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Startup Complexity

Tracing the Conceptual Shift Behind Disruptive Entrepreneurship

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ACADEMIC DISSERTATION
To be presented, with the permission of the Faculty of Social Sciences of
The University of Helsinki, for public examination in Auditorium XII,
University main building, on 20 December 2016, at 10 am.
Helsinki 2016

Publications of the Faculty of Social Sciences 38 (2016)
Sociology

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Cover illustration: Ulysses and the Sirens, Herbert James Draper (Wikimedia Commons)

Distribution and Sales:
Unigrafia Bookstore
http://kirjakauppa.unigrafia.fi/
books@unigrafia.fi
PL 4 (Vuorikatu 3 A) 00014 Helsingin yliopisto

ISSN 2343-273X (print)
ISSN 2343-2748 (online)
ISBN 978-951-51-2581-1 (paperback)
ISBN 978-951-51-2582-8 (pdf)

KONEEN SÄÄTIÖ

Unigrafia, 2016

Abstract

This dissertation examines the rise of startup entrepreneurship as a cultural phenomenon, and builds a model for understanding the systemic logic behind this culture. While proceeding with the empirical research, the dissertation develops conceptual tools for modeling cultures as "whirlpools" that condition the transitions between different contextual rationalities.

The empirical research answers the following questions: Why has this specific form of new venture creation developed such a popular sub-culture, jargon and identity? Why does it display counter-cultural tendencies in relation to the business world in general? What does it enable, as a differentiated cultural form and as a worldview, for the entrepreneurs and for the world around them?

Observing popular startup success stories, startup methodologies and articles from various business magazines, the research traces the general patterns of startup stories as well as the conceptual reservoir of startup entrepreneurship. Based on these investigations, the dissertation constructs a model that visualizes startup culture as a whirlpool of different systemic logics, and as a solution for a specific dissonance between these contexts. The findings suggest that startup culture is as much a culture of speculation as it is a culture of entrepreneurship. It has appropriated venture capital's perspective on potential markets and on venture financing, and turned these into everyday entrepreneurial jargon.

In this culture, two levels of speculation are kept methodically separate: the technological speculation with problems and their solutions, and the economic speculation with possible business models and with the valuation of the startup. Startup culture can be said to condition this dissonance between the two forms of speculation. For the startup, this division creates obvious room for innovativeness, as the system of economy appears as culturally distant. At the same time, startup culture has opened a new popular form of inclusion into economy: the entrepreneur as a technological speculator, who is himself a token of speculation for venture capitalists.

Along with the empirical research, the dissertation offers new ideas on how to model culture while doing qualitative analysis. If we accept that new cultural forms develop in a mostly self-organizing fashion, then we must accept that they have their own logic separate from the logic of the actors. Thus, the theoretical interest of this dissertation is how to model and visualize the inner logic of cultures.

The proposed solution draws heavily from the systems theoretical sociology of Niklas Luhmann and its later applications. Specifically, the suggested approach to modeling combines Dirk Baecker's ideas on how to model "complex forms" of communication in society with Niels Åkerstrom-Andersen's ideas on Luhmann's "semantic analytical strategy" for doing conceptual history. When combined, and slightly modified, these two applications of Luhmannian systems theory can act as a basis for an empirical approach to modeling subcultures as complex semantic forms of communication. Here, the analogy of a whirlpool is a fitting one: as opposing currents sometimes create a whirlpool, it is a steady state forming inside a non-equilibrium. In a similar fashion, cultures emerge out of the opposing contextual logics in society. When we model culture in this manner, the logic behind cultural evolution becomes clear: culture fills the "gaps" between different subsystemic contextual logics, thus enabling meaningful transitions between different forms of sense-making.

Acknowledgements

Firstly, I would like to express my gratitude to my primary supervisor Risto Kangas. Our relaxed meetings never failed to fill me with clarity and motivation.

A big thank you is due to my friend Mikko J. Virtanen. Many of the insights in this dissertation have resulted from epiphanies and creative misunderstandings during our stimulating conversations.

I would also like to thank Matti Kortteinen, Risto Alapuro and Pekka Mattila for encouragement and good advice.

Furthermore, this dissertation would not have been possible without the generous research grant that was awarded to me by Kone Foundation.

Finally, I would like to thank my family: my sister who has always offered a helping hand, and who introduced me to interesting people in San Francisco; my loving mother who has always been there for me; and my late father whose playful and curious mind I hope to echo in this dissertation.

Helsinki, December 2016
Antti Hyrkäs

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INTRODUCTION

This dissertation aims to achieve two goals, one of which focuses on an empirical phenomenon and the other on a theoretical-methodological issue. On the more empirical level, the study approaches startup entrepreneurship as a cultural movement that has translated speculative high-risk entrepreneurship into something more mainstream and popular. The study poses – and then seeks to answer – questions about why this popular cultural movement sustains itself along the more operative side of startup entrepreneurship, when the failure rate of new technology ventures is so high. Sociologically, we have to consider what this cultural form actually does, not just what it claims to stand for. Offering a new collection of concepts and stories this culture rearranges how different logics of communication are conditioned in relation to one another. By strengthening some connections while constraining others, the culture of startup entrepreneurship transforms the way that different communicative logics are incorporated into each other, most notably altering what can be included as relevant topics in economic communications. Resting on Niklas Luhmann's[1] concept of structural coupling (presented in Chapter 2), we may formulate the empirical research question (or "EQ") in the following way:

> EQ: What conceptual shift can we see when observing startup culture and startup narratives? Sociologically speaking, what new couplings (between the different logics of various social systems) does the startup culture bring forth in society, and what do these new couplings enable as a new perspective – a new "observer-culture" – for observing the world?

The end result of this pursuit is the deconstruction of startup success stories and, following that, the reconstruction of startup entrepreneurship as a cultural pattern that is able to couple various logics in society in new and meaningful ways. Thus, the study opens up a new way of understanding the startup phenomenon and its cultural drivers.

On a more theoretical level, the study takes regular detours to consider how we can model cultural movements instead of just describing them. As we proceed with this, I will combine two methodological approaches (see Baecker 2006 and Andersen 2011), both originating from the sociology of Niklas Luhmann, and will seek to combine them into one approach. This theoretical-methodological part of the study is intertwined with the empirical part, and will be developed along with the empirical research, so that we can better see how it works in action. In the empirical parts I will map the relevant "conceptual reservoirs" (Andersen 2011) of startup entrepreneurship, and see how these make a difference with regard to the more general model of the "form of the firm" (Baecker 2006). The theoretical-methodological goal is to find out – while proceeding with the empirical study – how this combination of approaches develops and develop these conceptual tools during the process if needed. What we hope to find here is a solid way of modeling cultural movements by using primarily qualitative data. We may formulate the theoretical research question (or "TQ") in the following way:

> TQ: Can Dirk Baecker's (2006) approach to modeling contextual knots be used as a research tool in empirical research – especially if we want to understand the logic of emergent discourses and/or cultures in society? Could we use Niels Åkerstrom-Andersen's (2011) conceptualization of "semantic

[1] Niklas Luhmann is known for his social theory (Luhmann 1995) and his theory of society (Luhmann 2012 & 2013). For a summary of Luhmann's ideas see, for example, King 2009; King & Schütz 1994, Lee 2000, Borch 2011 and Moeller 2012.

analytical strategy" to ground this modeling practice to data? How can we use such empirically constructed form models?

The end result of this theoretical pursuit is an increased understanding of how we can approach cultural movements, and how we can conceptualize and visualize them. As we will see, cultural movements reveal themselves through their distinctive stories and jargon and, with our refined model, we can display them as contextual couplings that sustain bridges between logics of communication. These models can be used in sociology, but also in consulting, as they offer us new insights on what matters in a given culture, and why.[2]

During the study, it became clear that EQ could not be solved without also solving TQ, and vice versa. As I proceeded with the data, it became clear that I needed certain kinds of tools for analysis, and as I was using the tools, new insights were uncovered. Thus, EQ and TQ emerged differently from a single question, but their differentiation from each other made them dependent on each other. On a further note, EQ and TQ are presented here as "research questions" for the sake of clarity, but in reality the study began with simple "empirical wondering" (Andersen 2010, 115). The core of this empirical wondering was simply the fact that during the past decades, startup culture has emerged as a highly popular and peculiar subculture of the economy. The actual question that began my inquiries into the subject matter was thus neither EQ nor TQ, but rather something like this: "What is happening here, and how can I best make sense of this as a sociologist?" My sprawling and repeated attempts to make sense of this phenomenon eventually led to the formation of the two research questions, EQ and TQ. They are thus retrospectively formed but, as will be shown, they are fitting questions for the answers I have found. Appendix 1 will offer a more detailed account of how the actual research, and the thinking behind it, proceeded.

Short Preface to the Empirical Part of the Study

What makes the empirical part of the study relevant in the context of current sociology is the fact that there has been no sociological theorizing on startup entrepreneurship as a differentiated cultural form. Startups are often approached simply as "new-ventures" or "entrepreneurship," thus utilizing the ready-made conceptualizations used in economics while trivializing the culture, narratives and conceptual reservoirs that have emerged around startups, or that have been appropriated by them. Extensive sociological reflection on entrepreneurship has been offered, for example, by Swedberg et al. (2000) and by Bill & Johansson (2010), and the popularization of the figure of the entrepreneur has also been noted by Boltanski and Chiapello (2005). However, these projects do not distinguish "startup entrepreneurship" as a differentiated part of the entrepreneurial discourse.

If there is a lack of research and theorizing on startup entrepreneurship in sociology, this is not the case in management sciences, especially in its more popularized form. There we can find theorizing on how to succeed with a startup (e.g. Ries 2011, Blank 2005), and scientific research on various details that have affected this form of enterprising, e.g. how a specific historical situation gave birth to the first ecosystem of startups Silicon Valley (Saxenian 1996). However, the majority of research in economics and management science prefers to focus on the more general category of "new ventures," being careful not to distinguish startup entrepreneurship as a

[2] As will be shown, the model can be used as one approach to "dialogic organization development", as it is a good starting point for discussions about how the different environments are ordered for the organiszation, different departments, for customers, etc. For more on dialogic organization development methods, see Bushe & Marshak 2015.

separate area of venturing. This is reasonable, as economics and management science is less interested in analyzing cultural patterns and meanings, and more focused on being an instrumental science that can be applied by firms as tools for success. Thus, the main research current aims to develop better tools and heuristics for "doing business," thus securing a clear system reference towards the economic system while preferring to observe other social systems as secondary or simply as externalities.[4] This study, on the other hand, is concerned with how startup entrepreneurship should be understood as a cultural form that operates in a specific niche of our present society, incorporating different logics of communication into a seemingly unified pattern. This pattern – of narratives, concepts and culture – hides a specific complexity so that communication and action can keep going even when paradoxes and uncertainties abide. Paradoxes flourish where logics are set against each other, so we will be on the lookout for the central conceptual tension – i.e. the "niche" – in which the culture lives, and which it is able to solve in its own way. Paradoxes that are not resolved logically get resolved in culture – much like scar tissue provides a "solution" for a wound, or like a neurosis haphazardly "corrects" a failure to make sense of some traumatic or disturbing event.

The present study holds that a need exists for a sociological theory of startup entrepreneurship – one that observes it not only as an instrument of economic growth or technological progress, but also as a cultural form that handles meanings in a unique way. In other words, startup entrepreneurship is not just a way of doing things, but also a cultural movement offering fresh significations, thus opening up new inclusions into the economy.[5] With this perspective, we will not be doing economic sociology in its most common forms, i.e. we are not trying to see how social forces structure markets or guide economic transactions. We are not observing markets or even firms, but a specific cultural niche that has emerged parallel to the firms and markets, adding new ways for these to connect, new ways to "speculate" (Stäheli 2013). Thus, I am more interested in the "cultural codes" that have emerged than in the accompanying "blueprints" for startup success (Aldrich & Yang 2012). At the same time, in analyzing this culture, I will refrain from judging it as futile or as "false consciousness", but will instead search for latent functions. I will ask, why has this cultural form differentiated, endured and disseminated? Why has it not died, as there are other ways of observing things, and as there is extreme uncertainty in the "game" of startup entrepreneurship? As we will see, the latter question is an answer to itself – the cultural form of startup entrepreneurship is a pattern of sense-making tailored to resolve a very specific uncertainty. This uncertainty is the societal "niche" where the culture operates. The uncertainties, the cultural solutions that have emerged in reference to it, and the following implications, are the three things that this research seeks to map out.

The data for the empirical part of the study is four-fold: magazine articles, books about famous startups, startup guidebooks, and a small amount of participant observation and interviews. The data will be presented as we proceed, but a brief overview of the data is given in Table A (see below). I began the empirical research with articles compiled from the archives (mostly electronic) of *Fortune*, *Forbes, Fast Company*, *Inc*., and *Entrepreneur*. These magazines were chosen because they represent the more entrepreneurial side of business magazines,

[4] In this study, "economy" is used to mean a system of communications that attempts to solve problems through payments. It is thus seen as a communicative processing logic that structures the world in a certain way, i.e. as scarcities to be solved with payments. This view is derived from the sociology of Niklas Luhmann and will be elaborated in later chapters.
[5] For a research with a somewhat similar goals and similar background, see Urs Stäheli's (2013) study on the semantics of speculation.

and because they frequently write about startup entrepreneurship.[6] Most articles were from 2011-2013, and the early saturation of my coding was achieved with these (see Appendix 1). Later I added more recent articles (2014-2015), but I found no difference in the way that startup entrepreneurship was generally presented.[7]

Books on famous startup success stories, and biographies of famous founders, were important in order to see how the "startup canon" – i.e. the holy stories of this cultural form – fit my observations. The startup guidebooks, on the other hand, were important to go deeper into the central concepts of startup entrepreneurship. Of these books, the most important ones were *The Lean Startup* (Ries 2011) and *Four Steps to the Epiphany* (Blank 2005). Along with the textual data, I made some participant observation and interviews. I frequently visited startup events in Helsinki and especially in Aalto University's Startup Sauna (and former Venture Garage). For two weeks I was in San Francisco, where I conducted informal interviews with entrepreneurs, investors, and people operating in the startup world. I also visited various locations and events there, such as the Blackbox Startup Mansion, the Berkeley Startup Weekend, Pitch San Francisco and two weekly "meet-ups" arranged for entrepreneurs. The conversations and participant observation function as secondary data in the study, and is referred to only sparsely. However, these conversations were important as they corrected some of my early misconceptions about the phenomenon.[8]

[6] It should be noted that most of these magazines were founded long before the new "scalable startup" phenomenon began. They do, however, correlate with the rise of computer technology. Of the magazines in my data, *Fortune* and *Forbes* are several decades older, but the others were founded around the 1980s, when general interest in entrepreneurship started growing. As Aldrich and Yang (2012, 3) write: "From 1982 through 1995, the number of articles on business ownership increased by more than fivefold in major national newspapers (…). The number of magazines and books on entrepreneurship exploded in the mid-1990s, and there were more than 26,000 listings for 'entrepreneurship'" At the time of writing this introduction (13 Dec, 2015) there were over 73,000 listings in Amazon for "entrepreneurship".

[7] The data is not listed separately, article by article, but the articles that have been referred to appear in the bibliography and are referenced in normal way.

[8] See Appendix 1 for a more detailed explanation of how the study actually proceeded. In the main chapters of the dissertation, I have decided to let the argument dictate the form and content of the study. Appendix 1 attempts to better clarify the chaotic reality of the research process.

Table A: Brief overview of data used in this study

Data	Amount of data	Purpose of data	Most relevant chapters
Biographies of iconic startup entrepreneurs	5 books that outline the stories of HP, Apple, Google, Facebook and Amazon (see Malone 2007, Isaacson 2011, Levy 2011, Kirkpatrick 2011, Brandt 2011)	Tracing the recurring narrative tensions of startup stories	Chapter 3
Articles on startup entrepreneurs and the phenomenon of startup entrepreneurship, and articles giving advice on how to succeed as a startup entrepreneur; a dozen blog-posts	88 articles from *Inc*., *Forbes* and *Fortune* (especially 2011-2015), and dozens of additional articles from *Entrepreneur* and *Fast Company*, and one book of founder interviews	Tracing the recurring conceptual tensions in startup stories/articles	Chapter 4
Startup guide-books, and various reports on startups and entrepreneurial activity (international and US)	2 guidebooks (Blank 2005; Ries 2011), 1 collection of interviews of founders (Livingston 2008), a handful of reports on entrepreneurial activity	Figuring out how startup-entrepreneurship describes itself as a distinct form of entrepreneurship and business leadership	Chapter 4
SECONDARY DATA: Informal and unstructured interviews and participant observation in events and startup spaces in Finland and US	6 entrepreneurs, 4 investors, mostly Finnish (about 1 hour interview each). Examples of events: Aalto Summer of Startups Demo Day 2013 (Finland), Startup Weekend Berkeley 2013 (US)	To correct initial misunderstandings about the topic and to enlarge my thinking on the subject	No particular chapter

SHORT PREFACE TO THE THEORETICAL PART OF THE STUDY

On the more theoretical level, the study brings together two schools of thought (see Baecker 2006 and Andersen 2011), both of which originate from the sociology of Niklas Luhmann, and both focusing on specific conceptual tools developed by Luhmann. In short – and to simplify things a little – Baecker's (e.g. 2006) approach to modeling "complex forms of communication" is a way to make sense of the categorical leaps that a discourse has to be able to make if it is to appear coherent. Similarly – and again simplifying here for the sake of offering a brief introduction – Andersen's (e.g. 2011) formulation of the semantic analytical strategy is an approach where we observe a discourse through its conceptual reservoir, and ask about the differences that these concepts make when meanings are attributed through them instead of other concepts. The first approach (Baecker 2006) is able to make complexity tangible, but is often used as a thought experiment and less as a tool in empirical research. The second approach (Andersen 2011) has a more empirical grounding, but does not hold the synthesizing power of the modeling approach.

Although these two approaches of thought have firm roots in Luhmann's sociology – both especially attached to the concepts of "observer," "distinction," "form" and "communication" – the emphasis and overall approach differs. Thus, one has to be careful when fitting these two traditions together. For this reason, extra care will be

taken to explain what is happening "under the hood," so to speak, as we reorganize the data from our theoretical perspective. By combining these two approaches, I seek a more solid ground for doing actual sociological research using Niklas Luhmann's social systems theory. By "more solid ground," on the other hand, I simply mean being more explicit about each step of the research, displaying how some conceptual shift appears in the data we are observing, and how it arranges the model we are about to build. However, as we will later see, we are not talking about a methodology in the sense of "approaching reality" in a more careful manner. Rather, we will stay at the level of "analytical strategies" (Andersen 2010), thus bracketing out reality and focusing on how a specific "observer-culture" of startup entrepreneurship appears in society, and how it relates to various tensions between different social systems.

Besides these two approaches that are based on Luhmann's ideas, I will use a more established approach to outline the basic pattern of meaningful action that appears in narratives of startup entrepreneurship. Thus, in Chapter 3, A.J. Greimas's actantial model is used to outline the typical startup success story. The use of the actantial model serves several purposes here: (1) it introduces us to typical descriptions used in startup entrepreneurship; (2) it is important for us to know about typical stories – the meaningful patterns of action – since we are inquiring about what context makes these specific patterns meaningful, i.e. what systems are able to take these communicative performances as information, and how.

Although the theoretical goal is the secondary goal of the study, it is a goal that I am particularly interested in as a researcher. It would seem that sociology has lost its courage to theorize with data in a way that would reflect its original research subject, namely modern society. This has been observed in recent discussion about social theory (e.g. Gane 2006; Swedberg 2012). As a sociologist, I share Luhmann's (2012, 1-13: 1995, xlv-lii) concern that sociology is hindered by its attempts to operate in the realm of common sense descriptions of human agency while distancing itself from the complex and self-organizing nature of social phenomena. The patterns of communication that we use – and culture for that matter – should not be seen as something that "oozes out" of human beings, so to speak. This reduction of social affairs to humans, and to their unity as "a people," is one of the major epistemological obstacles that sociology faces (see Luhmann 2012, 6). If we want to get past this obstacle – i.e. if we want to study society – then we need to focus our attention to the emergent logics that the actors and actions are embedded in.[9]

If we follow this path, and detach ourselves from actors and their motives, then sociology becomes what could be called *the science of contextual complexity in society*. The context that makes some actions meaningful, and others not, can be observed in many ways, e.g. as a social system and the semantics surrounding it (Luhmann); as a network of actors (Latour); as a field (Bourdieu); as a frame (Goffman); or as something completely different. Which conceptual lens is used to observe contextual complexity in society, is a matter of what school of thought the sociologist belongs to, and what problems she is interested in[10]. If one wants to observe a social

[9] This is especially important since there is too much uncertainty – or confusion – about what "consciousness" is. Thus, it is futile to seek certainty by anchoring "social" to this concept. As Minsky (2007) has noted, consciousness is a "suitcase word" that ties together too many incongruent processes, and ends up observing this false unity as a "mystery".

[10] In order to maintain this openness to different sociological traditions, I will use the term "context" throughout this dissertation, although the term "contexture" is a better fit for my own conceptual framework. Niklas Luhmann often used Gotthard Günther's (1973) concept of "contexture" instead of context when writing about the "poly-contexturality" of modern society. Günther defines contexture as an area of bivalent logic that can only overcome the "excluded third" of its own logic when different contexts are linked together through intermediating relations, i.e. through

network as a context, then some variation of network sociology should be used – then, complexity would present itself as connections leading to other connections, and the sociologist would go after the hidden laws that govern these connections. But whatever the actual approach, sociology would be better off if it considered itself primarily through the concept of contextual complexity, even though the concept can be observed in various ways. For example, Luhmann's idea of a context would be that a context is always constructed by some observing system that has to create a unity for itself in a messy environment – through such constructions, irritations become perturbations for organisms, societies, and minds alike. Furthermore, Luhmann places emphasis on the kind of context that revolves around a single operation – i.e. any system recreates itself by connecting only what it has learned to connect.

I will argue that social systems – in the form that Luhmann defines them – can be seen as the strong contexts that any new culture has to incorporate in one form or another. Social systems – compared to institutions, for example – offer the most resilient forms of sense-making upon which cultures creatively build. One could say that social systems and their mutual irritations are constantly influencing and altering the meanings that are available in society (see Luhmann 1992 and Clam 2000). Of course, Luhmann's approach is just one among many good conceptualizations of context in sociology, but its strength is in placing value on the operative side of things – meanings corrode and transform when subject to unexpected events but, in most cases, society falls back on "what works," letting one or several of its operative logics (functional systems) process the uncertainty. It is the weaker systems that I will call "observer-cultures" that offer prescriptions for combining different communicative logics. A startup, embedded in startup culture, communicates about organization, economy and society in a unique way, thus rewiring the circuitry between these and other systemic logics.

The important point that I wish to emphasize is this: sociology – in its most authentic form – seeks to understand the logic of social context, and dissonances between different contextual logics, and these go beyond the logic of action and the actors involved. The logic of actions and actors is well covered in economics and psychology – as sciences, these are all more attuned to observing actions and the intentions and rationality behind them, but have less patience to deal with contextual concepts compared to sociology. Sociology, on the other hand, is at its strongest when it observes actions, subjects and essences as the effects, not as the causes, of social processes (see Fuchs 2001). Context can be and is reflected in economics and psychology, but it is often presented in very common sense terms, and the messiness of the actual context is turned into a residual category. This messiness of intertwining contexts is precisely where sociology should roll up its sleeves and start working. As the present study shows, contexts collide and turn into complex contextual knots that have to be resolved with new semantics and new narratives, that are are better able to create meaning in an uncertain situation. And with culture offering a ready set of conceptualizations and stories, an observer learns to attribute meaning, causality and agency in a fitting way (see chapters 5 and 7).

In this study, I refer to "context" using several terms, all bearing a different meaning: social systems, culture, observer-cultures, and niches. These will be explained more thoroughly in chapter 2, but here is a brief summary:

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poly-contexturality (see Knudsen & Vogd 2015, 6). This fits well with Luhmann's theory of systems, and with the specific model that we will be developing. However, I want to keep an open mind as to what we can insert as environments into the model that we will later build. Baecker (2006) seems to have taken the same route, as well as Andersen (2010).

1) ***Social systems*** are networks of communications that, as networks, produce the communications that work to sustain the said network of communications. They are thus autopoietic and highly resilient, albeit blind to what their operations cannot connect with. As highly resilient and regenerating parts of society, they represent the basal processing logics of society, whereas institutions and cultures are more uncertain and are bound to change.
2) ***Culture*** refers to networked meanings and "semantics" – the conceptual forms that evolve and appear as reservoirs that can be used to make sense of events. When we refer to "culture," we have not yet observed any system references in it, but see it as a recognizable collection of somewhat free-floating meanings and ideologies.
3) ***Observer-culture***[11] refers to a more clear-cut culture, one that produces cohesive self-descriptions that are able to form the basis of a more or less cohesive identity and worldview. The concept of observer-culture – inspired by Fuchs (2001) and his view on cultures as observers – focuses our attention on the way in which each subculture is a model of the contextual/conceptual complexity that it has constructed. On the surface, it is just an articulation of what is a legitimate contribution to the culture and what is not. But beyond this single boundary of cultural relevance and legitimacy is a multitude of systemic boundaries – a complexity hidden in order to enable meaningful action in an uncertain world.
4) ***Complex form of communication*** refers to the model we use to display how a given observer-culture moves between different contextual logics while sustaining the integrity of its self-description. Alternatively, I will refer to this as the "form model" or the "Baecker model", and develop a further iteration of the model, which I will call the "whirlpool model".
5) ***Niche***, in this study, is a way of referring to the problematic tension in society that acts as a "living-space" for a given observer-culture. The constant self-description of an observer-culture is a way of solving the tension in the niche by introducing new conceptualizations and narratives to enable better sense-making.

THE MODEL-BUILDING APPROACH: GOING BEYOND QUALITATIVE AND QUANTITATIVE DESCRIPTIONS

An important idea that has guided this dissertation is that "the philosophy of modeling" should be incorporated into sociological research. My study offers one prescription for doing this, but suggests a way to unify sociology under this philosophy. What does it mean to create models? How does modeling differ from approaches where we attempt to produce descriptions, whether they are qualitative or quantitative in nature? Can modeling be incorporated into qualitative sociology?

In some ways, modeling can be seen as a very natural way of approaching new and interesting phenomena. As Joshua Epstein (2008, 1) writes, anyone who imagines how a social dynamic would unfold is running some model. The problem is that these models are often kept implicit, so it is hard to test these models by "running the model" yourself. Compared to this, constructing an explicit model is an act of openness that invites others to

[11] This concept is used in reference to Fuchs (2001, 59), who writes that "a self-organizing culture decides what matters to it, how it measures and distributes reputation, and how it explains its internal workings. Such cultures become observers, and self-observers, in their own right, and any "explanation" of culture should acknowledge this operational independence." See also Fuchs (2000), who refers to Dirk Baecker's form models, which outline cultures as observers.

run the model and see what happens. In this way others can see how we have reduced reality to a model, and they can more easily offer ideas for correction, or make their own iterations of the model if they wish.[12]

As the famous saying about models goes, "all models are wrong but some are useful" (see Box 1979). To this we could add that models are only useful if they help us navigate in new ways (see Salancik & Porac 1986). In this sense, they are maps that need to fit the purpose. When hiking in the woods, a map that lacks sufficient detail might not make sense: the map shows where a forest begins and ends, but the map reader is only able to see individual trees. But for a helicopter pilot, for example, the more distanced map might be of great use in navigating the territory. The question is, what "makes a difference" for a given observer in a given context, and what is simply noise. Organizations use organizational charts partly because they have a need to distribute agency and responsibility, thus guarding the organizational identity from the mistakes of individuals. The model we will be using, on the other hand, is a way of mapping social systems and cultural niches instead of actors, and seeing what creates the fertile ground for the narratives and semantics that make the observed action meaningful. In this study we are the helicopter pilot rather than the hiker – i.e. somewhat detached from the details, but able to add contexts that shed new light on the details.

Also, an important benefit of using a model – such as the form model (Baecker 2006) that we will be using – is that we can put our data in it and see what happens, then do this again and again. The modeling approach to research is: make a model or borrow one, pour some data in, see what comes out, refine the model, and repeat the process as needed. The end result we are hoping for is not explanation, but a "homomorphism" between the model and the real world, i.e. a relation where we have equivalent classes and a transition function that explains how change happens in the system (Miller & al. 2008, 38-40). Note that constructing a model of a complex adaptive system does not reveal the function of the whole arrangement in the real world, but merely reveals how change occurs. As Scott Page (2008) writes:

> We assume that the real world consists of various states, S, and a transition function F (S) that maps a given state at time t into a new state at time t + 1. The function F (S) is unknown to the modeler, and while the modeler would like to uncover F (S), this will typically be impossible given the dimensionality of the state space and potential complexity of F (S).

In other words, one should never confuse the model with the reality it is depicting. This sin is often committed by people who fall in love with models (the model as a panacea) or by people who criticize models without knowing what they are (the model as a reduction). As Wolfram (2002, 366) writes:

> all any model is supposed to do – whether it is a cellular automaton, a differential equation, or anything else – is to provide an abstract representation of effects that are important in determining the behavior of a system. And below the level of these effects there is no reason that the model should actually operate like the system itself.

[12] We are here taking a stance that fits our conceptual framework (see Chapter 2). There is no way to be truly holistic as there is always more to consider. Thus, one can only be reductionist, but one can do so in a more informed way, by using a better model. It is always a question of what to include in the model. Thus, a model can be seen as a reduction that has some informative correspondence with reality. A map is a model of a territory, and a key is a model of a lock it opens.

As a summary, to model is to decide what is important to answer the question at hand, and what may be omitted from the model without losing the homomorphism between the model and "reality." The search for dark matter in astrophysics is a good example of homomorphism. We can observe the rotation curves of galaxies and say that the galaxies lack the necessary mass to produce the velocity curves they have. So, instead of finding and observing dark matter directly, we can make models and simulations that show us how much dark matter there would have to be in order for galaxies to be curved the way they are. A somewhat similar path is followed in this study, as we first observe the "rotation curves" of action (narratives), and then create a model that could explain what "dark matter" (social systems) affects the velocity of these curves. In other words, we consider the stories and concepts in order to create a hypothesis of the social systemic conditions that must be in place for this observer-culture to operate.

Structure of the Study

In Chapter 1, I will offer a short introduction to startup entrepreneurship and its definitions, and consider the central uncertainty that it revolves around. This brings us to consider studies that have observed and theorized on "symbolic leadership" as a solution to unmanageable uncertainties. We will reflect on more recent research on how business leaders are constructed in investor capitalism, and how this performativity is fed back into actual economic operations. I end by drawing my own model based on these studies, and reflecting on the strange loop between leadership stories and uncertainties. Having noted this, we arrive at the question of how to conceptualize the emergence of startup culture sociologically while simultaneously adding something new – a more sociological dimension perhaps – to previous studies on uncertainties and symbolic leadership.

In Chapter 2, I will present the conceptual framework, the theory of social systems put forward by Niklas Luhmann (1995, 2012, 2013). At the crux of this theory is the idea that society is a system that solves uncertainties by generating and condensing meaning while, paradoxically, also creating new uncertainties as differentiation tends to breed new complexities. Sociology studies these complexities by observing them in relation to social systems and their abilities to handle the irritations that they cause to one another. After giving an overview of the conceptual framework, I will give a very brief introduction to the different techniques that we will be using in our analysis of the concepts and narratives of startup entrepreneurship. A more detailed explanation will be reserved for the beginning of each chapter containing analysis (chapters 3, 4 and 5).

In Chapter 3, I will proceed to observe the startup phenomenon more closely. Here, we observe the "standard stories" (Tilly 1999) of startup entrepreneurship, analyzing their recurring features with the help of the actantial model (Greimas), which is here used as a heuristic tool, one way among many of getting to the basic pattern that the stories contain. This chapter thus focuses on the phenomenon of startup entrepreneurship as a rationally motivated way of acting in a certain situation. We will get a clear understanding of how these narratives are structured, and this will act as a reference point later on when we consider a way of modeling startup entrepreneurship as a constellation of different communicative logics.

In Chapter 4, we move on to study the conceptual reservoir (Andersen 2011) of startup entrepreneurship, thus trying to look beyond the "standard stories" and their sequences of action, and into the concepts that operate as central sense-making tools when one is observing or emulating startup entrepreneurship. This chapter will provide an understanding of basic distinctions that are made in startup entrepreneurship and, more importantly, an understanding of what is the unmarked side of the distinction.

In Chapter 5, we try to see what these semantic categories tell us about the structural couplings between various social systems, especially as compared to Baecker's (2006) view on how social systems are bundled together in the "form of the firm." What results is a model of the observer-culture of startup entrepreneurship as it arranges a specific contextual complexity, where systems are coupled in creative ways. Here, more than in the earlier chapters, Niklas Luhmann's (1995) theory of social systems will guide our observations. We are operating in a deductive mindset, where we mostly care about finding consistency inside our model, but the categories constructed in Chapter 4 will be our signposts. This deductive attitude can be condensed in the following way: If we were to build a machine that would produce startup stories, how would it oscillate between different social systemic logics?

Chapter 6 will act as a conclusion for the empirical results of the study. Here, I will consider my findings through the lens of Luhmann's contingency theoretical functionalism (see Kangas 2014, also Knudsen 2010). The chapter will consider possible latent functions that startup semantics might perform in society, as it enables new couplings to function between different communicative logics. We will attempt to find a functional equivalent for the observer-culture of startup entrepreneurship, one that could perhaps clarify some peculiarities that we find from it as outside observers.[13]

Chapter 7 delivers the conclusion on the theoretical research question about combining the analytical strategy of semantic analysis (Andersen 2011) with form modeling (Baecker 2006). Here, we will reflect on the lessons learned during the research process, and consider how the philosophy of modeling could be incorporated into sociology and into organizational consulting.

Chapter 8 will present ideas for further research. Of these ideas, some are empirical and some are theoretical-methodological. Of the methodological ideas presented, a major one will be a call for action to build a formal language for sociology, one that is based on Spencer-Brown's (2008) calculus of indications. The present study merely gives some hints how, and why, this should be done.

[13] For the entrepreneur who is a member of his observer-culture, everything in entrepreneurship has a more or less "natural" explanation, offered to him by his culture. For us, however, the culture is as contingent as any culture, i.e. it could perceive the world in other ways too, but does not.

Table B: Summary of the main chapters and the flow of the argument in the dissertation

Chapter #	Chapter focus	Flow of argument from chapter to chapter
1	The figure of the startup hero and previous research on charismatic leadership in business	a) Comparing startup heroes and "celebrity CEOs" it seems that recurring narratives not only help fix expectations, but also turn "fictionalized expectations" into reality.
2	Conceptual framework and methodological considerations	b) Sociologically, the question is how and why standardized stories emerge in a given culture. Given the right conceptual framework, we can observe standard stories as attempts to overcome contextual complexities in society.
3	Analysis of the standard stories of startup entrepreneurship	c) In startup narratives uncertainty is transformed into contingency, and contingency into opportunity. The fragile identity of a startup is secured through startup spaces and funding, while the idea/product is exposed to constant flux.
4	Analysis of the conceptual reservoir behind startup stories	d) Beyond these narratives, we can find a conceptual reservoir that gives us further insights into how startups work. We can allocate these concepts into categories that reveal how certain communicative logics are conditioned or constrained.
5	Synthesis: startup as a complex form of communication in society	e) These conditionings reveal how the startup culture rearranges contextual complexity compared to firms. We construct a model of the form of this complexity – in relation to social systems – comparing it to a more general model of the firm.
6	Conclusions of the empirical research	f) We can now ask what this new form – this new "observer-culture" through which actors observe – enables in society. Furthermore, we will compare it to the celebrity CEO phenomenon that we observed in Chapter 1.
7	Conclusions of the theoretical considerations	g) Having thus modeled the observer-culture of startup entrepreneurship, we will consider what has been learned about modeling observer-cultures, and how the model could be used in sociological research.
8	Ideas for further research	h) Based on the insights and blind spots of the current study, what should we study next?

CHAPTER 1: THE STARTUP SPECTACLE AND THE SYMBOLIC MANAGEMENT OF EXPECTATIONS

> [N]o matter how peripheral, ephemeral, or free-floating the charismatic figure we may be concerned with – the wildest prophet, the most deviant revolutionary – we must begin with the center and with the symbols and conceptions that prevail there if we are to understand him and what he means.
> - Clifford Geertz (1983)

THE STORY OF THE FOREST CODER

In March 21, 2013, Thomas Backlund, a Swedish computer programmer and aspiring entrepreneur, blogged the following:

> I've quit my job.
> I've quit my apartment.
> 7:th of May I'm moving out into the Swedish forest to live and work from a tent.
> I do not know for how long.
> There I'm gonna code on my startup idea.
> I have a laptop, battery pack, solar cells and mobile broadband.
> Stay tuned.

From that point on, the 33-year-old coder posted regularly about his life in the woods. It was not until June that the news media started to catch up with his blog. News sites and papers such as *Hacker News*, *Mashable*, *Metro UK* and finally even *The New York Times* ran stories about him. In these articles he was dubbed the "Davy Crockett" of entrepreneurs and compared to the conquistador Hernán Cortés who – according to legend – burned his own ships in order to render escape impossible for his men. Backlund was a free spirit, who ventured outside the boundaries of society – seemingly, at least – in order to make his contribution. But it was not merely the journalists who were crafting a hero out of the forest coder. Backlund himself contributed to this view of himself by being very poetical about his retreat into the forest. In his blog he described, in a myriad of ways, how he was following his calling and going beyond what was rational. For example, immediately after gaining his first publicity through The Listserve (a site which picks one person at random every day and asks them to write a letter that is distributed to thousands of members), he wrote: "Maybe it would have been more rational to keep the apartment and just cut costs? Well, rational and right do not always align." In his blog, there is a photo of his backpack with the caption: "There's my life: 35 kilograms. It should not take more to slay the dragon, win the kingdom and divorce [sic] the princess." In June 2014, Backlund posted on his blog about his current status. In the post he explained how he had returned from the forest when winter started approaching and the nights were getting too cold. Reflecting on the forest episode, he wrote "Was it necessary to live in the forest to code? No, but it was necessary to go all in." Was he going to do it again? Well, as a matter of fact, he had moved back into a forest, but not just any forest – this time, he was coding in the jungles of Costa Rica, trying to get his startup going.

At first sight, the story of the forest coder might seem like a curiosity, an amusing anecdote at best. However, if one reads enough stories about aspiring startup entrepreneurs, or the stories of already successful ones, it becomes obvious that this story is a variation on a theme. This theme could be summarized as one of "retreat" and "rebellion" as a road to entrepreneurial success. Interestingly, in startup stories, the details of building the innovation are often secondary to the details that present the entrepreneur as an outsider. This basic theme can take many forms, but at the center we find the idea that the creation of "disruptive innovations" requires one to distance oneself from society and economy. As will be shown, this is a strong undercurrent in the culture of startup entrepreneurship. For example, in the "canon" of startup success stories, we see entrepreneurs who have emerged from garages and dorm rooms to change the competitive landscape of whole industries. Apple created disruptions with its personal computers and handheld devices, Facebook changed the way people stay connected with each other, Amazon challenged the publishing industry and book stores with its direct publishing and online store, and Google has transformed the way people search for information and advertise in the internet. But they all took their first steps in dorm rooms or garages, and they all developed highly peculiar corporate cultures that emphasize informal over the formal, playfulness over seriousness, and flatness of organization over strong hierarchy.

What is interesting about the story of the forest coder is the fact that the startup in question can hardly be considered successful, yet the narrative was able to appear as an entrepreneurial hero story. There are no financial actions involved, and no profits in sight, but the story hits the right notes – as if the initiations of successful entrepreneurs were so well known that in order to convey "entrepreneurship" one merely needs to show commitment by performing some of the initiatory steps. In later chapters we will see how the spectacle of startup entrepreneurship has its own language and how startup entrepreneurship accentuates ambiguity and contingency in ways that are not often visible in more traditional forms of entrepreneurship[14].

Overlapping Spectacles: Entrepreneurship and startup entrepreneurship

The story of the forest coder is a prime example of how startup narratives can emerge even when nothing is sold to customers and no outside money is invested. In the case of the forest coder, we simply had a person planning his company, building its product, and testing it with users. This might be seen as early stage entrepreneurship, of course, but to see it as noteworthy entrepreneurship is another thing. The way that the story was presented in the media, as an entrepreneurial story with heroic overtones, tells us something about the "spectacular" (Debord) nature of startup entrepreneurship. But is it just startup entrepreneurship, or entrepreneurship in general? Offering their take on entrepreneurial stories in general, Bill, Jansson & Olaisson (2010, 160) write that:

> It almost seems that anyone learning to 'play the role' of an entrepreneur can be perceived as an entrepreneur; and if done well enough, the imagery of success will appear, even though the enterprise evidently is, in a sense, 'incomplete'.

The same is true in startup entrepreneurship, as we will see in later chapters. And what governs this adaptation, where people learn to observe themselves or others as startup entrepreneurs, are the "scripts" that are offered in the stories. In these stories we see a constant movement to define the essential qualities of startup

[14] For a more extensive look entrepreneurship and on the prevailing perspectives on it, see Aldrich 2005, but also Atherton 2004 and Aulet & al. 2012.

entrepreneurship, and the constant importation of meaning into uncertain situations like that of the forest coder. Or, as Bill, Jansson & Olaisson (2010, 160) express it, there is a:

> (…) the hunt for the ideal entrepreneur, the 'real' entrepreneur (…) able to save us all in the new economy (…) has led to a powerful script of how to be entrepreneurial, a guide to how the spectacle of entrepreneurship should be played. This script is spectacular in nature, promoting the image of a male hero-like character who is different and thinks differently. (Bill & al. 2010, 169.)

Here, Bill, Jansson & Olaisson (2010) have outlined what will be the starting point of my present study. However, my research will build a different research interest from this ground. Bill & al. (2010, 158) are concerned with how "Entrepreneurship discourse, both popular and academic, tends to emphasize the spectacular while concealing the mundane aspects of entrepreneurship (ibid.)". But from the perspective of my conceptual framework (Chapter 2), revealing the "mundane aspects" would mean leaving the spectacle unanalyzed. This is parallel to an ethnographer dismissing the analysis of a particular mythology because she does not believe in the gods of the culture. However, if she was curious enough, she should study the relations and patterns that are available in these mythologies. This would enable her to see deeper into the social system of the tribe.

Thus, for the present study, the spectacular nature of entrepreneurship – and startup entrepreneurship especially – means that there is indeed a culture that has its own mythologies. Whether these mythologies are true or not is beside the point – their form and function is what is interesting for us. As any cultural form that has reached a self-referential closure (i.e. explaining itself through itself), we can see that startup entrepreneurship has its own heroes. This opens for us the question of whether startup entrepreneurship also has its own "vocabulary of motives" (Mills 1940), its own "standard stories" (Tilly 1999) and its own conceptual reservoir (Andersen 2011). If so, then there is a horizon of meaning in which the actions and experiences of entrepreneurs are embedded. Without this horizon, these actions would appear as more or less meaningless irregularities.

Thus, the spectacle of startup entrepreneurship will be taken as the first sign that there is something we can call startup culture. But as the cultures of entrepreneurship and startup entrepreneurship overlap, the study can be read in terms of entrepreneurship. In some ways, startup entrepreneurship has become the spectacular apex of entrepreneurship in general. For example, the Fortune Unicorn List – a list of private companies that have a billion dollar valuation – contains mostly scalable startups. Furthermore, most people seem to have heard about some of the big success stories of the startup world – Amazon, Google, Facebook, Twitter, Uber, Airbnb, just to name a few. Of course, most of the aforementioned companies are not startups anymore, but have grown out of this category into established technology companies. However, they all began as tech startups, some already embedded in early startup culture, and each one molding this culture further with their own success stories.

Thanks to the mass media and our highly connected society – i.e. the modern "world society" (Luhmann 1997b) – any viable cultural form will spread quickly around the world, bringing its sense-making tools available to different nationalities. In this regard, startup entrepreneurship is no exception. Stories about billion dollar companies and disrupted markets populate the news, and aspiring entrepreneurs around the world attempt to emulate these success stories with their own startups. Although entrepreneurship activity in the United States has been declining during 2010-2014, it is now rising again (see Morelix, Reedy & Russell 2015). Furthermore, as we will see later, the culture of startup entrepreneurship seems to have a strong resonance among aspiring

entrepreneurs. As a result, San Francisco is experiencing a new gold rush, as aspiring entrepreneurs are arriving to get their share of the "smart money"[15] that resides there. As a result, rents in and around San Francisco have gone through the roof because of the tech workforce and aspiring entrepreneurs moving in. There are entrepreneurs living in communes – some sleeping in recreational vehicles – in order to keep their costs low while chasing their dream of entrepreneurial success. The story of the forest coder that we considered earlier in this chapter is but one variation on this theme of retreat. As we will see, it is usually emulated on a more conceptual level.

To keep the story short, we are not interested in the "spectacle" itself – nor in the mundane reality that might differ from it – but in the contextual complexity behind this cultural form. Of course, one might trivialize the object of this research by referring to previous theories of innovative entrepreneurship, such as theories of "disruptive innovation" (Bower & Christensen 1995) and "creative destruction" (Schumpeter 1975). But the problem is that these explanations have already been appropriated by our culture and would thus make poor tools for explaining this culture. Useful prescriptions as they are for the actors involved, they do not greatly account for the contextual complexity which affects the phenomenon. This complexity is our final destination, but for now, we should begin by considering the common definition given to our subject matter.

Startup Uncertainty and the Figure of the Founder

The term "startup" can be understood as having a very broad meaning or a narrower one. Broadly speaking, almost any new company might be called a startup: in this definition of the word, it means that a company is just "starting up." However, this broad definition is rarely anymore the implied meaning when "startup" is uttered. Instead, the word is commonly used when talking about a new venture that carries with it a promise of high revenues and a high potential of changing the competitive landscape with an innovative idea. Often, new information technology is involved, or simply a new way of using technology to do things. But these definitions are still somewhat vague. Let us look for more celebrated definitions of the term "startup."

One famous definition was given by Eric Ries (2011) in *The Lean Startup*, stating that a startup is an organization designed to create new products and services under conditions of extreme uncertainty. Another commonly used definition is the one offered by Steve Blank (2005) in *Four Steps to the Epiphany*, stating that a startup is a temporary organization designed to search for a repeatable and scalable business model.[16] Thus, the four defining qualities of startups we are offered by Ries and Blank are: (1) creating "new products and services"; (2) operating "under conditions of extreme uncertainty", (3) "temporary organization" and (4) a "repeatable and scalable business model." I will go through these four qualities in detail.

Repeatable and scalable business model. A big part of the appeal that startups have, from the viewpoint of both entrepreneurs and investors, is their scalability. Especially startups that offer products or services through the internet have a good chance of building a scalable business model, i.e. a business model that enables the startup to increase its business without having to expand the organization at the same pace. The reason that scalability

[15] The term "smart money" refers to investors who have experience, contacts and know-how on building a business, and have thus more to offer than just capital. This will be clarified later when we discuss a paper by Granovetter and Farrary (2009).
[16] The definitions offered by Ries and Blank converge neatly, partly because they developed some of the ideas together. The Lean Startup is heavily based on Blank's Customer Development Methodology, and Blank has clearly approved the ideas that were presented by Ries (see Blank 2013).

has become such a buzzword is because modern information technology enables companies to serve millions of customers without hiring thousands of people. For example, if a company's business runs mainly through the internet, then it can operate internationally with only one office. This, in turn, leads to excellent cost efficiency: the company can serve a huge customer base, while running its operations with only a handful of engineers, i.e. in a very "lean" manner. The effects of scalability are further amplified if the startup manages to create a new product, service, or business model that "disrupts" existing markets.

New products and services. A startup is often oriented towards creating a new product or service, or a new business model. In other words, it aims to beat the competition by disrupting the current markets, not by taking part in them as such. Again, technology is an important factor here, enabling the entrepreneur to create new ways of looking at supply and demand. This is what makes startups fit especially well with Joseph Schumpeter's idea of entrepreneurs acting as the engine of "creative destruction" (Schumpeter 1975, 82-85). Inventing new things and making them successful is rarely easy, so there is a sense of gambling that both startups and their investors are very well aware of. Because there can be no demand for an innovation before it has been adopted by the public, the future is radically uncertain.

Conditions of extreme uncertainty. As the future is unknown, startups will have to work under extreme uncertainty about whether their businesses will ever become profitable let alone successful. It is a common truth that most startups fail to realize the success they are aiming for. Even the startups that get funded tend to disappear after five years. Most of them are kept alive with investment money and three out of four companies fail to return investments. Despite this, failed entrepreneurs are rarely given the spotlight in magazines, and this might affect new entrant's perception of the uncertainties involved. Here, the venture capitalists are also to blame, as they tend to "bury their dead very quietly" (see Gage 2012). This extreme uncertainty has consequences in relation to how the startup is perceived as an organization.

Temporary organization. A startup exists only as long as its founders – and its investors in some cases – are convinced that the startup can succeed. Interestingly, startups are also temporary organizations when they succeed: after reaching success with its product, a startup usually takes some steps to become a more "serious" company. Leaving the startup phase is generally referred to as an "exit strategy." This might mean leaving the company and moving on with your life. In its more positive connotations, this usually refers to two things: either the startup is acquired by a larger company, or it goes public with an initial public offering of its shares. In the first case the startup becomes part of an established company, in the second case it becomes one itself.

With these qualities in mind, we can see how the startup entrepreneur is someone who is able to come up with a new product or service, or a new business model, and who can believe in success despite constant uncertainty. By these standards, good traits for entrepreneurs would be creativity, tenacity and a good tolerance of uncertainty. Indeed, research has found clear differences between common traits of corporate managers and entrepreneurs. In their analysis of 23 research studies, Zhao and Seibert (2006) found out that, compared to corporate managers, entrepreneurs have higher levels of curiosity, innovativeness and personal motivation, as well as lower neuroticism. In business magazines, the list of entrepreneurial personality traits can take various forms, usually containing attributes such as tenacity or resilience, passion, tolerance of ambiguity, vision, self-belief, flexibility, rule-breaking, and fearlessness (e.g. Price 2013; Robinson 2014). Furthermore, studies have found that entrepreneurs are not only fearless, but "overconfident" (Buseniz & Barney 1997), even to the point

of having much more optimistic expectations about their life expectancy than non-entrepreneurs (Buseniz & Barney 1997). Paul Graham, a famous venture capitalist, startup guru and the founder of the accelerator Y-Combinator, lists the following five traits: determination, flexibility, imagination, naughtiness and friendship (Graham 2010). The last one is interesting, as "friendship" is not really a personality trait as such. However, as we will see later in this study, many of the startup stories revolve around friendships, thus taking friendship as the ideal social setting for creating innovative products.[17]

Most of the depictions of entrepreneurial traits mentioned earlier have been absorbed in the common understanding of what it means to be an entrepreneur. Research has shown that the entrepreneur is often depicted in the media as a flamboyant jester (Anderson & Warren 2007), as a passionate person with more "drive" than most people (Cardon & al. 2013), or as an intuitive mind that trusts his gut feeling and dares to follow it (Blume & Covin 2011). As we will see in later chapters, all of these attributes are indeed common tropes repeated in startup culture. Along with these traits, there are also more visible "cues" – such as clothing – for distinguishing startup entrepreneurs from regular entrepreneurs and corporate managers. When encountering a startup entrepreneur in the pages of a business magazine, the first thing that one usually notes is the relaxed dress code. Entrepreneurs are rarely seen wearing suits, which are the normal CEO attire. However, there is a dress code hidden inside what might at first seem like a lack of dress code: sneakers, t-shirts and hoodies are used not only in the office, but also in public appearances (see Kim 2014). This subtle dress code has been developed to the extent that critical remarks have been made about how the casual dress of the programmer has transformed into an almost mandatory "tech uniform," a stereotype that is actively emulated by aspiring entrepreneurs who want to look the part (see Chan 2014).

Famous startup entrepreneurs have been forerunners in setting the dress code. Mark Zuckerberg used to wear his Adidas flip-flops everywhere, and usually alternates between wearing a hoodie or a t-shirt. Even Madame Tussaud's wax museum has a statue of a shoeless Zuckerberg dressed in a hoodie. The famous founder and venture capitalist Paul Graham is often photographed wearing sandals and shorts, even when interviewed by business magazines. Steve Jobs, the founder of Apple, seemed to always wear the same clothes; jeans with running shoes and a black turtleneck. The tech uniform has spread around the world along with the culture of startup entrepreneurship. In Finland, it is almost impossible to spot Rovio's Chief Marketing Officer – or "Mighty Eagle" as it reads on his business card – without him wearing a red Angry Birds hoodie.

Uniform or not, looking casual is part of the habitus of the startup entrepreneur. But behind this casual façade that the startup culture celebrates, there is a strong connection with the serious high-stakes game that is venture financing. If we look into the history of the startup entrepreneurship in Silicon Valley, we start to see how and why the interactions between venture capitalists and entrepreneurs have been a major influence on startup culture.

[17] Farrary and Granovetter (2009, 329) write that translating friendship (social tie) into a company (economic tie) has been a common feature among startups. Their examples include companies like Hewlett-Packard, Apple, Cisco, Yahoo and Google. Many more could be added, such as YouTube and Twitter, for example. We will return to this later.

THE SYMBIOTIC RELATIONSHIP BETWEEN VENTURE CAPITAL AND STARTUP CULTURE

It is important to clarify that startup entrepreneurship as such is not something that needs venture capital in order to happen – many founders are reluctant to share the ownership of their firms. But still, it could be argued that the popular character of the startup entrepreneur would not be what it is if it weren't for the presence of venture capital firms. They are both fairly recent institutions and have to some extent evolved together: both venture capital firms and computer technology startups emerged after the Second World War. The first "iconic" tech startup, Hewlett-Packard, was founded in 1939, and the first venture capital firm, American Research and Development, emerged in 1946 (see Gompers 2001). .

Although the culture of startup entrepreneurship is now spreading around the globe, and gaining new forms, it is safe to say that it first emerged in Santa Clara Valley, what is now called Silicon Valley. The story of the rise of Silicon Valley is an interesting one. During the Second World War, the development and production of military electronics was administrated mostly in esteemed east coast universities, but also in other places such as Santa Clara Valley's universities. The problem in California was that there were no large technology firms in the vicinity of Santa Clara Valley, so there was pressure to facilitate interaction between universities and small firms. Around the east coast, and especially around MIT, there were plenty of big established tech companies. The absence of large technology firms was one factor that led west coast universities, especially Stanford, to create a more complex network of partnerships through facilitating interaction with entrepreneurs. As a result, a special culture of cooperation formed between entrepreneurs and universities (Saxenian 1996; see also Blank 2007).

The relationship between universities and businesses provided only one side of the equation in the making of Silicon Valley. In 1956 a company called Shockley Semiconductor Laboratory opened, marking a more appropriate birth date for what is now called Silicon Valley. In 1957 a "traitorous eight" left Shockley Semiconductor and formed dozens of companies that were to become the backbone of Silicon Valley. Soon, venture capital firms started emerging in the area, experimenting with this new breed of technology companies. Ferrary and Granovetter (2009) make a sound case of how the rise of venture capital, more than anything, made the growth of Silicon Valley possible. The complex network of actors that we call Silicon Valley did not form around startups, but around venture capital firms. Serving diverse functions such as financing, selection, collective learning, embedding and signaling, venture capitalists had a significant impact on the ecosystem of startups as well as on the startups themselves, and they still do (ibid. 2009). Of the five functions of VCs that Ferrary and Granovetter (2009) present, **financing** is the most obvious one. Investment of capital into startups to gain return on the investment later on is vital. But this is only the most obvious one of the five functions that VCs serve. VCs also work as **gatekeepers** when selecting what startups to invest in, and when creating the heuristics that guide this selection process. In addition to these, VCs work as **knowledge banks** that gather information on what kinds of startups tend to succeed, thus acting as mentors for their startups.[18] The **embedding** function of VCs means that they help startups get access to various services in a complex network of actors, i.e. services such as law firms, media agencies and business coaches, some of which are picky about their clientele. The last but not least function is **signaling**, which refers to how VCs – through investing in certain firms – send signals to their network about what are the most promising startups. By opening further opportunities, an investment from a respected VC firm can easily become a self-fulfilling prophecy that helps the startup achieve success. To

[18] See also Hellmann & Puri (2002) on venture capital and the professionalization of startup firms.

cut a long story short: the actions of VCs go a long way to determining who gets to meet who in the complex network of actors that surrounds startups. Because of this, startups are often better off in adapting to what VCs expect from them if they want to reach success, and especially if they are seeking funding (Chaganti, DeCarolis & Deeds 1995).

The relationship between entrepreneurs and VCs is a relationship which is defined by the uncertainty of the situation. The aim is to make the startup succeed, but there are often differing views on how much control, and how many shares, the VC should get in the deal. Some entrepreneurs have had bad experiences, and hence the acronym "vulture capitalists" is sometimes used (Gompers 2001, 7). Even if the entrepreneur would be willing to give away a fair amount of control and shares, the startup might run into a double bind when presenting itself to potential investors. As Zimmerman and Zeitz (2002, 425) have noted:

> The process of legitimation for new ventures often leads to a paradox. A new venture needs legitimacy to access resources and to grow, and it often gains legitimacy by conforming to its social structure. However, a new venture also often sells itself as offering something different, so in some sense it may challenge existing expectations, or at least create new ones. (…) It "flies in the face" of its social structure.

In order to build "higher levels of legitimacy," a new startup needs to combine different legitimation strategies, such as selecting a favorable environment, manipulating expectations and creating new ways of doing things (Zimmerman and Zeitz 2002). With all these demands, it becomes clear that there is a demand to speak the right language and give the right impressions to the VCs in order to gain legitimacy. In light of this, there has been some discussion on whether a startup entrepreneur should actually be "passionate" about his startup idea, and whether this matters (Cardon & al. 2013), and whether entrepreneurs are sincere when they attribute some choices to "intuition" (Blume & Covin 2011). If there is not much else to build on, then a display of conviction, passion and intuitiveness might be useful in convincing investors of your startup's worth. The "scripted spectacle" of entrepreneurship is thus repeated again and again in order to secure investments, while the mundane aspects (e.g. routines, bureaucracy and repetitive tasks) are toned down or deemed irrelevant (see Bill & al. 2010). Indeed, it has been suggested that the "entrepreneurial stories" told by an entrepreneur can significantly help his startup adapt to the startup ecosystem (Lounsbury & Glynn 2011). A key aspect of these stories is their ability to reduce uncertainty by building legitimacy (ibid., 549).[19] Lounsbury and Glynn have offered some propositions about how this reduction of uncertainty happens through entrepreneurial stories: first of all, the most significant impact of these stories is that they make the unfamiliar more familiar, understandable and acceptable for potential investors. In other words, the stories legitimate the startup by arranging information in a patterned way. In order to achieve this, the stories have to do three things: they must resonate with current expectations and interests of potential stakeholders; they must suggest how the startup is distinctive from other companies; and they must make claims about how the startup relates to industry and its norms (Lounsbury & Glynn 2011).

[19] Uncertainty means having to proceed without adequate knowledge of the situation at hand. As George Shackle (1955) wrote, "(t)here would be no uncertainty if a question could be answered by seeking additional knowledge. The fundamental imperfection of knowledge is the essence of uncertainty."

The success of venture capital firms and startups has shown that both parties are very well capable of operating in this world of stories and shared meanings, even when uncertainty is high. What makes this impressive is the fact that these stories deal almost solely with "imagined futures" or "fictionalized expectations" (see Beckert 2013), i.e. the markets for the product in hand have not yet been realized as markets, as there are no paying customers in sight. Thus, there is often a high risk of the imagined futures remaining imaginary. But somehow both venture capitalists and entrepreneurs are able to surpass this uncertainty by forming heuristics and expressing trust where there are obvious blind spots in knowledge. In this way, there is a doubling of reality in a very radical way as the entrepreneurs and venture capitalists arrange their activities towards markets that do not exist. As Jens Beckert (2013) writes, "Actors are motivated by an imagined future and organize their activities based on this depiction."

We can see how startups offer "imagined futures" or "fictionalized expectations" for investors who need the imaginaries in order to change the uncertainty to risk, i.e. to something more calculated. By doing so, they also testify to the validity of these imaginaries. Moreover, if the investors have any influence in their network, their investment (as a testification and as a display of trust) will push the imagined future towards becoming a reality (see Ferrary & Granovetter 2009, Zimmerman & Zeitz 2002). Thus, recursive loops emerge in economy, as actors are observing actors observing actors (see Esposito 2013). We will return to this later in this chapter.

We have now observed how new ventures gain legitimacy through telling stories or, more generally, through the use of cultural forms. Furthermore, we have seen how "imagined futures" or "fictionalized expectations" are built into this culture. To better understand this situation, we will have a closer look at "symbolic leadership," and how it has reached new heights in the past decades. The purpose of the following literature review – going outside the subject matter of startup entrepreneurship – is to present a functionally equivalent phenomenon. In other words, we present a similar problem-solution scheme that has occurred outside the scope of startup entrepreneurship. After this brief literature review, we can reframe the problem under study in a more refined way, as we can see new connections.

I will begin with a brief introduction on "symbolic leadership" and how it was first discovered and understood in management science. After this, it is shown how symbolic leadership took ever more influential forms in the management of corporations as CEOs were increasingly observed and affected by investors, corporate boards, and the media. This has led to a rise of "celebrity CEOs" in business leadership, i.e. there is now less emphasis on the CEO as an expert and more emphasis on him as an individual visionary who opens new meaning horizons and gives hope and inspiration to the corporation and its stakeholders.

A Reference Point: Uncertainty and Symbolic Leadership in Business Organizations

The idea that managers serve symbolic functions in organizations is not new.[20] Henry Mintzberg (1973), in his famous book *The Nature of Managerial Work*, listed various symbolic activities of leaders, such as signing

[20] The idea of symbolic leadership has some resemblances with the theory of "the king's two bodies." This theory, put forward by the historian Ernst Kantorowicz (1895-1963) in his work on "medieval political theology," stated that the king was often depicted as having two bodies. These bodies were the body natural and the body politic – the latter an embodiment of the community of the realm and the former his physical body. We

documents, playing out ceremonies and acting as a figurehead and a source of inspiration for employees. It soon became clear that what Mintzberg had found was just the tip of the iceberg. As Pfeffer (1977) noted in his article "The Ambiguity of Leadership," "the symbolic role of leadership is more important than implied in such a description." Pfeffer (1977, 211) suggested that, to get a more holistic understanding of the symbolic role of leadership, we should have two separate strands of leadership studies: one analyzing leadership as a social influence process, and the other analyzing leadership mythologies and the processes by which they are created. Similar ideas were presented by Meyer and Rowan (1977), who criticized prevailing theories for their view that organizations function according to their formal blueprints, with actual activities conforming to the prescriptions of the formal structure of the organization. Empirical research on organizations had already shown that the relationship between informal and formal structure was much more complex and one could not be replaced with the other; organizations, like societies, needed myths and ritual elements to survive, and these should be studied as a force.

During the next decade, there were more than a handful of studies that focused on how, and why, causality was attributed to leaders in such ritualistic ways (Salancik & Pferrer, 1978; Bettman & Weitz 1983; Staw et al. 1983; Salancik & Meindl, 1984; Salancik & Pfeffer 1986). In this literature, the symbolic function of leadership was not seen simply as binding the organization together through ceremonies, but also as a way of sending signals to the outside world as well as for making sense of a complex environment. In organization science, the studies of Bettman and Weitz (1983), Staw et al. (1983) and Salancik & Meindl (1984) paved the way for understanding how causal attributions were used. They all studied causal reasoning in corporate annual reports and found strong evidence for self-serving attributions. The studies differed in focus, but their contributions were mutually supportive.

For example, Salancik and Meindl (1984) studied CEO statements in annual stockholder reports and argued that the "managements of unstable firms strategically manipulate causal attributions to manage impressions of their control" of organizational outcomes. The results indicated that top managers of firms displayed strong tendencies to credit themselves for positive outcomes. In other words, when a firm experienced success such as growth in revenue, the management was three times more likely to acclaim their contributions to the firm's fortune than they were to make any other causal statement. By ruling out other possibilities, Salancik and Meindl theorized that these attributions are purposeful because they send a signal that the management was "in control of organizational outcomes" and, by doing so, could "encourage people to participate in the organizational coalition." Interestingly, however, economically unstable firms had a much stronger tendency to accept more responsibility for negative outcomes than economically stable firms. For this exception, the authors had an interesting theory: taking responsibility, whether for a negative or positive outcome, is what a management of a firm would do if they needed to convince constituents of their ability to direct the corporation more effectively. Uncertainty was not faced by blaming the environment, but by taking responsibility for the failure to understand the environment. By taking responsibility, the management sent a signal that it knew what to fix to better adapt to the challenges posed by the changing environment. In this way – in conceptualizing the majority of outcomes as resulting from the leader's decisions – unstable firms can depict themselves as steering

will return to these ideas at the end of the present chapter, when we consider briefly how symbolic leadership, and leadership stories, operated in different ways before and after the functional differentiation of society.

the company even when this is not the case. This could be described as "the romance of leadership" (Meindl, Ehrlich & Dukerich 1985), meaning that leadership becomes an explanatory concept that is used to make sense of organizations as causal systems.

Implicit in the results of Salancik & Meindl (1984) – as well as in Bettman and Weitz (1983) and Staw et al. (1983) – was the idea that the appearance of steering a company is more important for the management of a company than the success of steering it in the right direction. Through studies like these, it became clear that there are two levels of leadership: the leader as a decision maker and the leader as a symbol of control.

It is worth noting that Salancik and Meindl (1984) were closing in on a phenomenon that would later be categorized by sociologists under the umbrella category of "the risk society," most famously thematized in the works of Ulrich Beck and Niklas Luhmann. According to Luhmann, modern society is affected by the understanding that everything could have been decided otherwise and that every decision has consequences. This understanding results in a situation where "safety" is never actualized, but instead new dangers and new risky decisions are observed (Luhmann 1993, 23–28). According to Luhmann, this uncertainty can be momentarily reduced in organizations in two ways – either by "joint decision making" that reframes uncertainty as "risks" to be taken, or, alternatively, by means of "project description by the protagonists," i.e. adding layers of communication to produce an illusion of having risk under control before taking the decision (1993, 192). This usefulness – albeit somewhat counterintuitive – of having an "illusion of control" seems to be what Salancik and Meindl (1984) were after in their study.

One could ask, then, what are the implications of this over-emphasized attribution of causality to a leader? To begin with, there are obvious tradeoffs for the leader with the randomness of causal attributions: he is now also accountable for things that he has little if any control over. But his role as *a reference point* is precisely what makes him more useful for the organization as a system – he can now symbolize ideas and events that the organization is associated with since he is tied to them through his decisions and his image. This usefulness of a leader's symbolic value, and of all the little rituals associated with it, was well noted by Pfeffer and Salancik (1978) in *The External Control of Organizations*:

> Organizations and social systems go to great lengths to invest managers with symbolic value. Leaders may be provided with special perquisites and designations of authority which serve not only to reward the leader but also to remind others of this person's importance by focusing attention on him. When one leader leaves office, the search for the new leader may be elaborate, involving committees, elections, inaugurations, and the expenditure of time and resources. All of these activities tend to cause observers to attribute great consequences to the occupant of the particular administrative position. In this sense, the symbolic role of management is critical whether or not the manager actually accounts for variance in organizational results. The symbol of control and personal causation provides great stability for the social system. (Ibid., 263)

In this way, the symbolic role of the manager is especially useful when things go wrong; firing a manager clears the air and designates a scapegoat. After firing its leader, an organization can take more radical measures as the top manager is no longer there to defend his past decisions. Firing leaders as a way of bracketing failure and transferring it outside the organization is something that is, to some extent, very helpful in fast and competitive landscapes: Gamson and Scotch (1964) have noted that firing baseball managers is indeed a form of

scapegoating; similar results were obtained in a recent study of Norwegian football managers (Arnulf et al., 2012). It has also been shown that the attribution of causality to the leader correlates with the competitiveness of the landscape. For example, Aerts (2005) found in his study that listed companies were more likely to attribute causality to the actions of their leaders than non-listed companies. Furthermore, the results confirmed the idea that negative outcomes are not concealed, but rather acted as cues for impression management and optimism about future performance (Aerts 2005, 515).

What I would like to point out is that all of the studies above show how decisions and decision makers are powerful narrative tools that enable the organization to show that it is more in control over its environmental factors. It seems, however, that they are not used in a reflective fashion, but because the events have their own dynamic in which it simply makes more sense to attribute outcomes to leaders so that the world can be seen in terms of a pattern of actions. Tracing decisions and decision makers builds grounds for retrospective sense making. Following from this, the more decisions an organization makes, the more room it has for attributing its outcomes to one of those decisions instead of "chance" or "the environment". This, of course, is something that we find in all decision making, and not just management. As Harold Garfinkel has written:

> In place of the view that decisions are made as the occasions require, an alternative formulation needs to be entertained. It consists of the possibility that the person defines retrospectively the decisions that have been made. The outcome comes before the decision. (…) The rules of decision making in daily life (…) may be much more preoccupied with the problem of assigning outcomes their legitimate history than with the question of deciding before the actual occasion of choice the conditions under which one, among a set of alternative possible courses of action, will be elected. (Garfinkel 1967, 113-114, originally quoted in Weick 1979)

Indeed, what has been made clear by the literature reviewed so far is that managers reduce uncertainty in two ways: not only (1) by making decisions concerning the organization's future, but also (2) by *creating an illusion of control* through anchoring outcomes and decisions to themselves. In this way, both the "managing side" and the "symbolic side" of management can be seen as two ways of solving the problem of uncertainty. This, however, poses its own problems for anyone observing management – as has been neatly summarized by Hendry and Seidl (2003, 191): "because both *change* and *ritual* tend to be entrusted to the same 'priestly' élite, *the two can easily become confused*" (my emphasis). This confusion can be hazardous for the organization, since rituals can intercept and abort attempts at reflexive communication. With too many ritually allocated attributions, communication is in danger of being "rigidified as a fixed course, and its rigidity takes the place of any question concerning why this is so" (Luhmann 1995, 452). In other words, by ritually attributing organizational outcomes leaders run the risk of stalling reflexivity inside the organization.

The Celebrity CEO as a Symbol of Control for Investors

So far, we have observed how symbolic leadership operates inside organizations, and guides their decision making. Recent research has shown that modern CEOs increasingly have a symbolic role also outside their respective organizations. This means that the CEO as a symbolic figure plays an important part in how the organization communicates with its environment (see, for example: Chen and Meindl 1991; Fanelli & Graselli 2006; Hayward, Rindova & Pollock 2004; Westphal & Zajac 1998; Sinha et al. 2012; Heames & Harvey 2006). This seems to be closely tied with the way that the stock market enables companies to observe how they are being

observed. In other words, the recursive interplay between investors and corporations gives an extra push to symbolic leadership:

> Certain features of the stock market make it particularly receptive to symbolic action. […] To cope with the quick response times and imperfect communication that characterize market reactions to announced events, audience members can be expected to estimate how others are likely to respond in determining their own response to the current action. Such estimations are influenced, in turn, by prior market responses to similar events, providing the basis for institutional effects in the construction of market value. (Westphal & Zajac 1998, 131)

In their study of 400 corporations over a 10-year period, Westphal and Zajac (1998) found proof that symbolic language is heavily used in the way that CEOs are presented to the stockholders. This was particularly clear in the way in which the companies studied were able to boost shareholder confidence by adopting long-term incentive plans (LTIP) that "symbolically align CEO compensation with shareholder interests." Westphal and Zajac (1998) found out that:

> the stock market reacts positively to LTIP adoption whether or not the plans are actually implemented. Second, we found that using agency language results in a more favorable stock market reaction to LTIP adoption, again, irrespective of whether the plans are implemented.

This means that the stock price would sometimes rise simply as a result of symbolic gestures – by referring to future decisions that were never implemented (LTIP adoption) or by enforcing an agency perspective through the use of language (emphasizing the leader's role in organizational success). A CEO has a function not only as a decision maker and a symbolic leader *inside the organization*, but also as a symbolic leader *in relation to stakeholders*. The CEO builds a common ground of understanding between a company and its stockholders, and much is done through symbolic gestures, i.e. through the somewhat superficial management of expectations.

Fanelli & Grasselli (2006) offer further research on how symbolic leadership – or "charismatic symbolism" as they call it – matters in the interplay of organizations, investors and analysts. More specifically, they add important detail on the process of how symbolic action effects stock market perceptions. After analyzing two cases of CEO succession, they conclude that charismatic symbolism is "not unidirectional control located in one social domain (the CEOs) and exercised over another (the analysts), for analysts are both central agents in, as well as beneficiaries of, the diffusion of charismatic imagery" (ibid., 826). In other words, an analyst testifies the CEO's achievements, thus cooperating in institutionalizing the charismatic image of the leader.

As a third force contributing to charismatic symbolism, Fanelli and Graselli (2006) propose the strong influence of charismatic leadership theory (CLT) over management studies. CLT identifies the extraordinary characteristics that inspire devotion and motivation in followers. These studies tend to describe charismatic leaders as highly influential and confident individuals and explain organizational phenomena through their actions. There is, of course, some truth in these theories, but they also oversimplify the picture by referring to the personality. As a result, the phenomenon of charismatic leadership is reduced to a psychological attribute, and this strengthens the view that there is a special breed of people who are extraordinary leaders. In this way CLT studies might indeed reinforce the cult of the celebrity CEO and give stockholders, analysts and business media one more reason to focus on every gesture of the leader while downplaying more complex variables.

In creating celebrity CEOs, the business media is partly to blame. In its attempt to reduce the overall complexity of a situation, a great deal of business journalism tends to revolve around what the CEO does and says. According to Hayward, Rindova and Pollock (2004), a CEO acquires true celebrity status when "media sources attribute a firm's positive performance to the CEO's actions in a way that generates a powerful impression of renown and credibility for that CEO." In the process of attributing a firm's actions and performance to its CEOs, Hayward et al. write, journalists create celebrity CEOs. For a firm, a problem arises if a CEO internalizes the celebrity status, as he will then be less willing to consider strategic alternatives thoroughly. This causes "strategic inertia" (ibid., 646), i.e. a narrowing down of the horizon of possibilities in decision making due to a lack of reflection. If the firm manages to succeed despite (or because of) a stubborn celebrity CEO, it can celebrate the tough-mindedness of its leader. Either way, celebrity CEOs run the risk of becoming over-confident, over-optimistic and over-committed to failing strategies (see Sinha et al. 2012).

Taken together, previous research seems to suggest a vicious circle between CEOs, analysts, stockholders and business media. On all levels there is a struggle for control over growing complexity and uncertainty, and part of this burden is resolved by attributing meaning to, or deriving it from, the public character of CEO. The symbolic role of leadership lets the actors reduce complex causal patterns to simpler ones, and to do "divination" before actual results are visible. At best, it helps to avoid a standstill, but attributing too many unauthorized outcomes – positive or negative – to a CEO has obvious detrimental effects on how the firm is managed. Raising the CEO on a pedestal has been discovered to discount contextual factors in business performance, overstating the CEO's influence, and increasing the CEO's overconfidence in his ability to steer the company (Sinha et al. 2012).

The cult of the celebrity CEO – especially as it operates in relation to stakeholders and markets – is closely tied to a phenomenon known as "investor capitalism" (Useem 1996). According to Useem (1996), institutional investors and investment experts have been exerting growing control over corporate managers since the 1980s. Useem provided the term as well as research on how investors were now influencing companies in novel ways and thus distorting corporate leadership. More recently, however, there have been interesting studies that trace the history and consequences of investor capitalism. Two of these are Mark Mizruchi's (2013) *The Fracturing of the American Corporate Elite* and Rakesh Khurana's (2002) *Searching for a Corporate Savior: The Irrational Quest for Charismatic CEOs*.[21]

In his detailed account of the rise and fall of managerial capitalism Mark Mizruchi (2013) shows how the economic crisis of the 1970s resulted in a stock market full of undervalued companies.[22] Old industries were adversely affected by foreign competitors and by the rapidly rising service industry. At the same time, the Reagan administration in the US started hiring officials steeped in a new economic model known as "agency theory." In a nutshell, this theory suggested that the primary purpose of the corporation was to maximize shareholder value and, following from this, managers should be given incentives that were first and foremost tied to accomplishing this mission (see Eisenhardt 1989). This, along with the widespread depressed stock

[21] Of course, there has always been business heroes of various sorts, although with less popular appeal. The successful entrepreneurs of early industrial capitalism were either observed negatively as "robber barons" or positively as "captains of industry". A good introduction to early business dynasties, and to the men behind them, is offered by Landes (2008) in his book *Dynasties: Fortune and Misfortune in the World's Great Family Businesses.*

[22] The rise of managerial capitalism was famously observed by Chandler (1977) in his book *The Visible Hand: The Managerial Revolution in American Business.* Related to the managerial revolution was the rise of business schools as business management came to be seen as a profession in its own right (Khurana 2007).

market prices, created a fertile environment for corporate acquisitions. The acquisition wave was first led by outside raiders and private interest groups that started buying poorly performing firms and restructuring them for profit (Khurana 2002, 55). This is often referred to as "the first private equity boom" (the second was the dot-com boom and the third the housing boom, both occurring during the first ten years of the 21st century).

As Khurana (2002) has shown, these desperate times transformed into new kinds of demands for corporate CEOs. The CEO was now expected to bring outside wisdom to a corporation that was losing value. He was to take the measures that were necessary to increase shareholder value. He was to inspire and lead the employees and give a face to the company that was more and more criticized by the media. The media took to this, and started to praise the CEOs that seemed to raise the value of their companies. The earliest example of a "celebrity CEO" was Lee Iacocca, former President of Ford, who was hired as the CEO of Chrysler Corporation in 1979. Khurana (2002, 71-72) describes Iacocca at the top of his fame in the following words:

> Not since the heyday of the Robber Barons, when Rockefellers, Fords, and Carnegies ruled the business world, had a CEO so captivated the nation. Before Iacocca ascended to the leadership of Chrysler, the company had appeared doomed. Yet within a few short years, under Iacocca's leadership and with the help of $1.2 billion of government-guaranteed loans, the company appeared vigorous again. (…) In 1984, Iacocca's autobiography became the best selling business biography of all time. Two years later, standing at the base of the newly refurbished Statue of Liberty on a warm Fourth of July evening, Iacocca received more cheers than the man he was standing next to, President Ronald Reagan. Indeed, at that moment, many influential political people had initiated a movement to recruit Iacocca to run for president in 1988. Certainly his rhetorical powers were magnificent, and any other corporate chief appeared positively bland standing next to this son of Italian immigrants and personification of the American dream.

In the early 80s, every corporate board in the United States was searching for a charismatic savior. In his analysis of the CEO search process, Khurana found out that boards of directors were more prone to finding a charismatic leader for their corporation than wrestling with the environmental factors and other complexities that would determine a firm's performance (ibid., 208). But investors and corporate boards weren't the only ones who found solace in charismatic CEOs. The growing concern about the social and environmental effects of corporations increased the pressure on stakeholders being spoken to in a more humane way.[23] As a result, managers felt the need to portray their organizations as having a moral dimension (Khurana 2002, 70):

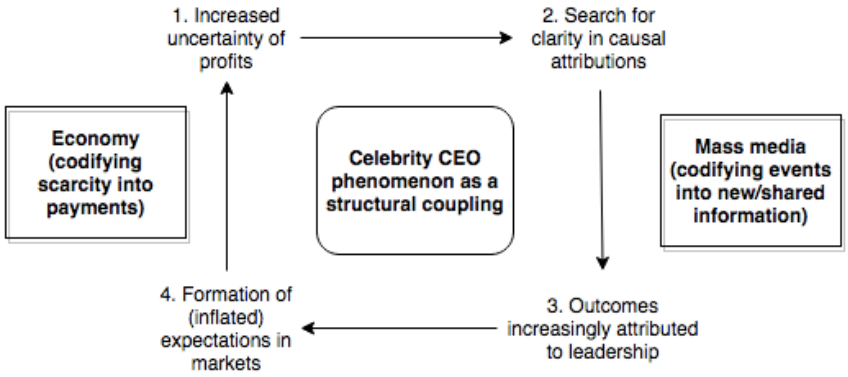
> The changing definition of business has also changed the definition of an effective CEO from that of competent manager to charismatic leader. Given the new conception of the corporation and its role in society, a CEO must now inspire. To motivate employees to devote long hours to the company, the CEO must convince them that the firm is not simply a profit-making enterprise but that it fulfills a larger, more exalted mission. (Khurana 2002, 71)

What we have seen so far might be reformulated as the rise of a "prophetic ethos" (Walsh 2013) in the business community in order to manage uncertainty. By "prophetic" we mean that the leader is not simply an expert in

[23] Amernic & Craig (2007) discuss how a specific "CEO speak" has evolved as top management has attempted to fix or soften critical issues in rhetorical ways.

his trade, but a visionary who is allowed to open new horizons of meaning at his own will, and others actors – employees, investors, business media – are expected to pay attention to his every gesture. There is thus more emphasis on the character and vision of the leader than before. As we have seen, the reasons for this are mostly in two interrelated phenomena: (1) the accentuated uncertainty between ownership and management in the aftermath of the 1970s recession, and (2) the increased impact of business journalism as a mediator of expectations between investors, analysts, and firms. Together these two phenomena have formed a recursive circle – whether it is seen as a fruitful or a vicious one remains a matter of the observer's position. Taking a more sociological stance, we can say that the popular character of the "corporate savior" presented a new variation to the "structural coupling" (Luhmann 2013, 108-115) between the economic system and the system of mass media. By structural coupling we mean that the economy and mass media, as different systems, could increasingly interpret one another's operations as information.[24] For media, successful CEOs appear as good stories. For investors, the more spectacular stories offer further proof that a company is worth investing in. A cyclical motion (see Figure 1) forms around this structural coupling where (1) the management of uncertainty creates (2) the need and search for clear causal attributions, that translates into (3) unclear outcomes being attributed to management by investors and the business media serving them, and finally (4) these narratives being fed back to investors and other market actors, who calibrate their expectations accordingly. Thus, Figure 1 presents us with a model that takes the previous research on symbolic leadership and observes how it can be conceptualized in the context of society (see Luhmann 2012 and 2013). The purpose of our model is to set the stage in two ways. Firstly, it tells us why, and in what ways, leadership narratives matter, and thus guides our data collection (see Epstein 2008). Secondly, the model has to be strengthened with further research, this being the purpose of the present study. Thirdly, the model raises questions about the relationship between narratives and reality. These questions need to be answered before the research can truly begin. This answering will be done in Chapter 2, where we will focus on the conceptual framework I will be using.

Figure 1: Summary of the reviewed literature: Repeated and heroic leadership narratives of celebrity CEOs form a structural coupling through which the economy and mass media irritate each other in cyclical fashion



[24] In this study, we use the concept of structural coupling to designate the coupling between social systems. However, Luhmann (2012, 49-67) also uses the concept to discuss how humans and social systems constantly adapt to each other's irritations. It is, in other words, a very general concept that avoids the pitfall of positing a too strong causal connection between different modes of self-organization (i.e. between different systems).

Probing for a Sociological Perspective: Leaders, Charisma and the "Active Centers" of Society

As we have seen, the previous research on charismatic leadership in business organizations, and on the celebrity CEO phenomenon, is consistent and interesting, but is largely confined to a discussion about firms, markets and investors. What I want to focus attention on is this: could we observe these cults of business leadership in a wider context of society, perhaps seeing how they relate to wider cultural movements and conceptual shifts instead of how they relate to organizations and markets? In order to do this, we need to consider some general level theories – as opposed to management science theories – which address the tension between leadership and culture. We will begin by considering some historically repeating patterns in the relationship between an emperor and the central ideas of the culture surrounding the emperor; we will then consider how these ideas should be seen in our time, i.e. in a functionally differentiated society that is only able to describe itself in a fragmented way. This will open up a wider perspective on the subject matter, and will also act as an introduction to the conception of society that we will return to later in this study.

The Ruler and his Royal Progress as the Self-Reflection of Society

In his article "Centers, Kings and Charisma," Clifford Geertz (1983) argues that Max Weber's notion of charisma has lost its original complexity in the hands of later sociologists. More often than not, charisma is now reduced to a psychological attribute of a given leader while the more sociological dimension of the concept has disappeared. For Weber, charisma was more than merely a psychological attribute that builds legitimacy in times of social disorder and disintegration (1983). To counter simplifications of this sort, Geertz praises the work of Edward Shils (e.g. 1965) for uncovering the more sociological aspects of Weber's concept of charisma.[i] According to Shils, charisma for Weber could be defined as *the symbolic value an individual possesses* and the *relation of this symbolic value to the active centers of the social order*. Viewed in this way, charisma presents itself as *a sign of being near the heart of things* (ibid., 14), or stands proxy for something important. Somebody might indeed be a charismatic person, but to be charismatic in the sociological meaning of the word, there would have to be a connection between the charisma of the person and some set of shared and valued ideas. This notion of charisma comes very close to Aristotle's notion of ethos if, again, understood in its original meaning. Ethos is usually referred to as one of the three modes of appeal, but on closer inspection it has a more sociological quality to it than logos and pathos. In rhetoric, it can be summarized as the "argument from authority," but this authority does not refer to a personal quality, but emphasizes something conventional and public. In its concrete meaning it refers to "a habitual gathering place" (Halloran 1982). Thus, to have ethos "is to manifest the virtues most valued by the culture to and for which one speaks" (ibid.).

In pre-modern societies this sense of "being near the heart of things" was usually presented by appearing to stand close to a god, or at least symbolizing some of the deity's central qualities. To bring this sociological understanding of charisma to life, Geertz presents us with three examples of "royal progress," i.e. of the tour that an ruler emperor had to make amongst his people in order to take "symbolic possession" of his realm. These tours could go on from one week to several months, and consisted of a series of festivities and public appearances. Geertz gives us examples from different times and cultures: England in the times of Elizabeth I (1533–1603), Hayam Wuruk's (1334–1389) Indonesia, and Morocco in the times of Mulay Ismaïl (1672–1727). Without going too deeply into Geertz's description of these figures, we can say that each was a personification

of something that was at the time considered to be a central aspect of god. Thus, Elizabeth ruled with symbols of chastity, Hayam Wuruk with symbols of magnificence, and Mulay Ismail with energy displayed by his constant movement and ruthless expressions of personal power. The royal progresses of these three rulers were depictions of their traits in a most concrete manner. Geertz (1983) describes how the "political imagination" that was at work in the progress of Elizabeth I was:

> […] allegorical, Protestant, didactic, and pictorial; it lived on moral abstractions cast into emblems. Elizabeth was Chastity, Wisdom, Peace, Perfect Beauty, and Pure Religion as well as queen (at an estate in Hertford she was even Safety at Sea); and being queen she was these things. Her whole public life – or, more exactly, the part of her life the public saw – was transformed into a kind of philosophical masque in which everything stood for some vast idea and nothing took place unburdened with parable.

What interests Geertz is that, in the times of Hayam Wuruk and Mulay Ismail, very different ideas had to be conveyed if the ruler were to take symbolic possession of his realm. Thus Ismail displayed force, movement and violence, whereas the symbolism and the hierarchy enforced by Wuruk depicted a static yet magnificent order that gave everything its proper place in a clockwork manner. They all made their royal progresses in the periphery of their kingdom but the way that the ruler as depicted was different, as was the journey that the ruler had to take. What is shown by these examples is that in spite of these differences, the ruler has to embody an idea of "the center" for the periphery. Geertz (1983) defines these centers as the

> […] concentrated loci of serious acts; they consist in the point or points in a society where its leading ideas come together with its leading institutions to create an arena in which the events that most vitally affect its members' lives take place. It is involvement, even oppositional involvement, with such arenas and with the momentous events that occur in them that confers charisma. *It is a sign, not of popular appeal or inventive craziness, but of being near the heart of things*. (Italics mine)

In this way, we come to see charisma not as a personal quality, but as the expression of attributes that connect the person to the central ideas of the culture (but not necessarily a "national culture"). We could say that the cultural form dictates the leadership form, even in situations where charismatic leadership abounds. Here, we do not have to restrict ourselves to considering political leadership. Instead, as Geertz notes, "charismatic figures can arise in any realm of life that is sufficiently focused to seem vital – in science or art as readily as in religion or politics." What is always there, however, is the "sacredness" of some central ideas. Geertz is well aware that these active centers of social order are not static, but constantly reformulating as cultures go through changes. Even when taking a revolutionary stance towards the existing order, one has to offer a reformulation of the center or evidence of being a representative of it. Again, as Geertz (1983) writes:

> Every serious charismatic threat that ever arose in Alawite Morocco took the form of some local power figure's laying claim to enormous *baraka* by engaging in actions – *siba*, literally, "insolence"--designed to expose the weakness of the king by showing him up as unable to stop them; and Java has been continuously beset by local mystics emerging from meditative trances to present themselves to the world as its "Exemplary Ruler" (*Ratu Adil*), corrective images of a lost order and an obscured form.

For a sociologist, there is a problem here: if we are to follow the charismatic figure in order to define the "active center" of a culture, then we find ourselves facing the complexity of modern society. How are we to account for the functionally differentiated arenas that have different leading ideas and leading institutions? In order to gain a better understanding of how we are to envision the "active centers of social order" in a centerless society, we will bring Geertz into conversation with Luhmann's (2012 & 2013) theory of society. This will lead us to a consider how the functional differentiation of society has affected leadership stories, and charismatic symbolism that goes hand in hand with them. A good way to start is to look at Luhmann's ideas about the "contingency formulae" specific to each function system of society (Luhmann 2013b, 105-131).

Effects of Functional Differentiation: From an Active Center to Multiple Systems

At this point, it is enough to introduce the idea of "contingency formulae" of function systems.[25] In essence, contingency formulae are functional system specific concepts, or "communication tricks" that allow communication to continue "despite the lack of metaphysical security" (Qvortrup 2005, 9). They emerge in communication when the functional systems of society (economy, politics, religion, education, etc.) reframe ambiguous and uncertain questions in a language that is ready to be processed in their operations, through their medium, and by their binary codes (e.g. money/no money, legal/non-legal, government/opposition, etc.).

For a function system, a contingency formula is the central, indisputable idea that new communications can be set against to anchor them into the system (Luhmann 2012, 282). As a reference point, a contingency formula translates indeterminability into determinability by offering a "narrower version of the problem as its solution" (Luhmann 2013b, 105). This narrowing down can be clarified in how contingency formulae act simultaneously as constraints and enablers of communication: a contingency formula aims to suppress possibilities for meaning by reframing all meaning in relation to its formula. This, of course, guarantees a certain familiarity with regard to any given topic, and enables the system to operate endlessly by way of taking new topics that were previously outside its boundaries. This is hard to understand without examples, so let us consider a few.

One example would be legal communication about smoking, initially taking form as a question of "justice" (law's contingency formula), thus making it appear as a possible legal issue (Moeller 2012, 134). Exotic topics are noise for a system until they come into contact with the systems contingency formula and thus begin irritating the system, as if asking to be incorporated into its communications. In the case of smoking, the political system might postulate the problem through "accepted values" but, being unable to solve it with its own operations, turns it into a question of costs to society, i.e. a problem of scarcity, and finally into a legal question. Traveling through these systems and their different logics, the topic and its framing change shape until the original

[25] Function systems are social systems that have evolved around a single problem (e.g. scarcity in an economy), and that have reached an abstractive capacity that observes events in terms of being resonant with the systems operations or not (see Luhmann 2013, 87-108). The functionality of the system here does not mean functionality in relation to society at large, but in relation to solving the problem that the system revolves around (ibid. 89-90). The dominance of functional differentiation can be observed in both micro and macro levels (to use traditional sociological terminology). In micro interactions, it is easy to see how our way of insulting each other differs from earlier societies, where segmented, stratified or center-periphery differentiation was more prevalent. In our society, we insult people by defiling their status relating to function systems ("you have no money/love/rights/education/style/etc."), whereas in a tribal society it is more insulting to defile the other's position in a network by attacking connections ("your father has no honor!"). As an example of macro phenomena, it is easy to give examples of how the globalized economy overpowers national politics (pushing it towards neo-liberalism) in which the self-description is still fixed at the level of the container-like nation state. Compare this to a situation in medieval Europe where emperors represented the apex of all systems, and differences between social strata, segments or locations were more effectual. For more on functional differentiation, see Luhmann (2013, 89-108) and Roth & Schütz (2015).

formulation is, more or less, lost in translation. (For more examples of problems of political steering, see Moeller 2012, 88-104.) The complexity of the functionally differentiated society is an endless supply of confusions and debates, as there is still an expectation of some central operative logic.

The idea of a contingency formula becomes clearer when seen through specific function systems. In religious communications, and in societies where religious and political communications have not yet differentiated from each other, all things make sense when we set them against the idea of God. We can therefore say that God is the "contingency formula" of religion (at least in monotheistic religions). In communication, God is the "supra-modal necessity" that resists the "respecification" of any topic, as all topics have a defined connection to God. This makes it more unlikely for a member of a culture to deviate from the said culture:[26]

> The formula, God, basically signifies the compatibility of any contingency with a kind of supra-modal necessity. As a result of this generalization, the task of respecification becomes more difficult. All the contingency of an increasingly complex world, including evil and chance, must be attributed to the one God and must therefore be interpreted within the religious system. (Luhmann 1984, 52)

What I wish to show by combining Geertz's idea of "charisma as standing proxy for a center" with Luhmann's definition of a "contingency formula" is to strengthen the point that has already been implicitly made as we have combined a mass of previous research to construct a vicious circle between the cult of the celebrity CEO and the growing uncertainty in the market. The point I am referring to is this: that charisma should be studied in relation to various social systems in society, especially in relation to couplings between these systems. Another way of putting this is that charisma operates in contextual border regions, even though it always seems to depict a center. The modern business world and its cult of the celebrity CEO displays some similarity when compared to an archaic tribe that lets a shaman or an elder act as a figurehead, thus tying together loose ends. The world navel – or the "axis mundi" as it is often called – can never be found, but it can be represented and redefined. Thus, leadership stories might offer a good entry point to unlocking cultural shifts and for observing the social systemic tensions that are connected to them.

Of course, we have to consider that perhaps leadership stories serve functions which depend upon how the society they appear in is differentiated. The three examples that Geertz presents in his article – Elizabeth I, Hayam Wuruk and Mulay Ismail – are all from societies that do not yet have functional differentiation as their primary form of differentiation. In these settings, politics, religion and law share their apex in the ruling elite, the figures at the top representing them all. In societies such as these, the semantics and discourses of various systems were not clearly separated. This is why leadership was analyzed through representations of deities and their characteristics as much as through political influence – political legitimacy and "being second to God" could not be separated, at least not without about the notion of "the king's two bodies." From a modern perspective, we see this as "corruption," where the integrity of one system is compromised by mixing it with another (e.g. doping in sports, bribes in politics, religious influence in law, etc.). In modern society, we seem to face the exact opposite problem: as function systems have become differentiated around specific problem definitions, how can they be brought together without causing excessive irritations to the systems, without causing unintended

[26] Religious communication forms a system that defuses the problem of the "unobservable," which easily irritates and confuses communication. This is achieved with the code of immanence/transcendence. For further explication, see Luhmann (2013b) and Laermans (2001).

"corruption" (see Luhmann 2013 for an extensive discussion of how the form of differentiation affects society, its internal irritations, and its self-descriptions).

Times have indeed changed, but Geertz (1983) was certain that this idea about the symbolic possession of a center by a leader still operates in modern society. It is only the idea of the center that has changed, as well as the way that these centers are conveyed in symbols. In "Centers, Kings, and Charisma," Geertz also gives two modern examples of how leaders have to refer to, and encapsulate, some central ideas. Both of his examples are from political campaigns in which the candidates tour the country in order to appeal to the voters. I will not explore these examples in detail; it will suffice to say that we are shown how different aspects of political campaign events are turned into symbols of the center, which in politics, according to Geertz, is the idea about the "shared values" of voters. This is similar to Luhmann's idea that politics has to build its legitimacy by ritually referring to "continuously accepted values." The notion of continuously or generally accepted values is thus the "contingency formula" of a political system, i.e. until something is turned into a discussion of values, it does not rise to a political agenda (Luhmann 2013b, 106-107). Thus, the politician has to prove his connection to continuously accepted values, and to how he represents them, not only with his words, but also with his character.

To summarize: social charisma – a leader's symbolic possession of the center – is not tied to religion or politics alone, but can arise in any area of society – and the business world is no exception. But if the royal progresses of early rulers depicted closeness to God – religion being the original function system – and modern political candidates in their campaigns stand proxy for continuously accepted values, then what does the business leader stand close to in order to take symbolic possession of his realm? In other words, what is the contingency formula of economy and how is it presented in leadership stories?

According to Luhmann, the notion of "scarcity" acts as the contingency formula and reference-problem of the system of economy (Luhmann 2013b, 106). Things have to be conceptualized as scarcities so that those scarcities can be solved through economic operations such as payments. Hence economic discussions are – like economic transactions – always about shortage of goods or money. Someone might criticize that the economy is not about communicating scarcity and shortage, but about overcoming scarcity. On closer scrutiny, however, this is only true to a certain extent. As has been seen time and again in the course of history, shortage does not go away if we have "more economy", i.e. more economic transactions. The system of economy cannot solve shortage, as it is a network of operations that constantly redefines where shortage is and then solves it, while always creating further shortages. There are thus more ways of communicating scarcity, and more ways of formulating answers to it, and hence a multiplication of scarcity. There might be more "wealth" in the world, but shortage is always present as long as we view the world through the lens of economy.

As we saw earlier in this chapter, the recurring character of the "celebrity CEO", a.k.a. the "corporate savior," seems to have emerged as a response to scarcity that was conceptualized among investors, and answered by private equity firms. And behind this, there was the faltering profitability of large corporations after the recession of the seventies (see Useem 1996, Khurana 2002, Mizruchi 2013). The newly-born celebrity CEOs were sought after by corporate boards, endorsed by a new breed of top management headhunters, and endowed with special attributes by analysts and business media. It is little wonder that their appearance as saviors was sometimes enough to turn a sticky situation around, at least by bringing back hope for investors and

stakeholders, thus creating fresh trust and securing investments when needed. As the research suggests (especially Khurana 2002), these figures were often celebrated for being able to turn the focus from market scarcities to the internal scarcity of the company, displaying a "willingness to spill blood" in order to readjust the supply to the demand.

In this, celebrity CEOs can be seen as the contingency formula "scarcity" taking a human form, and the acknowledgement of scarcity being displayed as a virtue. Thus, we can now see how the contingency formula of economy is parallel to what Geertz discussed as the "active centers" of society. The difference is that we have considered a modern functionally differentiated society where active centers are attuned to functional systems. But what should also be noted is that these stories are of high interest to the system of mass media – they indeed exhibit how both systems can interpret each other's irritations as information in a continuous fashion, i.e. these stories form a structural coupling between the function systems of mass media and economy.

Conquered Complexities: Leadership Stories in a Functionally Differentiated Society

The idea that individuals are presented in different ways when seen against different subsystems – such as economy, politics or religion – is not new. For example, Gunther Teubner (2007) has pointed to how every system has its own ways of reducing human beings to topics of communication. This is a prerequisite for systemic sense making. Teubner speaks of the "homunculus" ("little people") that populate the communications of a given function system. For Teubner (2007, 18) this simply means that the *criteria for agency and rationality* are positioned differently in each system. As a result, we have homo economicus, homo juridicus, homo politicus, and so on. The human being considered in the economic system is not the same as a human being considered in politics – they are differing reconstructions that open up very different meaning horizons and options for further communication. And as each function system has various programs affecting their code, so the homunculi come in different shades even inside each system. In short, these criteria determine when the system, as a network of communications, decides to be disturbed by people, i.e. when irritation is able to become system relevant information.

> Each subsystem attributes in a different way to its person's actions, responsibilities, rights and duties, and equips its actors with capital, interests, intentions, goals and preferences. Each subsystem, as it were, designs its own psychology, creates actor-models with specific criteria of relevance. (Ibid.)

This does not mean that people or their actions are determined by subsystems. It merely means that communications *about people* in relation to these self-organizing networks of communication are riddled with constraints; the most resilient constraints being the ones that come from established functions systems – such as law, politics, economy, education, science, and such – and the strong programs inside these systems[27]. And, furthermore, that people can be rational from the perspective of one system, while being irrational from the perspective of another. As a result, the ability of these systems, as networks of communications, to form

[27] I use the term "strong program" here to refer to what is often referred to as ideology, such as capitalism or socialism in economics, or "neo-liberalism" in current politics. Later, when we consider what is happening between various systems, I will use the concept of semantics as it does not tie us to any given system and its programs, but rather enables one to consider system references while proceeding.

"topics" out of people are radically limited by the subsystems themselves. People, on the other hand, are free to emulate these criteria when they want, or if they want, but these are just ways for social systems to reduce the complexity of human beings into something that can be processed in communications.

The homunculi that emerge are simply the end products when the limited sense-making ability of function systems is directed at human beings who are, as we know, too complex to be ever fully included in communications. Function systems reduce the overwhelming complexity that human beings represent. They have to do this in order to produce meaningful communications about people as students, celebrities, political subjects, economic actors, legal subjects, etc. Of course, in art – e.g. in novels or films – the complexity of an individual can be temporarily opened for consideration simply as complexity, but in other systems the complexity has to be labeled. The concept of "homunculi" thus reminds us that we have multiple definitions of persons, and through such attributes we should conceptualize them in different situations. These definitions and conceptualizations depend on which system is "making sense" of actions and communications, and – as we saw – the cues for systemic resonance appear in the form of contingency formulas.

Looking back at the figures of the "startup entrepreneur" and the earlier "celebrity CEO," the idea of system-specific homunculi is valuable, but does not seem to explain enough. It does not offer an explanation of what might be called "super-homunculi," or system-specific heroes. By these we mean cases where the system-specific reduction of a human actor – the homunculus – is replaced more or less with a system- specific "hero" that might be more complex, and sometimes even paradoxical, compared to the homunculus. Most function systems seem to harbor their own heroes, and these are often more complex than the homunculi – the "artistic man" does not represent the same qualities as a "great artist"; the "new seeking/producing man" does not naturally culminate into what we call a "celebrity"; the law-abiding citizen does not match the complexity of a legal hero who fights to get justice and transforms the law. Homunculi represent the status quo in its many forms, and super-homunculi embody conquered complexities, or a rearrangement of complexities. However, it is not always clear why system-specific hero cults have developed certain patterns and how these patterns are, possibly, connected to changes in society. This is what we will theorize when focusing on the heroic figure of the startup entrepreneur.

To summarize, a hero figure opens up a view to the contextual complexity behind the system-specific simplicity offered in the figure of the homunculus, i.e. the person seen through one system in particular. For example, the figure of homo economicus simplifies the complexity available in society, and in individuals, in order to offer something that can be measured and processed in the systems operations. The economic hero, on the other hand, further simplifies the motives and actions taken, but adds to this a description of overcoming the complexity that is working underneath. In this sense, the hero narratives are good data for sociological research, as they address intersystemic irritations in society – or, if these irritations are stable and reoccurring, structural couplings between systems (Luhmann 2013, 108-115; also Luhmann 2012, 49-67).

In the popularized version of leadership and startup narratives, the mass media is the first-order observer, and thus the blind spot, of observation. As a subsystem of society the mass media is about common schemata formation (Luhmann 2000). The mass media work as a memory in the sense of laying a common background of expectations through stories. Of all the function systems, mass media is the most notable in creating a general background knowledge that works as a reference point for ongoing communications (Luhmann 2000, 66).

Stories and semantics that populate mass media communications can thus be analyzed as a "schemata formation" that often implies a structural coupling with some other system. Mass media is a system in which society observes itself in the sense that unified self-descriptions arise. As such, it is indeed a place where semantics takes popular forms. Having thus considered the way that leadership stories are coupled with mass media – whether we are talking about modern "news media" or about "the ruler's royal progress" in past cultures – we can now step back and consider how mass media affect these stories and the audiences who observe them. We can simply discuss what the stories reveal about current "semantic shifts" and "cultural movements" in society. The startup hero is the new contender for the older figure of the celebrity CEO, and through this we can say how mass media relates to him. In the model that we will build later, mass media will be taken as a force similar to what was presented in Figure 1 – i.e. as an amplifier for the specific cultural/semantic shift.[28]

CONCLUSION: ECONOMIC UNCERTAINTIES, CULTURAL SOLUTIONS

As we have seen, spectacular leadership stories serve a special purpose when uncertainties cannot be simply calculated away – they bring forth the symbols of control, so that uncertainty does not cause either decision paralysis or retractions of important investments or contracts. In this way leadership stories, as one form of symbolic leadership or charismatic symbolism, perform a function in their relation to economy: it creates trust, and thus enables all the observers to live through uncertainties. The importance of these stories does not mean that we should simply study the figure of the leader and leave everything else out. It is, in fact, reasonable to suspect that the character of the business leader is only the tip of the iceberg, i.e. the most obvious part of a rich cultural form, and that this form itself is connected to some underlying structural change in society. What is important to note now is the fact that uncertainties are fitted with cultural solutions even in such a rational field as business leadership. Economic uncertainties are solved, in a successful but risky manner, with cultural formations. These solutions are emergent, not planned and controlled ones.[29] Stories begin as simple depictions which are refined in use, thus becoming tools that not only describe, but also change, the social reality they describe.[30]

We have seen how "imagined futures" or "fictionalized expectations" are built into the culture of startup entrepreneurship, much more so than they were built into the cult of the celebrity CEO. What has been said so far, however, has been tied to the system of economy while taking additional cues from how mass media is able to irritate it into new operations through the medium of leadership stories. We now need some conceptual tools to expand our observations from "firms" in "markets" to observing "observer-cultures" in "society". The question is: How should we proceed if we want to study startup entrepreneurship as a cultural form and see what kinds of new connections it enables?

First of all, we have to choose between different approaches to studying cultures, most of these gravitating towards ethnography or semiotics. Here we should be careful, as what is meant by "culture" in social sciences is

[28] This does not mean that mass media does not have its own spin on the stories. However, it is safe to assume that the effects of mass media communications are mostly just simplification and amplification of the culture and its stories, with an increased emphasis on agency.
[29] The definition of emergence is, of course, somewhat more complex than this. For example, emergence is "not simply an accumulation of complexity, but rather an interruption and new beginning in the constitution of complexity" (Luhmann 1995, 23).
[30] "Performativity" is an old idea in sociology and philosophy of language. See e.g. J. L. Austin's famous book *How to Do Things with Words*.

not always clear – too much variation is allowed, not enough constraints are put in place before analyzing.[31] Luckily, we can see some guideposts, thanks to the previous research we have reviewed. First of all, if these stories work primarily with attributions, then perhaps we should operate on a more abstract level. For this, we need a conceptual framework that has the sensitivity to uncover what lies behind specific attributions of agency. We need to uncover the uncertainties that have summoned specific attributions, and not simply replace the old attributions with our competing causal and essentialist simplifications. One conceptual framework that enables us to proceed in this manner is the sociology of Niklas Luhmann (1995, 2012, 2013). As will be shown in the next chapter, Luhmann's sociology lets us distance ourselves from human agency, and operate on the level of the self-production of social systems, thus observing the contextual side of things. The following chapter will present the conceptual framework of this study as well as an overview of methodology. It is after this brief conceptual introduction that we will return to startup entrepreneurship and begin working on the narratives and concepts that they have to offer, and later construct a contextual model of startup culture.

[31] This seems to be connected with the wish to incorporate the human being into the social systems. Furthermore, there is a misunderstanding of "holism". The problem is not reductionism per se, but uninformed reductionism. In systems theory, there is often a good understanding that the most central question in research is "what should we incorporate when studying this phenomenon?" and this question always implies its other side, i.e. "what can we leave out when studying this phenomenon?" For example, Luhmann tends to proceed very cautiously in this sense, leaving out most of the things that are the most obvious building blocks for most theories (humans, action, causality).

CHAPTER 2: CONCEPTUAL AND METHODOLOGICAL FRAMEWORKS

> When seen sociologically, cultures are observers in their own right. They observe other cultures, themselves over time, and also their niches in the world.
> - Stephan Fuchs (2001, 2.)

This chapter outlines the basic ideas behind the conceptual framework, and gives an overview of the tools that we will be using in later chapters. More detailed methodological considerations are to be found from the beginning of the chapters where they are used, especially in chapters 4 and 5. With this chapter, we should arrive at an understanding of what meaning is (sociologically speaking), how it operates in society (as compared to cognition), and how we should study it (as opposed to merely describing it).

We will begin this chapter where social systems begin – by looking at the complexity involved in situations where people seek to understand one another. From the perspective of our conceptual framework, all social phenomena are taken to be complex by definition. This will also hold for startup entrepreneurship – it has emerged from a complex network of communications, and is constantly evolving and observing itself as a communicative form. Constantly changing itself, it is pushing itself beyond any finalized understanding. Because we are trying to observe a speeding car, it is plausible to build a model that does not aim at defining the true nature of startup entrepreneurship, but gives guidance as to how it operates in relation to various meanings in society. With this model, it should be easier to observe the complexity behind the phenomenon, and not just the result of reducing complexity that it has achieved.

My motive for taking a theory-laden approach to empirical research is twofold. The first reason is that I want to present a new understanding startup entrepreneurship that takes into account the view that society is not a unitary context, but a collection of contexts, some of which a startup has to address in order to operate. The second reason for bringing social theory into empirical research is that I want to test its applicability as a tool. This chapter builds a foundation from which a reader can understand why the analysis proceeds in the way that it does later on. Here, the reader gets to see the arguments that have shaped the research, and that have been shaped by the research.

Theory and methods serve as maps for the researcher and his audience alike. They lay out the conceptual framework that enables comparisons to arise in a complex environment (Esposito 2013b, 141). Without a theory, there would be no comparisons, as things would just be what they are, i.e. things would be too stable and essentialized in their common sense forms. As a result, we could not see the "forest from the trees" (Salancik & Porac 1986). With theory, however, we can exclude some possibilities while giving rise to other, more surprising possibilities (Esposito 2013b, see Knudsen 2010). We can problematize what has not yet been problematized. As Esposito (2013b, 145) writes,

> Research generates surprises, and it can do it better if the theory is more abstract and complex – which does not, then, serve to explain, but primarily to generate problems and then to look for their solutions. Not all research, however, does this: for example, the research that merely describes already-known data in a more complex way, or the research that provides solutions and confirms them (this works virtually always) without caring about the problem and about possible alternatives.

Thus, for us, the purpose of theory is to uncover uncertainties for analysis, not hastily fill them with renewed simplifications of identities, agencies or causalities. As will be shown, Luhmann's theory of social systems enables us to take distance to everyday routines of attribution and concentrate instead on why certain distinctions, certain ways of condensing meaning, have become generalized. The emphasis is on how recurring irritations have been made meaningful with what might be called "culture" and, furthermore, what was the gap in existing meanings that needed to be filled with to begin with.

Mythologies and Systems Emerging From Contradictions

Although the structuralism of Lévi-Strauss has been widely criticized (see Clarke 1981; Leach 1989), his widely influential ideas can be used as a surface for reflecting our own conceptual framework. It offers us a commonly referred approach to "reading culture" which helps us better articulate our own approach, i.e. the social systems theory of Niklas Luhmann and its unique conceptualization of meaning and culture. The emphasis is mostly on the differences of structuralism and Luhmann's systems theory, but we will address some of the similarities also (these similarities will become central later on, in Chapter 4).

In The Structural Study of Myth, Lévi-Strauss (1977, 229) wrote that mythical thought "always progresses from the awareness of oppositions toward their resolution". This was to say that myths resolve contradictions that would otherwise pose a threat to the stability of an individual mind and, following from this, to the existing social order. For Lévi-Strauss the central tension in mythological stories was the contradiction between nature and culture. For example, we can see how foods are transformed into culture by the act of cooking them. According to Lévi-Strauss, we can see which foods are generally more prestigious than others simply by looking at how they were cooked, and this has less to do with nutritional facts or easy of cooking, and more to do with the patterns of meaning it is able to produce. Instead, it is simply the way that the relationship between nature and culture is resolved that makes some foods more appreciated (Lévi-Strauss 1969; Leach 1989, 15-33).

This contradiction of nature and culture, and its various manifestations, had slowly transformed inside the human mind that had to take more and more culture into account, while also being part of nature. The contradictions were formed into symbolic structures and myths that captured the contradictions and offered culture-specific solutions for them. For Lévi-Strauss (1977), it was thus the job of a structuralist to uncover these contradictions. This can be done, according to Lévi-Strauss, by observing pairs of opposites in a given mythology and by studying how they are related to other pairs of opposites that appear in variations of the same story. By uncovering relationships between opposites in a given culture, the structuralist uncovers the structures of the mind that have given birth to the aforementioned contradiction. In this way, Lévi-Strauss believed that patterns in culture were iterations on the unconscious structures of mind. (Lévi-Strauss 1977.)

In the social theory of Niklas Luhmann (1995), we find a somewhat similar idea of social systems emerging to resolve contradictions, but the similarities are accompanied by stark differences. Unlike Lévi-Strauss, Luhmann does not see consciousness – in its rationality or irrationality – as a determining factor when considering the formation of social systems. He argues that, although "psychic systems" constitute a necessary condition for social systems to arise, they are not parts that constitute the whole of the social system (Luhmann 1995, 255). Instead, society (as the totality of ongoing communications) is located in between individuals. This becomes clear if we move our focus from individuals to communication as the basic unit of social systems.

For Luhmann, communication is the combination of three selections: information, utterance and understanding. Information is selected, an expression is selected, and an effort is made to distinguish information from the utterance. Of the three selections, it is the understanding that seals the communication as communication, while at the same time making a new interpretation of what was implied in the selection of information and the selection of expression for this information. Thus, communication is always a creative process where new meanings are crafted in the process, but also one that has to rely on pre-existent coding to distinguish the communication from what is simply "noise" (ibid. 142). For example, clearing ones throat by coughing is not communication, but action. Only when someone overhears the cough and understands or misunderstands it to mean something – to convey a critical attitude, for example – does it become communication. Communication does not exist without interpretation, and interpretation is always related to the expectations that people have in different situations.

Here, we run into a problem: expectations have to be somewhat stable in order to enable the continuation of communications. In other words, there has to be some generalized expectations, and generalized meanings, that people can lean onto in order to have some basal synchronicity in their actions and experiences. Instead of structures, Luhmann prefers to speak of "structures of expectation" (Luhmann 1995, 292-294). These, as opposed to Lévi-Strauss' notion of structure, are (1) separate from the human mind and (2) will change their form radically over time as new irritations appear and have to be handled in social situations. The way that structures of expectations evolve follows its own logic outside human minds. This logic draws from how communications have been able to connect to other communications in the recent past. But even with these differences, the idea that contradictions – or paradoxes[32] as Luhmann often calls them – are central to meaning formation is alive and well in Luhmann's social theory. Luhmann's focus is more on the process side of things, taking interest in the constant flow of events that have to be filled with meaning, this pressuring meanings to differentiate further. New questions become relevant, such as: what rules govern the connectivity of communications? But before we can address this question more closely, we should consider another question, i.e. how is communication possible, if every mind is stuck in an endless loop of processing its own constructions?

Double Contingency and the Resulting Surplus of Meaning

In order to explain how social systems come into being, Luhmann borrows the concept of "double contingency" from Talcott Parsons (Luhmann 1995, 103-136; Luhmann 2012, 201-214). Double contingency is the uncertainty that individuals face when trying to anticipate one another's expectations in order to set their own expectations. Even with all their empathy and rationality, people remain incalculable "black boxes" to each other. Their assumptions about each others cognitions are distorted, so generalizations are called for. They have to keep guessing what the other person expects from them, thus forming their own expectations of the other person's expectations. Forming expectations about the other person's expectations about my behavior would be a highly precarious affair unless there were some generalizations at play, common ideas about limiting the possible expectations. Thus, communications take on more refined forms that close off certain expectations while enforcing other expectations. What this leads to, is that uncertainty is reduced as we are able to take more for

[32] Luhmann (1988, 1990, 1995b, 2005) uses the term "paradox" in a somewhat loose sense, sometimes referring to various logical paradoxes, sometimes to logical contradictions, and sometimes to more mundane conundrums that we are constantly faced with when operating with meanings. (See also Gonzales-Diaz 2004.)

granted, leaving it in the blind spot of our observations. Thanks to this, communications are able to quickly build on previous communications, and the uncertainty of several black boxes (individuals) is balanced by a "white box" of social system that operates between them. (Luhmann 1995, 103-136; Vanderstraeten 2002.)

In everyday life the double contingency between individuals does not cause much harm. After all, a sense of understanding is easily reached between individuals attempting to communicate, this being the case even when there is no actual understanding between the parties involved. Thus, communication succeeds in connecting to previous communications and igniting new communications. The important point is that, in the long run, patterns of communications are affected, but not steered by individuals. Communications build on previous communications in a creative fashion and forms mostly outside the steering of the participants. Instead of somehow synchronizing their thoughts, individuals can test their expectations in situations, constantly taking new cues, new perturbations, from social systems. In other words, individuals can enter situations and

> (…) influence what they observe by their own action and can learn further from the feedback. In this way an emergent order can arise that is conditioned by the complexity of the systems that make it possible but that does not depend on this complexity's being calculated or controlled. (Luhmann 1995, 110.)

Seen through this framework, social systems should not be observed through concepts such as "consensus", but as systems that emerge exactly because genuine consensus is fundamentally impossible. Social systems reduce the complexity of expectations by forming and separating different contexts of expectations, thus we are able to form generalized expectations of each other's expectations. In a store, I expect that payments are the expected form of communications, and that the store clerk is not interested about other communicative operations, although he or she might ask me how I am doing. What this all leads to, is that we should not see cultural patterns as structures of consciousness or structures of action, but as "structures of expectations" (Luhmann 1995, 292-294). This means that, in a given situation, certain meanings and certain patterns in handling of meaning are to be expected while others are not. Put in more systems theoretical terms: there are constraints as to what meanings can follow the previous ones in order for them to make sense against a specific background of expectations. If I walk into a casino, I walk into a specific "frame" of meaning, expecting some things, and not others. I am attuning my behavior to my expectations of what others might expect of me, and I know that words might bear a different meaning in this specific context (for a similar view, see Goffman 1986).

Of course, there are always unique and personal expectations on the level of a single psychic system, but consciousness is also compelled to take seriously how similar communicative events have unfolded in the past. In this sense, there is "interpenetration" (1995, 210-254) between psychic and social systems that forces them to interpret irritation from each other as information, as something that "makes a difference". Following this, structures of expectation are rules about "how permissible relations are constrained within the system" (Luhmann 1995, 283). As we have seen so far, for Luhmann structure is not a "productive factor, no underlying cause, but merely the constraint on the quality and connectability of the elements." (Luhmann 1995, 283.) Thus, the structures of expectations act as conditioning, as constraints governing how meaning is attributed by social systems (Luhmann 1995, 292–294).

While enabling communications to link with further communications, thus creating structures expectations, social systems lead to more and more refined ways of processing meaning. There is constant irritation and noise coming from environment of social systems, e.g. from psychic systems, and thus constantly new challenges for

meaning processing. The challenge is to incorporate new meanings into expectations. We arrive to a very "liquid" understanding of meaning as it is not "rooted" in anything. Meaning can only refer to other meanings, and it does this in a very restless fashion. In Luhmann's (1995, 59-102) theory of social systems, meaning is

> not swallowed up by objects; it constantly generates a surplus eager to be employed; it always opens up diversified channels of exploration; it incessantly undermines social structures, since they inevitably come to stand in the way of new (communicative) investments; and its proliferating reproduction appears to foreclose any world that could take shape beyond this process. Meaning reproduces itself by way of negation of, objection to, and deviation from previous communicative offers. (Winthorp-Young 2003, 325.)

The proposition that "meaning reproduces itself by way of negation" refers to Luhmann's idea that meaning is "processing according to differences" (Luhmann 1995, 66). Something is meaningful in the sense that it has been selected from a horizon of other potential meanings and set against them as a difference (for Luhmann's indebtedness to Husserl, see Paul 2001 or Arnoldi 2010). The "difference" here is not the difference between sign and signifier, but between actual and potential meanings. In communication, one possible meaning is actualized, but the horizon of other possible meanings keeps looming in the background. Meaning is thus "the unity of actualization and virtualization, of re-actualization and re-virtualization, as a self-propelling process (which can be conditioned by systems)" (Luhmann 1995, 65). The horizon of other potential meanings does not disappear with each actualized meaning, but rather keeps challenging the space of actualized meaning.

The key to analyzing meanings is to strip them down and reveal the distinctions that they convey. A meaning is meaningful because it is set against other possible meanings. As already stated, meaning is actualization of possibilities. If we want to study it, we should have a way of dissecting it. Luhmann observes meaning as operating in three basic dimensions: the fact dimension, the temporal dimension and the social dimension. These dimensions are related to three phenomena that are present in all meaning formation: differentiation, evolution and communication (Luhmann 2013, 340-341). These are Luhmann's equivalents for Reinhart Koselleck's distinctions between friend/enemy, before/after and in/out (Andersen 2011, 258). For example,

> A muddle of objects is never meaningless. A pile of rubble, for example, is immediately recognizable as such, and one can immediately tell whether it is attributable to time, to an earthquake, or to "enemy action". (Luhmann 1995, 62)

In the above example the fact dimension is implied in the reference to an earthquake – it becomes meaningful in relation to an earthquake as a known fact or phenomenon in the world. The temporal meaning dimension is the extension of "before" and "after" distinction into the distinction of "past" and "future". Instead of earthquake, the pile of rubble might get its meaning in terms of decay that is attributed to time. The social dimension of meaning, on the other hand, refers to the ways in which something is accepted by the observing system as similar to oneself or seen as different from oneself. The pile of rubble may be attributed to enemies or hooligans, thus strengthening the us/them distinction with the cost of other meaning dimensions. (Luhmann 1995, 76-81; Luhmann 2012, 18-28.)

> Thus systems theoretical thinking is an epistemological device to look at the ways in which, by communication, three distinctions are established and implemented: (a) the social distinction between

> actor and observer, (b) the ecological distinction between system and environment, and (c) the temporal distinction between past, present and future. (Baecker 2001, 70.)

These distinctions are made in unique ways in different systems, each considering distinct environmental perturbations as their cues for "information". Thus, when observing distinctions, we are observing what is taken as information – as something that "makes a difference" – instead being bypassed as noise, and what system – in its temporal, social and factual dimension – is reproduced in this process of "in-formation". There is always the question of what systems are evolving and how, when yesterday's noises are observed as today's information. When we refer to Luhmann's theory in this manner, as an epistemological device for analyzing distinctions, we are not very far from cultural studies. Furthermore – when we take stories as our data – it becomes very hard to keep distance to the field of cultural studies. This overlapping and tension between social systems theory and cultural studies is the last clarification that I want to make, before moving on to consider the more methodological ideas.

Differentiating Culture, Semantics, Meanings and Complex Forms

Recent re-reading of Luhmann's theory has succeeded to show that Luhmann can be seen as a sort of cultural theorist, even though he explicitly avoided using the word culture when writing about cultural phenomena (see Stäheli 1997, Laermans 2007, Arnoldi 2010, Andersen 2011, Martens 2006, Baecker 2006). The reason Luhmann himself avoided using the word "culture" was that it was not often properly defined as a concept (see Stäheli 1997, Martens 2006, Laermans 2011). Although cultural studies have yielded results, the idea of culture as an explaining factor had made it all too easy to name almost any set of social phenomena as culture. This runs the risk of explaining the phenomenon by labeling it culture and, subsequently, celebrating it as counter-culture (Stäheli 1997, 127-128). One could argue that, with a viewpoint such as Luhmann provides, we can investigate the "becoming" of a culture. This would mean taking for granted the idea that culture provides meaning for the actors and instead focusing on how the distinctions that make up that culture frame the world in a novel ways.

As has been explained by Baecker (1997), Stäheli (1997) and Laermans (2011), Luhmann's dismissal of the concept of "culture" does not mean that his own theory is not good for analyzing what one might call cultural phenomena, let alone narratives. It merely means that we have to untangle the sense making logic of social systems that we are studying in relation to their contexts. This untangling is challenging, as the semantics tend to become taken-for-granted and self-referential. Luhmann avoids this by "thinking of culture in terms of a perspective of observation and not as a specific realm of society" (Stäheli 1997, 140). He does this, as already mentioned, by replacing the notion of culture with concepts such as semantics, meaning and self-reference. Using many concepts where simply "culture" could be used is not an attack against the notion of culture, but a way of saving it, for if everything in social world is deemed cultural, then the concept risks becoming useless (Stäheli 1997, ibid., 130). Thus, we should be careful when operating with the concept of culture, as it naturalizes what we are observing, thus losing sight of the contingency that led to its emergence. In this case we can move beyond the idea of culture as a pattern that arises from structures of mind or of action, and instead concentrate on how meanings are transformed into these patterns in very unpredictable ways (Baecker 1997). This is why Luhmann insists on an "analysis of meaning well before any analysis of action, let alone culture, becomes possible" (Baecker 1997).

Here, it is useful to observe the distinction between semantics and culture. Semantics is the ready set of commonly used distinctions available, the social stock of rules for the treatment of meaning (Luhmann, 1995, 163). With these rules, social systems and psychic systems can align themselves more readily to situations without starting over every time. Interestingly, Luhmann uses the word "culture" mostly when semantics are observed by a second-order observer comparing different cultures (Martens 2006, 87). The advantage of using the concept of semantics is avoiding the temptation to search for fixed cultures or cultural essences. In this study, culture is not seen as a cause or an effect, but as a productive "doubling of reality" (Baecker 1997). It is a collection of distinctions that are not only commonly used, but also available for reflection and comparison. As a reservoir of themes, culture serves offers further strategies in the reduction of contingency.

Remembering Luhmann's example concerning a "pile of rubble", the usefulness of culture for society can be exemplified with the help of the three meaning dimensions. In the factual dimension culture regulates, "how to speak of which things, which themes to avoid, and how to change themes depending on the social context one is in" (Baecker 1997, 11). In the temporal dimension, culture "plays down the temporal intricacies of distinctions between before and after". On a longer time-scale, it generalizes past forms for the use of present and future, so that we will expect same forms to appear as before, i.e. "it provides society with a future very much in accordance with its past" (ibid.). In the social dimension of meaning, culture provides answers to double contingency, as comparable situations are remembered and turned into further expectations and communications. (Baecker 1997, 11.)

> Culture is demanded to provide care, attention, and worship for the social inside the social. And that is exactly what the modern notion of culture deploying regional and historical comparisons provides. Culture provides a self-description of the society in terms of complexity reduced, self-reference indexicalized, boundaries justified, and closure re-opened. It does so by doubling all possible meaning (Baecker 1997, 9.)

Again, contrary to what Lévi-Strauss suggested, culture does not solve contradictions that originate in the individuals. Instead, from our viewpoint, culture can be seen as a more self-reflective way of resolving the foundational uncertainty of social systems, "a stock-market for paradox resolution" (Luhmann 1998, 102). We can now see a how Lévi-Strauss's idea that "myths resolve contradictions" can be formulated in a more concise fashion, by making the point in a more general way – social systems in general, not just mythological stories, resolve uncertainties of meaning. And where social systems run into troubles, culture offers adequate "operative fictions" (Laermans 2007, 80) that keep communications connecting even when there are no expectations to build on.

Although these definitions of culture seem valid, I think Luhmann's critique still stands – as a concept it is hard to grasp, and leads easily to a situation where the study starts and ends with culture (in contrast to Lévi-Strauss reflecting culture against underlying structures and Luhmann reflecting "culture" against differentiations, irritations and couplings of operationally closed systems). Another concept is needed, if we want to go beyond just describing the data, and theorize about it. Luckily, we can take our cue from the definitions already given: if we take it to be that culture is an "operative fiction" (Laermans 2007) that constantly embeds action with meaning, and a "doubling of reality" that makes systemic boundaries more tangible, then we see that it is an observer in its own right. According to Stäheli, this is exactly the case: if we follow Luhmann, we are "thinking of

culture in terms of a perspective of observation and not as a specific realm of society" (Stäheli 1997, 140; for similar view see Fuchs 2001, 2).

If culture is indeed an observer, then inquiry should not stop at observing the components (e.g. discourses) of culture, but proceed to study the process of cultural "cognition" that works with these components in order to sustain a world-view, a "reality tunnel"[33] that overrides complexity and uncertainty in society. We are not describing an "area" of culture – a pool of meaning – but a recursive loop of *cultures self-descriptions that actively work to prevent the dilution of the said culture*, i.e. descriptions and/or practices that maintain its borders even though there is constant pressure to adopt other ways of describing things[34]. Repeated stories and concepts become constants by the virtue of repetition and, thus, patterns of meaningful action and communication are fixated for the time being, i.e. naturalized or "essentialized". When we observe that a sub-culture differentiates from its surroundings, and develops its own jargon, we are looking at the formation of new meaning-structures in society. Culture, when seen this way, is an observer that observes past a specific – but often hidden – contextual complexity.

> If there are constants, this is because they are being held constant by an observer. When this happens, essences appear, along with things-in-themselves or natural kinds. Essences prosper in the deep cores of cultures, where they house that which they cannot even consider, let alone deconstruct. The literature has many different terms for this core, including paradigm[35], tacit knowledge, practices, ethnomethods, common sense, and pretheoretical understanding. (Fuchs 2001, 2.)

But what is it that they "cannot consider"? In short, it is the fact that there are actually a multitude of contexts, not just the singular context that the culture – as an observer – sees surrounding it. Observer-culture has to be blind to this relativism, and have confidence on its own version of realism (see Fuchs 2001, 4-5.). At the same time, a culture that watches its boundary is self-organizing in the sense that it decides what matters to it – i.e. its relationship with the systems and meanings in its environments is not governed by the environment, but by its own logic of differentiation. Having arrived at the notion of observer-culture – that designates sub-cultures and cultural movements as observers – we now have a good understanding of what it is that we are after. We can now start approaching our subject matter with a renewed understanding.

Furthermore, having reached a formulaic pattern, these stories can be observed as "spectacular" stories (Stäheli 2013, Bill & Jansson 2010). Spectacular stories leave out the mundane, and accentuate the adventurous. The reason for this can be many, but our theory suggests that agency is enforced culturally where it does not come naturally, i.e. culture fills the gaps that are created by disorderly systems. When available patterns of meaning do not fit, they are enhanced or replaced by more robust ways of attributing meanings. There is a constant

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[33] The term "reality tunnel" was coined by the psychologist and counterculture hero Timothy Leary. His idea was that there were as many "reality tunnels" as there were persons, as each person had their unique set of mental filters formed from beliefs and experiences. Here we use the term in another context to refer to other kind of reality tunnels – cultures, not only minds, can be seen as constellations of filters, and thus as "reality tunnels" in their own right.

[34] A "culture's self-description" is not limited to cultures attempts at describing itself as a totality, but rather to any attributions that it makes when it considers its inside as opposed to what is outside.

[35] The concept of paradigm is in some ways similar to our concepts of culture and observer-culture. According to Merriam-Webster (2015) dictionary, a paradigm is a "model or pattern for something that may be copied" or a "theory or a group of ideas about how something should be done, made, or thought about". However, as Kuhn (1970) used the concept in a myriad of ways, we will refrain from using it as an operative concept here.

adjustment going on in the ways that stories are told, and identities are arranged, in social systems. As Luhmann writes

> To unfold a paradox is simply to shift the observer's blind spot to a place where it is less troublesome. (In family therapy, which is based on constructivism, we say: to a less painful place). Against one's better judgement new, stable identities are introduced, which can be maintained more easily. (Luhmann 2005, 92.)

As the blind spot is always the unity of the distinction, i.e. the indicated side is given form by what it is separated from, shifting it means drawing new distinctions, thus giving rise to new semantics. The question is "why" and "how" certain semantics are constantly produced in the self-descriptions of social systems (see Stäheli 1997). According to Luhmann, our best bet is to observe how the connectivity of communications is enhanced by the condensation of meaning into new "forms" and new "identities". But identity should not be understood as an essence, as it is basically a mechanism to reduce surprises[36].

> For meaning systems, the world is not a gigantic mechanism that produces states from states and thereby determines the systems themselves. The world is an immeasurable potential for surprises; it is virtual information, needing, however, systems to produce information, or, in more precise terms, to give selected irritations the sense of information. All identity must accordingly be understood as the result of information processing or, if relating to the future, as a problem. Identities do not "exist", they merely have the function of ordering recursions so that in processing meaning, we can draw on and anticipate something that can be used recurrently. This requires selective condensation and, at the same time, confirmatory generalization of something that can be called the same as distinguished from other. (Luhmann 2012, 19–20.)

Identities, i.e. what are normally seen as essences of either persons or cultures – e.g. when saying that a person or culture "is like this/that" – are here seen as "monitoring devices". Understood this way, identities help systems relate a constantly changing world back to some structure, i.e. expectation that gives it shape (Baecker 2006, 121). Thus, when a sociologist comes across something that could be labeled as "identity", she can move on to ask, "why has this specific way of drawing distinctions been stabilized in this specific case?". Identity, as the self-thematization of a system, is a stacking of different mechanisms for dealing with complexity in repeating – i.e. more or less expected – situations.[37]

With these considerations in mind, we are able to offer the following definitions of meaning, semantics and culture, each drawing from Luhmann's conceptual toolbox (see Laermans 2011): Meaning is the reflection between actual and possible, i.e. the tension between what is actualized in specific situation and what is seen as being connected to it as further possibility – the range of communicable possibilities here depending on semantic shifts that take place in, and in between, social systems. Semantics are the "typified meanings" (ibid. 73), i.e. the distinctions that have stabilized and that condition, and are conditioned by, the surrounding

[36] Again, note that this holds both (1) for an identity forming though cognition and condensing in personal traits, and (2) for an "identity" forming through communicative operations and condensing in culture, i.e. cultural identity.
[37] These questions, and especially the question of identity, will be returned to in chapters 4 and 5 where we will use our conceptual framework to observe the concepts of startup entrepreneurship, and consider how they arrange a horizon of meaning.

expectations. **Culture** can be seen as a network of these semantics, each connecting with other semantics, thus creating a system of mutual referrals between meanings. In other words, culture refers to semantics that we are able to recognize as belonging together. **Observer-culture**, on the other hand, is used to designate a differentiated cultural movement that carries within it a world-view of some kind, drawing boundaries between itself and other cultural forms. The difference between culture and observer-culture is somewhat artificial, but I will hold on to it in order to emphasize the fact that some constellation of meanings offers a clearly defined observer position that carries within it an "identity", whereas culture is a more "messy" concept. Cultures can be labelled observer-cultures if we are able to observe how they resolve some contextual complexity by creating a new observer position, a new "wormhole" through the complexity of the world.

Methodological Framework and the Four Layers of Inquiry

Luhmann's sociology has yielded several approaches that could easily be seen as "methods", but that are often labelled differently (see Andersen 2010; Baecker 2006; Knudsen 2010). Following Andersen (2010), I will use the term "analytical strategy" instead of "method" in order to stress the deliberate choice of working – more or less – with an "empty ontology" (Andersen 2010, 99). Empty ontology[38] means leaving questions of "what is out there" aside and concentrating on how these questions come to be as they are. Every "what is out there" is tied to an observer relying on different system references, thus creating a different worldview. In Luhmann's constructivism, we thus have a manifold world that can only be constructed from different positions, and cannot be "revealed" with a method[39]. If we take this position, then we can move from methods to "analytical strategies".

Whereas a method observes objects in the world with a goal of producing new knowledge, an analytical strategy observes observations as observations in order to de-ontologize them (Andersen 2010, 99). This brings us to a central point about our conceptual framework: the world consists of observers observing observers. "An observer is anyone or anything to whom or which something matters and makes a difference" and these observers "need not be persons" (Fuchs 2010, 81). The observers that we observe can be any first-order observers of their environments – organisms, social systems or psychic systems. We, as observers of observers, are second-order observers. As Andersen (2010, 105) writes,

> On the level of first order, the outlook is mono-contextual. The observer sees what he sees. He makes use of a distinction without being able to distinguish. On the level of second order, the outlook is poly-contextual.

We will thus trace the poly-contextuality that is left out when first-order observations are made. In the scope of this study, it is of interest to us that firms observe themselves mainly as economic entities operating in markets, while mostly bracketing out their other contexts (see Baecker 2006). Furthermore, we are interested in how startup entrepreneurship, as a new condensation of meaning, shifts this observation of environment. For a researcher utilizing an analytical strategy,

[38] A philosopher would perhaps criticize the possibility of working with "empty ontology", as it resembles the idea of a mind as a "tabula rasa" – something that is never the case. However, I believe that in sociology we can use this in a more relaxed manner, e.g. as a heuristic for approaching data.

[39] For more on Luhmann's breed of constructivism, see Luhmann 1990 and Buchinger 2012.

> The point of departure is (…) empirical wondering beginning in observing how a system develops a certain interest. So what defines your interest as a researcher is that the systems 'out there' develop an interest in something. Your shifter is an interest for interest. (Andersen 2010, 115)

As presented in Chapter 1, the "interest for an interest" in our case was the popular form of startup entrepreneurship, as it appeared in mass media, as something distinct from regular business leadership and entrepreneurship. This began our "empirical wondering", and led us to consider how the business leader appears at the center of these communications, offering a clearer focal point. By doing this, the repeating pattern of "celebrity CEO" forms a "structural coupling" between economy and mass media, i.e. economy and mass media perturbing each other in systemic way, if sometimes causing unexpected distortions in each other. But this merely gave us the impetus to take give more critical attention to the stories as stories – i.e. as a "standard stories" that allow this coupling to keep operative, turning the mutual irritations into an observer-culture that guides actions of CEOs and those observing the CEOs.

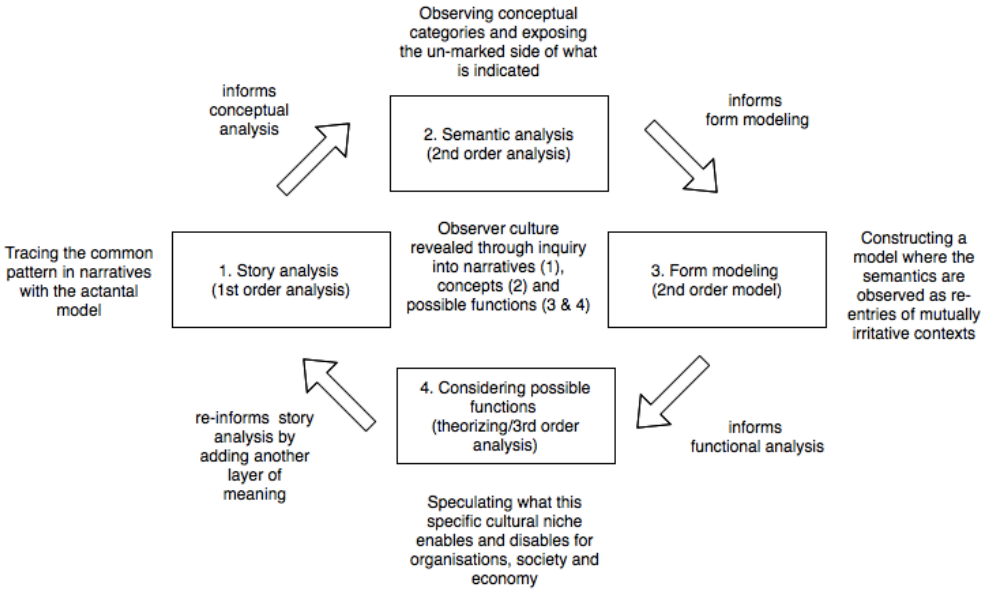
As already stated, the actual research proceeds in three steps that take up chapters 3, 4 and 5. Each step has a specific purpose:

1. Story analysis of Chapter 3 offers us the first-order perspective of the actors as we trace the common narrative pattern. On this level, we learn to see the world through the startup entrepreneur (as presented in media), and create an actantial model that manifests the forces that are seen to govern the world from the perspective of startup culture, what is seen to enable action and what is seen to block it. Here, we will not analyze the observations as observations, but will take the accounts for actions as they are given, and simply order them with the actantial model. For our research, this information offers a background against which we can reflect our later observations about semantics and social systems. We could refer to this as the causal representation of startup entrepreneurship on the level of first-order observations.
2. Semantic analysis of Chapter 4 offers us a differing entry-point to startup culture, as we now focus on the distinctions operating behind the repeating "indications" – visible in concepts – in startup culture. Now, we start to see the borders of the observer-culture, not just its structure for meaningful action. We see how it differentiates from other meanings, other semantics. This is a level of second-order observation, as we are now observing observations, trying to see what distinctions make the specific indications operative, and what this reveals about the "difference that makes a difference" that startup communications are able to create. The semantic analysis can be observed through the form condensation/meaning, as we are trying to observe how meanings are condensed into new forms in this cultural niche.
3. The form modeling of Chapter 5 offers us a way of putting the results of our semantic analysis to use, as we try to look how the different semantics operate as an observer-culture that fine-tunes the couplings with different communicative contexts. Here, we will consider Dirk Baecker's (2006) "form of the firm" – model, and see how the startup semantics would re-arrange the model. This will provide us with a background to compare our model against. The model enables us to see what functions the semantics are able to perform by coupling or de-coupling various communicative contexts in society. Here, following Niklas Luhmann (1995, 2012, 2013) our main reference points are the various social systems that operate in society (as well as society itself as an over-arching social system). The form modeling can

be observed through the form unity/difference, as we are now observing how a "unity" is perceived (through the startup semantics) in a situation of contextual complexity. It shows us the social systemic oscillator inside this observer-culture.

4. Theorizing on (possible) social functions of startup culture takes place in Chapter 6, which is also a conclusion for the empirical part of the study. Here, we will consider what the observer-culture does, and what functions it is able to perform for social systems, and for society at large. The concept of function is aligned with Luhmann's use of the term, i.e. we take it that any form appearing in the world often has several functions, none of which is to be seen as essential or final in any way. In evolution – whether biological cognitive, or social – forms switch functions and functions switch forms. We will thus offer theorizing on what functions the observer-culture of startup entrepreneurship performs. I will elaborate on this functional analysis later in this chapter.

Figure 2: The relationships between the four layers of the study



The four layers of the study can now be depicted in Figure 2, where every layer acts as data for further processing. Constructing the narrative model gives us a basic understanding of how the culture prefers to describe itself (of course, media is also an observed here, see Chapter 3 for more on this). This knowledge enables us to analyze the central concepts of startup culture, in Chapter 4, as we now know have a better understanding of what kind of "events" the startup narrative consists of, and what the central actors are considered to be. The conceptual analysis, on the other hand, gives us material for constructing the model of the "form of the startup", which can best be understood as the heart and soul of the observer-culture of startup entrepreneurship. Finally, the form model itself enables us to reflect on startup narratives from a new angle, seeing how the actions relate to the meaningful context that is offered for those actions. Although social systems tend to describe themselves as actions systems, they are actually systems where limits for meaningful contributions are offered, and thus actions are pre-defined (but not "pre-determined").

To summarize what has been said: First we observe a repeating pattern; secondly, we attempt to locate the unmarked side that keeps this pattern in place; thirdly, we construct a model by using the conceptual categories as our guide, and; fourthly, we consider the functions that the cultural niche might perform from the perspective of different social systems. The end result is an enriched perspective to the patterns we first observed.

For the sake of readability, we will introduce each approach at the beginning of each chapter. However, we will give a short introduction here to the fourth layer for two reasons: (1) it is our final destination, and (2) the term "functionalism" carries many negative connotations that should be considered briefly to clear the air.

On the Benefits and Pitfalls of Theorizing on (Contingent) Functions

In addition to the story analysis, the semantic analysis, and the resulting synthesis of the observer-culture of the startup, we will utilize a fourth strategy. However, this one should be taken as a "scheme for observation" (Knudsen 2010, 3) or a "regulative principle" (Kangas 2012, 63) that helps us ask sociological questions about latent functions of the communicative form that we are observing. If chapters 3 to 5 have observed startup semantics and communications, Chapter 6 will try to make sense of how this form fits society as we know it. The goal is to open up new understanding of the subject matter by generating new comparisons (Esposito 2013b) and new surprises (Knudsen 2010). We will call this method equivalent functionalism (Knudsen 2010), but it can also be called contingency theoretical functionalism (Kangas 2012). In this part of the study we will form more theoretically guided observations about why the specific rearrangement of meaning contexts is taking place. We will ask, what problem is this form a solution for (even if it evolved randomly). The aim is to elaborate our findings so that we will reach a more sociological definition of startup entrepreneurship as a cultural form.

Few words about the functional method are needed in order to avoid confusion. In its most basic form, functional method is a method that attempts to explain a trait through its "function", i.e. how it is useful to the system under study. For example, we might say that some social phenomenon or institution has the function of X. In this case, we have to make sure that the consequences of the phenomenon are (1) not the concequences of conscious intentions to bring them about, and (2) that the phenomenon displays some goal directedness in relation to social life (see Kangas 2012, 60). The second idea is where functional method often goes astray, as there is a danger of overstating the goal-directedness. If this is the case, the analysis transforms into a teleological explanation where the social phenomenon under study is explained as having the sole purpose of helping some system in its survival. As has been shown by Robert Cummins (1975, see Kangas 2012, 62), this kind of functionalism can be accused of taking two independent forms of explanations and merging them together: the explanation for the existence of a phenomenon and the explanation of the function of a phenomenon. This leads to a blindness concerning the fact that a process leading to a specific function is often insensitive to the function that it arrives at. All this can be avoided, if the scientist doing the functional analysis is able to disengage himself from "the task of giving an explanation for the presence of a trait" and solely confine himself to "an analysis of the inner composition of the whole, and its capacities to perform such-and-such things under consideration" (Kangas 2012, 62). The full implication of this is that "functions" do not develop teleologically with a specific end-goal in mind, but through contingent process of variation and selection. The functions present themselves as fundamental features of the observed systems only when observed retrospectively by an observer – observed in retrospect, things seem to fit the world they inhabit. In reality, it is often the case that the products of evolution were variations that did not really "fit the world" before some

change in the environment worked in their favor (e.g. an exceptionally cold winter favoring the specimen with longer fur while causing light-furred creatures to die).

In sociology, it seems even more difficult to pin down any single problem that a specific social or cultural form solves. There are often more than one, depending on the viewpoint. And fair enough, there is no reason for why a certain social phenomenon could not serve several different functions. Often, the best bet for a sociologist is to study how some phenomenon is replaced by a surrogate phenomenon that performs an identical function while having a different substance (Kangas 2014, 13). For example, we can observe the mindset of western capitalism arising from an environment of protestant, religiously tuned work ethics, but slowly bypassing the religious function and filling it with a purely economic function.

Weber's idea of "subrogation" and Hans Blümenberg's idea of "re-occupation" are two similar forms of observing how functionally equivalent, but ontologically different, solutions replace one-another in the course of history (Kangas 2014; Erizi 2011). This view on cultural evolution reappears in sociology, but it is in Luhmann's theory where the most important events in history appear to be "precisely these kind of substitutions, replacements of a problem solving causal relations with another" (Kangas 2014, 15). From this perspective, function is the unity of a difference between a problem and its possible solutions (Knudsen 2010). In public discourse, there is a blindness to the abundance of functional equivalents among social forms. When one social form is weakening, and another form is gaining popularity, moral alarm bells start ringing – there is a fear that some important component is going missing, finally sending our society into depths of anarchism and nihilism, as if society was a trivial machine instead of being a resilient self-organizing system. In evolutionary morphology, the term exaptation has been suggested (see Gould & Vrba 1982) to describe this – features that enhance fitness, but were not built by natural selection for their role, but were already there, and took on extra functions.

Taking this notion of function as our starting point, we can define contingency theoretical functionalism in the following way:

> Instead of giving an account of the genesis of a social phenomenon, functional analysis directs the attention to the question of how, among many functionally equivalent alternatives, this particular way of solving the problem is maintained and reproduced in a social setting (Kangas 2012, 63.)

This conceptualization of function is related to a mathematical way of approaching functions. We ask: why and how does a certain relation between elements endure, producing a somewhat predictable result? How is this relation (function) used? Could it be replaced with another function?

When doing functional analysis, the first thing is to distance oneself from the common ways of defining the problem, as these are often simple attributions centering around action, rationality and simple one-way causalities. Thus, this study searches for problems and solutions on the more abstract level of social systems, where we will suffer from using a more abstract language, but can access more latent functions than on the level of everyday actions and rationalizations. The point is to keep the problem/solution schema open to new irritations. As Knudsen (2010, 48) writes "the problem/solution distinction can take the analysis further by asking which problem the described semantics is a solution to. Or: which problems does it create? And how are these problems solved?"

For example, role conflicts are a problem that can be solved in different ways. For an organization, separating departments and groups of people from each other can solve role conflicts. For a family, however, it is not feasible to separate family members from each other in order to avoid role conflicts. This would defeat the whole purpose of family as a unit and as a source of intimacy and support. Thus, a family tends to solve role conflicts through precedence claims and vocational roles. The solutions are functional equivalents in their ability to solve the problem (role conflict), but for a family only one is feasible. As shown by this example, the observation of functional equivalents permits a prediction of which system will gravitate towards which solutions and for what reasons. If were only considering families, and not organizations, we might not be as sensitive to the very unique constraints that families have in solving their problems. (See Bednarz 1984, 350-351.)

Contingency theoretical functionalism, or equivalent functionalism, can be further clarified by emphasizing how it acts to keep analysis open to new systems references (Baecker 2006, 117-119). According to Baecker, this might be the whole point of doing systems theory: "Make sure which systems reference you use in order to watch and analyze a phenomenon; and observe how your analysis changes as soon as you change your systems reference" (Baecker 2006, 118). When locating the systems and their constraints is always a matter of empirical study, neither the problems nor the solutions can be taken as pre-givens. We will simply have to look around and consider different possibilities when observing what makes the phenomenon meaningful. As Kangas writes,

> There are no aprioristic answers to be found to the question of how communication is structured and to which problems they are answers, neither from the (implicit) rationality structures of language and communication (Habermas), nor from the list of necessary functions to be derived from the presumed conditions for the existence of social systems (Parsons). (Kangas 2012, 64.)

Social systems are robust because they leave so much out, i.e. they form "latencies". What we are is a situation where latencies. This will become important in our later anayses, as we see how startup culture systemically "pushes out" some conceptualizations in order to create space for new ones – thus, in systems theorethical terms, creating negentropy in order to sustain homeostasis. The latencies we will refer to later on are examples of functional latency that "functions to protect structure" (see Luhmann 1995, 336-337). These latencies – as the willful ignorance of the system – seek to stabilize the startup culture in relation to the uncertainties that surround it.

It should now be clear how the concept of "function" is important, and how it is used in the later chapters of this study. Relying on the empirical analysis of Chapter 5 and on the synthesis of these semantics provided by Chapter 6, Chapter 7 will look for possible functions performed by the semantic form of startup entrepreneurship, and search for a functional equivalent that would be able to reveal something unforeseen about startup entrepreneurship. This means finding similar problem/solution schemas in relation to society or to other social systems, even if the functional equivalent in question seems distant other than having a similar problem/solution schema. Finding a functional equivalent – one that fits our empirical findings – would enable us to offer a better answer for the survival and popularity of startup entrepreneurship as a special form of communication. But even then, it will not explain the origin of the phenomenon, nor its causes or effects. We are simply looking at how communicative possibilities are opened and closed with the help of startup semantics. Chapter 7 will consider the use of the form modeling and contingency theoretical functionalism, and consider the fruits and limits of using this approach to studying culture.

CHAPTER 3: COMMON PATTERNS IN STARTUP STORIES

> The single greatest danger for a founder is to become so certain of his own myth that he loses his mind. But an equally insidious danger for every business is to lose all sense of myth and mistake disenchantment for wisdom.
> - Peter Thiel (2014)

The purpose of this chapter is to give a summary of the popular narratives and identities of startup entrepreneurship. By popular we mean the ones that appear in slight variations in the startup success stories recounted by business magazines and startup biographies. From the vantage point of our conceptual framework, this amounts to elaborating on the "first order observation" of startups, startup narratives and the startup identity. This is the level of "taking it as it is commonly observed", and shining light on the repeating patterns. The level of first-order observation describes a startup as an action system, i.e. as a system that emerges from actions that can be attributed to subjects, i.e. the founders of the startup. As we are interested in systems of communication, this description is for us neither false nor true. Instead, it is seen as a useful starting point for observing the communicative form that startups revolve around. To be more specific: the patterned self-descriptions that we can trace in startup narratives are, from our perspective, communicative operations that use a special constellation of "actions" and "subjects" in order to make sense of complex situations. This way of sense-making is practical, as it offers descriptions that are easily turned into prescriptions, setting a clear vocabulary of agency and motives for aspiring entrepreneurs. But there is also a tendency to downplay context, especially the contextual complexity offered by various social systems involved in startup entrepreneurship. Furthermore, as we observed in Chapter 1, popularized entrepreneurial narratives tend to enforce the "spectacle of entrepreneurship" which has led to a "powerful script of how to be entrepreneurial, a guide to how the spectacle of entrepreneurship should be played" (Bill & al 2010, 169).

The current chapter proceeds in the following way:

1) A quick reading of five startup stories that are canonical examples of successful startup entrepreneurship, each followed by an actantial model interpretation of the narrative.
2) Formulating a generalized actantial model of startup entrepreneurship, now with the help of a larger data set collected from business magazines.
3) A brief discussion about the central tensions in this actantial model, so that we get a better idea of the complexities handled by this observer-culture.
4) An excursion into two alternative ways of considering the timeline of startup entrepreneurship as a curve – one used by venture capitalists and the other by entrepreneurs. The purpose of this fourth part is to show that, although VCs and entrepreneurs share an interest in the success of the startup, they also operate in different fields of experience, and any common horizon has to be able to attune these horizons.

In relation to the study as a whole, this chapter carries the function of displaying the popular understanding of startup entrepreneurship, so that we know it before proceeding. Only after we have a pattern of first-order observation in our mind should we proceed with further analyzing the data, and synthesizing a model of the

contextual complexity behind the culture and its patterns. As we saw in Chapter 2, culture hides complexity in order to make action more plausible. Now we are looking at the culture, later we try to look behind it.

Stories, Motives and the Control of Intransparencies in Culture

In order to approach stories, we should have some understanding of how stories work. In Chapter 2, we already considered the relationship between meaning, narratives and social systems. I will briefly elaborate on these ideas to draw a clear picture of why the stories are presented here, what can be read from them.

By stories we mean what Charles Tilly has labelled as "standard stories", i.e. "sequential, explanatory recounting of connected, self-propelled people and events that we sometimes call tales, fables or narratives. (Tilly 1999)".

> To construct a standard story, start with a limited number of interacting characters, individual or collective. (…) Treat your characters as independent, conscious, and self-motivated. Make all their significant actions occur as consequences of their own deliberations or impulses. Limit the time and space within which your characters interact. (…) Furnish the time and place within which they are interacting with objects that you and they can construe as barriers, openings, threats, opportunities, and tools – as facilities and constraints bearing on their actions. (Tilly 1999.)

The problem, Tilly (1999) writes, is that even though standard stories are useful and based on real observations, they are not adequate descriptions of social processes. The trouble with standard stories, in other words, is that cause-effect relationships are almost always narrowed down to individual organizations or persons, each actor having internally created motivations and goals. This is why, according to Tilly, a sociologist should maintain a critical distance to standard stories. One should reflect on them, but not reifying them when investigating some social process. Stories are bound to be reductions of complex phenomena, as we already saw in Chapter 1. According to Tilly (1999, 39), this is the natural state of things.

> Social interaction generates stories that justify and facilitate further social interaction, but it does so within limits set by the stories people already share as a consequence of previous interactions.

According to Tilly (1999), there are four ways in which a sociologist can choose to connect with and challenge standard stories. The first way is by telling "superior stories". These are stories that take into account more environmental factors, and more actors, than standard stories, thus suggesting previously unseen causal chains. The second way of challenging standard stories is by contextualizing them. This involves revealing what kind of context gives rise to a certain kind of standard story, what conditions play into its formation. The third way is that of observing how stories are generated, and what factors play into why certain stories are generated instead of others. The fourth way to challenge standard stories is by observing "non-story processes". When this is the case, the sociologist is not concerned about stories, but follows the interactions of the participants and builds models of the phenomenon under study, thus formulating a rule that governs the causality in the case he is studying. The four ways to confront standard stories form a ladder in which each step depends on those below it:

> (…) each rung in the ladder from explanation to enlightenment depends on those below it; construction of superior stories rests on some ability to contextualize them, contextualization requires some

> awareness of processes that generate stories, and the analysis of generation requires partial knowledge of the nonstory causal processes at work in social life. (Ibid.)

In this study, we are not after what Tilly has named "superior stories" – forming fuller descriptions of causal chains is not our primary interest. Nor are we looking strictly for non-story causal processes – as we noted in Chapter 2, instead of causes and effects, we are interested in "conditionings" that leave room for different causal explanations. Thus, we are interested in contextualizing the stories. Context, however, can mean different things. In this study, the contextualization of narratives will be guided by Luhmann's system's theory that enables us to reframe how stories are generated and what processes play into this generation of meaning (see Chapter 2, this will be further discussed in Chapter 4).

Tilly's view of standard stories fits together with our observations about leadership stories that are often as much performative – acting as a currency for companies and investors – as they are descriptive (see Chapter 1). Stories – as they are repeated and as they carve out a pattern as a result of this repetition – set expectations and designate resons for action. As C. Wright Mills (1940) wrote, actions are always situated actions, and motives are more or less borrowed from ready-made "vocabularies of motive". Of course, people have personal reasons for their actions, but for the most part we are socialized into attributing specific reasons and motives in specific situations.

> Motives are imputed or avowed as answers to questions interrupting acts or programs. Motives are words. Generically, to what do they refer? They do not denote any elements "in" individuals. They stand for anticipated situational consequences of questioned conduct. Intention or purpose (stated as "program") is awareness of anticipated consequence; motives are names for consequential situations, and surrogates for actions leading to them. Behind questions are possible alternative actions with their terminal consequences. "Our introspective words for motives are rough, short-hand descriptions for certain typical patterns of discrepant and conflicting stimuli." (Mills 1940, 905, quote in the last sentence is taken from Kenneth Burke's *Permanence and Change*, 1936.)

Motives are thus what the perceived actor, or his/it's outside observers, interpret to be the stimuli that caused the action in question. But, for the sake of making sense to ourselves and to others, we are tempted to limit our vocabulary of motives to what "fits" the common vocabularies. This pressure to find the right motive for actions is easy to observe in society. For example, people are generally more upset if a murderer claims something trivial as his motive – society then offers motives underlying this trivial motive in order to align him with the accepted motives ("he has clearly lost his mind"). If a motive does not fit the accepted vocabulary of motives, there is an attempt to deny the person's ability and right to talk about his own motives.

As another example, consider the old Japanese story about a samurai whose master is killed by an assassin (see Campbell 1988). The samurai searches for the assassin, finds him, disarms him, and proceeds to deliver a killing blow with his sword to avenge his master. But the assassin, in his terror, or as an act of defiance, spits on the samurai's face. While the samurai is enraged by being spat on, he does not proceed with killing the assassin. Instead, he puts his sword back in its sheath and leaves. The story ends with this mystery. So what happened? The samurai, according to the interpretation of the comparative mythologist Joseph Campbell (1988), "was made angry, and if he had killed that man then, it would have a personal act, of another kind of act, that's not what he had come to do." In other words, the social function of this act of revenge would have been tainted by

personal feelings. As a samurai, he wanted to do follow the duty that was dictated by the "samurai code", not his own will.

The samurai story might seem extreme, but we do similar things in our everyday lives – we consider if we are acting under the right meanings and "motives". It is not only samurais who reflect on whether an intention behind action is pure and in tune with the meanings we want to convey with our actions. Thus, each action should be done with the right intention, and not because of immediate impulses that would lose connection with the more cultured layers of meaning. In his fit of rage the samurai lost connection with his original motive, the samurai code of honor, and decided to delay the killing until he was calm and could perform it purely as an act of duty.

The reasons we give to actions have to reflect on some common vocabulary of motives whether it is the "vocabulary" of modern society or the "code of the samurai" as in our example. And as we observed in Chapter 2 (while discussing Lévi-Strauss), narratives are especially potent in clarifying motives and establishing a hierarchy between them. This is possibly one of the reasons why fairy tales are told somewhat universally – not only do they "reveal" what forces govern the world (Lévi-Strauss), but they also teach us to attribute motives to actions and actions to motives. The most difficult thing to understand, for the layman, is that "Reasons are the properties of cultures, not persons" (Fuchs 2001, 122). A culture condenses and generalizes sense-making, and as a network it "tells abbreviated stories about itself, preferably stories with plots, purpose, logic, and sense" (Fuchs 2001, 258).

If motives and narratives are as interconnected as we have suggested here, then it would be safe to say that the samurai in the fable was concerned about "getting the story right" before acting it out. The generalized pattern of action, outlined in popular narratives, has to be more or less known before action can appear as meaningful action that communicates about something.[40] And there is no question that startups appear to themselves and to others as meaningfully different, and that this difference has reached a reflective state that Luhmann would call "culture", i.e. the semantics are visible enough to be compared to other semantics. A comedy television series called "Silicon Valley"[41] that focuses on the startup phenomenon is one sign of the highly visible and reflective state of startup culture. It captures some peculiarities of startup culture, and reveals – one could argue – the "madness behind the method". But critique and ridicule presented against the peculiarities do not seem to affect the alluring nature of startup culture. Indeed, in a survey of 549 entrepreneurs, the majority (66%) stated that the "entrepreneurial culture" has affected their decisions to become entrepreneurs, while not being the primary motive (Wadhwa & al. 2009a).

Summing up, we can say that narratives consist of sequences where action is selectively presented and reasoned upon. Luhmann (1996, 344) agrees with Mills' view that motives are "accounts of reason for action". But ultimately, Luhmann (1996, 347) writes, these accounts work towards "normalizing improbabilities" by referring to "communicated commitments to stabilize expectations" (344). Or, as Luhmann (1995, 57) writes in Social Systems,

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[40] In this sense, we might follow the complexity-theorist David Snowden in saying that stories have a higher agency in society than people. Stories are the known patterns of action that people adapt to.
[41] The show was created by Mike Judge. It premiered on HBO in 2014.

> Self-reference, as well as the self-thematization of systems, then appears against the backdrop of functional analysis as self-simplification of the object system, which, for its part, fulfills the function of a necessary (…) reduction of complexity.

Seeing how stories are full of "accounts of reason for action", we can say that stories work in the same manner. When an individual has been embedded in stories, she knows how to handle surprises, i.e. she knows how to act in predictable ways in unpredictable situations.

> Whatever happens, you know why it happened and what will ensue from it. You are prepared since you know the outside of your society and its way to handle the outside. And you notice only events that fit the paradigm. (Baecker 1997).

And here, the hero appears as a paradox as he "produces conformity (will to imitate) through deviation" (Luhmann, as quoted in Cesaratto 2013, 123). He expresses originality but, while doing so, exposes himself to people who are under pressure to copy ever new "individuality patterns" (Luhmann 2013, 265).

The Relevance of Media Narratives for the Study of Startup Entrepreneurship

Startup entrepreneurship is a form of business venturing. As we have seen, startup is a nascent company that carries a novel business idea, and can also be observed as an organization. Thus, one might ask, why not go inside startup organizations to study the cultural form as it appears there? Would not this be more accurate than studying narrative patterns and concepts that are laid out in management literature and business magazines? In a sense, yes it would. Ethnography would give us more details and variation to work with, especially if our interest was on forming a "thick description" (Geertz) of the subject matter. But as we want to study the the cultural form as it appears in its generalized, most advertised form, this is not the level of detail we want to bring forth. Interviews and observations have been an important part of this study (see Appendix 1), but they are not the primary data – they do not contain the patterns we are interested in studying. The data relevant for us is contained in popular startup stories, where we can see popular semantics circulating, clearly drifting towards more and more "cultivated" semantics (see Andersen 2011, 262-263, more on the semantics in Chapter 4).

Also, basing my stance on the conceptual framework presented in Chapter 2, organization can be seen as an important, although often over-emphasized layer of social reality. Although it is clear that a startup identifies itself as an organization, this does not mean that we should focus solely on startup organization. For us, a startup is operating as organization, and observes itself as organization, when it communicates decisions and membership rules. It should be clear that there is a lot more going on in a startup. We will try to see what this "a lot more" is, and how it is attuned in the organization and its self-description. And this is why we begin with the popular, recurring self-descriptions before moving on to observe what lies behind. The level of the "organization" does not dictate the form, and the culture that goes with it, but is incorporated in it as one specific system reference. Our focus is on how this referencing is made, i.e. how the startup becomes observed as organization with a uniform identity.

This being said, mass media offers us good data of the generalized patterns of startups stories, i.e. how startup culture attributes actions, motives and outcomes in order to make sense of what is happening. Two points

should me made about the system of mass media, and how observing media narratives is relevant to a sociological understanding of startups. Firstly, the mass media is not the reality itself, but neither is a monocontextual reality to be found anywhere else, e.g. by going "behind the scenes" of an organization. It is the common observations that interest us, precisely because they are descriptions of reality. It is not a problem that what we can access through this description is a "niche", a form of observing that stems partly from the specific interplay of economy and mass media. As we have suggested in Chapter 1, this causal loop is a "structural coupling" in society and thus a sociological question concerning the interplay of logics of different social systems.

Secondly, mass media can be seen as the arena for the self-description of modern society (Luhmann 2013, 314-315). The mass media are filled with generalized narrative descriptions that subsequent descriptions have to refer to. In this way, it is a canvas on which stories are amplified, popularized and condensed into repeatable patterns. From the viewpoint of society, mass media can be seen as offering a “memory” in the sense of creating generalized information that is referred to in other communications (Luhmann 2000, 65)[42]. To give an example, there might be a common understanding that there is war in certain area and, as the mass media produce “war stories”, this understanding becomes a general framework for discussing the implications and effects of the ongoing situation. This means taking for granted that there is a “war”, and not worrying about whether the conflict really fits the definition of a war, or if it is actually just a series of operations handled by privately owned military forces, and aimed at very different goals than what we would observe in a “war”. Whether correct or not, the setting up of a temporarily stable background – with the semantics of war – reduces uncertainty of communications by forming common sub-topics. However, mass media might also increase uncertainty by avoiding topics that do not fit the old framing, but that would better explain what is going on.

The generalized narrative patterns are often challenged from outside by emerging "ante-narratives" (Boje 2001), i.e. narratives that challenge the narrative patterns of the status quo. However, these challengers often take the framing for granted, and focus on details instead. Strong narratives, and the general framings behind them, have the tendency to become what Merton called “self-fulfilling prophecies” (for an example of this, see Figure 1 in Chapter 1). It is a "definition of the situation evoking a new behavior” and this behavior transforming the definition into a true one (see Merton 1957, 423)[43]. Whenever new narrative patterns take hold, we should ask if there is an operative function beneath the descriptive function. The question should be, why has a set of ritualized descriptions and concepts emerged to designate some new, multifaceted phenomenon?

Thirdly, observing startups as they appear in the media enables us to keep on the level of the culture, especially as it appears as a pattern of meanings to be copied, rather than as an entity. We will keep open the question of “what is a startup”, and try to see what it *does* as a set of “semantics” (Andersen 2011) that enables a certain “form” (Baecker 2006) to operate in society. And after this, we will ask why this form, and why now? Withdrawing from “essentializing” definitions is important because of our conceptual framework, but also because of the subject matter itself: it is not clear how it should be observed. We have already seen glimpses of

[42] In this way, mass media is connected to the function performed by culture as a memory of society. Mass media amplifies and ”scales up” culture’s function of offering a set of patterns that we can use for description and prescription. Due to mass media, we can now observe ”mass culture” and fast, international exchange of sub-cultures and trends. See chapters 2, 5 and 7 for more on how culture is able to do this.
[43] Merton’s actual definition of a self-fulfilling prophecy was a "false definition of the situation evoking a new behavior which makes the originally false conception come true" (Merton 1957, 423). However, we try to avoid using the word “false” in this instance. It is here enough to say that narratives are by definition “reductions” of actual causal chains, and that – when established – this reduction of causal factors in narratives can have real effects as the pattern of action is imitated, or iterated on, in society.

how startups seem to operate in a much more unstructured manner compared to regular firms. Recent research has also indicated that observing the "entrepreneurial group" (see Ruef 2014) might be more fruitful than focusing on the organization or the individual of the entrepreneur. Thus, observing popular semantics gives us the freedom to observe meaning, slowly and carefully approaching definitions.

In the following observations, the actantial model of Algirdas Greimas (1983 & 1987; also Hébert 2006b) is used as a heuristic device in order to present the attributions in an organized fashion. Actantial model is used, because it lets us clearly represent the general patterns of startup narratives and show the skeleton inside these stories. After laying out a general model of the startup narrative, I will enrich this model by laying out specific actantial models of five stories that are considered to be the "canon" of the startup world[44]. The specific actantial models, and the generalized one, help us see what appears as relevant in the realm of startup narratives (what is noise and what is information) and, furthermore, what are the axes of desire, power and transmission that the actantial model brings forth. Although the meaning dimensions are not one-to-one with the three axes, we will gain knowledge of how startup entrepreneurship

Actantial Model as a Heuristic Tool

The actantial model of A.J.Greimas is a tool for braking down action patterns - whether real or thematized – into actantial classes, so that we can better see the internal tensions that a narrative has (see Hébert 2006 & 2006b). The steps for creating an actantial model are as follows:

> (1) Select the general action. (2) Convert the action into an actantial model by first selecting the subject and the object (since the other actants are defined relative to this axis), specifying the type of junction between the subject and the object (a conjunction or disjunction) and saying how and whether the junction is achieved (completely or partially, with certainty (a real junction) or doubt (a possible junction)). (3) Select the other actants. (Hébert 2006, 72.)

The "general action" in our case is the journey from an idea to a scalable and disruptive startup, i.e. what we would call a "startup success story". When we have this action in mind, we can start defining actants. An actant can be almost anything that has some push or pull in relation to the sequence of actions that we observe as a narrative. An actant can be, for example,

> (1) an anthropomorphic being (for example, a human, an animal, a talking sword, etc.) (2) a concrete, inanimate element, including things (such as a sword), although not limited to the concrete (such as the wind, the distance to be traveled), (3) a concept (courage, hope, freedom, etc.). An actant may be individual or collective (society, for instance). (Hébert 2006, 73.)

However, each actant should be something that resonates in relation to the subject-object-distinction. Thus, a helpful character whose acts of kindness do not resonate in the subject reaching the object is not a helper in the actantial model (Ibid.). The tensions of a narrative – or a pattern of action – are outlined primarily in the three axes: the axis of power (helpers/opponents); the axis of transmission (sender/receiver); and the axis of desire

[44] We are using the word canon as it is commonly used in literature, i.e. as a "group of literary works that are generally accepted as representing a field" (Wiktionary). In this case, however, we are not observing literary works but a group of stories.

(subject/object). We might simplify these tensions as obstacles: power is blocked, knowledge is blocked, and desire is blocked. The narrative then overcomes these obstacles. It should be noted that we use the actantial model here in a heuristic way, so that we are able to reflect on the tension points later on when we are operating with our model of the contextual complexity. As a heuristic tool, our actantial model is kept as simple as possible, and does not do full justice to the variety of ways in which the actantial model could be used in this case.

Five Canonical Startup Stories and Their Actantial Models

Before we start outlining the more general actantial model for startup stories, we will see how some of the most famous startup stories configure in the actantial model. We will refer to these as the "canon" of startup stories, although many other stories could be added to the list. These are commonly referred to by other startup entrepreneurs and by the mass media when discussing and comparing startups – they are the reference points, the ultimate measuring sticks, against which startups reflect their own journeys. Of these canonical stories, HP should be seen as a curiosity as it is much older than the other companies, originating in the first half of 20th century. However, it is commonly referred to as the first startup, and holds its place in the canon, although it fits our model rather superficially, as we will see. Apple is a somewhat obvious pick for the list since Steve Jobs is one of the most revered icons for aspiring tech entrepreneurs, now finally rivalled by figures such as Mark Zuckerberg and Elon Musk. Of the canon presented here, Facebook and Google are probably the most obvious startup success stories, as both have become very powerful companies in terms of their enormous user base, wealth and lobbying power.

It should be noted that these stories are not taken as journalistic constructions, nor are they taken simply as true descriptions. With Luhmann (see Chapter 2) we are rather in the middle ground of these interpretations: every pattern of actions that we are able to observe is “meaningful action”, and thus action that has already taken form as communication, and as communication it is able to signal something beyond itself. As was the case with celebrity CEO phenomenon, the action always becomes a signal, and is reinforced as such signal when the pattern becomes a familiar one in society. After this has happened, we can as what communicative possibilities this signaling opens. Thus, the shape of the stories is interesting precisely because they are always simultaneously “reality”, a recipe for meaningful action, and an apparatus for “signaling” about reality. Thus, we can read many things from these accounts: What is the current recipe for meaningful actions and what it signals on this very general level? Where are the borders of the universe for this breed of meaningful action? However, in these readings and actantial models, we will refrain from attempting a systems theoretical reading of what is going on. Instead, we attempt to clarify some basic patterns so we know the general shape of these stories, and the world that they portray. The stories and actantial models are the general form I have found for these stories, and how I see these stories appear in books, business media and in conversations with startup entrepreneurs and investors.

Hewlett Packard (Dave Packard and Bill Hewlett)

Hewlett Packard, or HP, is one of the major manufacturers of computers, printers, data storage technology and networking hardware. With a revenue of over hundred billion dollars, it has been listed as 49th in the Most Valuable Global Brands of 2014 (Millward Brown 2014). The company was founded as early as 1939 and is considered as the first iconic Silicon Valley startup. The founding story is so famous, that there is a sign in front

of the old garage where Willliam Hewlett and Dave Packard built their first audio oscillator, claiming it to be the "birthplace of Silicon Valley". Indeed, the HP garage in Palo Alto, California is a place of pilgrimage to anyone interested in startups. The founders themselves were not always thrilled: as the garage was later named a historic monument, Dave Packard attended the event and was heard saying "I am tired of this garage"(Malone 2007, 72).

HP was founded in 1939, but the origins of the company are traced back to the friendship of Bill and Dave in their college years. The two met occasinally while playing football in Stanford University, but became friends after they discovered a similar interest in radios. The Great Depression had begun and the job market was awful. The biographer Michael Malone writes in his book "Bill & Dave" that

> (…) in a strange way, it was kind of liberating: if the traditional corporate career paths were all but closed, they were free to try something radical and new. They even mused about teaming up and starting their own company, perhaps even in the field of "electronics" (a term so new that it had been coined after they came to Stanford). (Malone 2007, 39.)

However, the two didn't start their company immediately after graduating. Instead, Dave accepted a job offer from General Electric while Bill continued his studies, proceeding to work on a project concerning the resistance capacity oscillator. The business was founded a bit later with an initial idea of doing contract work in engineering and electronics (Malone 2007, 67). There was no vision of a world transforming product, as is often the case in the more modern startup stories. As Malone (2007, 54) writes:

> What separates Hewlett and Packard from almost every high-tech entrepreneurial team that follows them over the next seventy years (and probably for many years to come) is that they started their business before they knew what they were going to do.

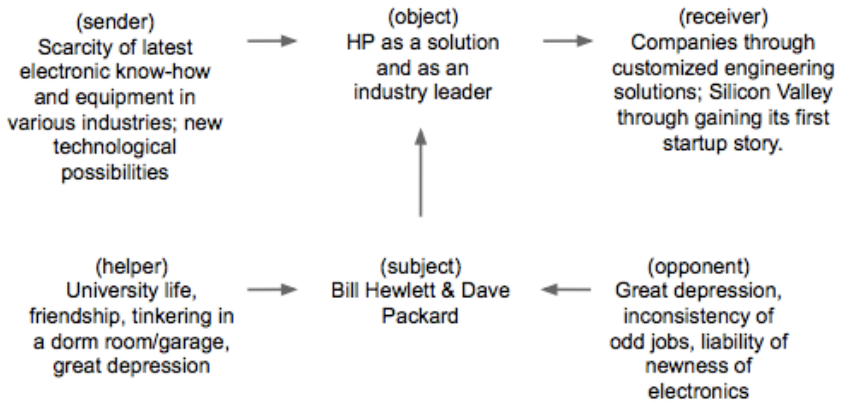
Furthermore, they knew each other as friends very well, and this, by contrast, is something that repeats in startup stories. What also sets them apart is that they stated their motivation as being simply self-employment instead of technological or economical disruption (Mason 2007, 54). Packard later wrote that they were "not interested in making money. Our idea was if you couldn't find a job, you'd make one for yourself" (ibid). Of course, there were no big success stories in electronics and computing before HP, so there was no startup culture to attatch oneself to. Still, some of the central elements of startup culture were present with early HP. There was the garage where no one would interrupt their tinkering; there were miscellaneous side-projects – akin to what later startups would call "pivots" – that helped them to understand the uses and limits of their technology; and there were the two co-founders with complementary skill-sets and trusting relationship. As Dave has noted:

> The miscellaneous projects made us more sure of ourselves and our skills. They also revealed something that we hadn't planned but that was of great benefit to our partnership – namely, that our abilities tended to be complementary. Bill was better trained in circuit technology, and I was better trained and more experienced in manufacturing processes. (As quoted in Malone 2007, 68.)

After becoming a leading technology company, HP tried to vigoriously maintain what Dave had referred to as HP:s "small-company atmosphere" (Malone 2007, 144). Hewlett-Packard embraced the idea of being a "family"

way before the rest of the corporate world began flirting with the idea of having an informal culture to supplement the formal organization. In HP, trust and openness were valued high, and the power relations between employees and executives were often suspended. For example, HP arranged picnics in which senior executives served food for employees (Malone 2007, 126). As for another example, the concept of MBWA – "management by wandering around" – is often traced back to HP.[45]

Figure 3: Actantial model of the HP story



Apple (Steve Jobs and Steve Wozniak)

In 2014, Apple is considered as the world's 2nd most valuable brand (Millward Brown 2014). It is a consumer electronics company that specializes in personal computers, handheld devices, and software. Of all the startups, the story of Apple might be the most commonly known. With its meticulously designed computers and handhelds, it has generated a following that is not common in consumer electronics. Even less common is the way in which the founder and long time CEO of Apple, Steve Jobs, became a well known figure among the consumers of Apple products. When Steve Jobs passed away on October 5, 2011, the general reaction was something one would expect with the death of some beloved cultural figure or humanitarian hero. When his official biography was released only three weeks after his death, it became an instant hit and Amazon's bestselling book of 2011.

Apple was one of the big players behind the personal computer revolution in the 80s. The company was founded in 1976 in Cupertino California by Steve Jobs and Steve Wozniak. The first prototypes of personal computers were built in Jobs' parents' garage, but it was Wozniak who had the real engineering skills. At the time, computers were assembled for special uses only, to perform very specific calculations. However, there was also a growing gorup of hobbyists, who assembled computers out of . The most notable of these groups was The Homebrew Computer Club, where Steve Wozniak was also a member. Apple's goal was to assemble ready to use

[45] Primarily, MBWA is a way for managers to collect random samples of how operations are running on different levels and departments. However, it could as well be seen as a way of loosening the feeling of having a tight hierarchy, as the visits can be expected to be more casual and when they are unstructured.

computers for people who were neighter hobbyists nor specialists, but who could use computers to store and process information.

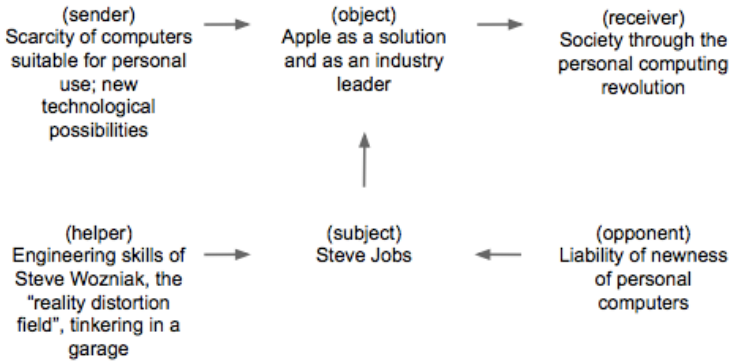
The story of Apple has many qualities that are also to be found also from later startup success stories. Steve Jobs had the ability to think big, to disregard the status quo and to find new ways to push forward. But he also had the ability to convince people around him to believe almost anything, no matter what the reality of the situation was. This has been referred to as Steve Jobs' "reality distortion field" (Isaacson 2011, 133-140). Whether this was an ability or an personality disorder remains unclear, but it is referred to in most thorough articles and books that are written about Steve Jobs. Reality did not get in the way of Steve Jobs.

> "The reality distortion field was a confounding melange of a charismatic rhetorical style, an indomitable will, and an eagerness to bend any fact to fit the purpose at hand. If one line of argument failed to persuade, he would deftly switch to another. Sometimes, he would throw you off balance by suddenly adopting your position as his own, without acknowledging that he ever thought differently. Amazingly, the reality distortion field seemed to be effective even if you were acutely aware of it, although the effects would fade after Steve departed." (Hertzfeld 1981).

In 1983 Jobs lured the CEO of Pepsi, John Sculley, to help him lead the company into success. The story takes a surprising turn when Jobs is fired from Apple by the man he lured in himself, John Sculley. Jobs and Sculley had their disagreements about the company and Jobs was planning a boardroom coup. Sculley had a hint of this and he managed to win the board members and oust Jobs instead. Steve Jobs was fired from his own company in 1985.

The ten years after getting fired from Apple had been productive for Jobs. He started new companies like NExt Computer and the graphics company Pixar that was later acquired by Disney. Apple, on the other hand, wasn't doing so good. In 1993 Apple decided to acquire NExt Computers and hire Jobs as the CEO of Apple. Jobs is a rare case of a startup entrepreneur turned into a hired CEO. After this, Jobs made the company profitable again by launching the products Apple is so famous today, including iMac, iPod, iPhone and iPad. Apple also opened its highly successful Apple Stores and launched the iTunes and the App Store, both of which were important for opening up new possibilities for independent producers of music and software.

Figure 4: Actantial model of the Apple story (the early years of Apple)



Of course, he had been a brilliant leader and changed the way people use computers and phones, but there was also something else – it was his story. Actually the story of Steve Jobs the business leader is not so much a story as it is two stories combined. The first of these stories is about Steve Jobs the founder of Apple that got fired from his own company. The second is Steve Jobs the CEO that was hired to save Apple. If we look at these two stories separately, they are actually not that unique – the story of the Jobs the entrepreneur can now be seen as archetype of startup story, and the story of Jobs the savior CEO can be seen as a variation of the corporate savior –narrative we observed in Chapter 1. It is the combination of these two stories that makes the legend of Steve Jobs so powerful.

Google (Larry Page and Sergey Brin)

Google, founded in 1998, specializes in internet-related services and products. It became a success after creating a search engine that was able to index web pages in a more effective way while keeping advertising invisible for the users of the search engine. The idea behind the product was to download the internet into Google's own servers for indexing, and create a better algorithm for web searches. Google is currently the most valued brand in the world with an annual revenue of almost 60 billion dollars (Millward Brown 2014).

The story of Google began in a similar vein to the story of HP in that the to-be-founders first met while studying in Stanford University. However, Google's story is also unique in that the founders had academic passions that later transformed into entrepreneurial activities. Sergey Brin was a "formidable mathematical mind" (37) and Larry Page was the more practical one of the two, but not too practical to be – according to his professor, he was constantly coming up with ideas that resembled "science fiction more than computer science" (39).

In the late 1990s, Larry Page was a PhD student at Stanford. In his research, he was trying to figure out ways to make the web more connected. Part of his inspiration was how citations were used in scholarly articles. By simply observing how some articles were cited more often than others, your could identify them as more important compared to the rest (plex 44). In web, it was easy to see what forward links a certain page presented, but it was difficult to see what linked to that particular page. There was no citation index for world wide web. In order to make one, Page wanted to "crawl the whole web" (45). This meant that he would have to write an algorithm that would go through webpages in order to index them for further reference. Here, problems started to arise. First of all, the web was too big. It was necessary to store the internet into a hard drive in order to properly index its contents. This proved to be time consuming. Also, the web seemed to have a logic of its own that other search engines had not figured out. Other search engines were, more or less, trying to guess what people were searching, looking at how many times words appeared in different pages. This could lead to irrelevant results. Sergey and Larry figured out how to develop an algorithm that reads various different "signals" that web pages give in order to observe how they would satisfy queries. When a query is made in Google search, the search enters a vast index that is ordered according to signal strength. No one had done it in the same way. Google is a prime example of a technological disruption that really changed the way people and organizations think:

> Arthur C. Clarke once remarked that the best technology was indistinguishable from magic. The geeks of Silicon Valley, assuming he was talking about them, have never forgotten that and have invoked the quote in countless press releases about their creations. But Google search really did feel like magic. (plex 77)

At first, Page and Brin attempted to keep their project academic, trying to harness it for their academic careers. After this, they tried selling it as a service. Slowly, however, it became clear that they were way ahead of all competition. As Stephen Levy writes,

> Brin and Page had launched their project as a stepping-stone to possible dissertations, but it was inevitable that they began to eye their creation as something that could make money. (Levy 2011, 67)

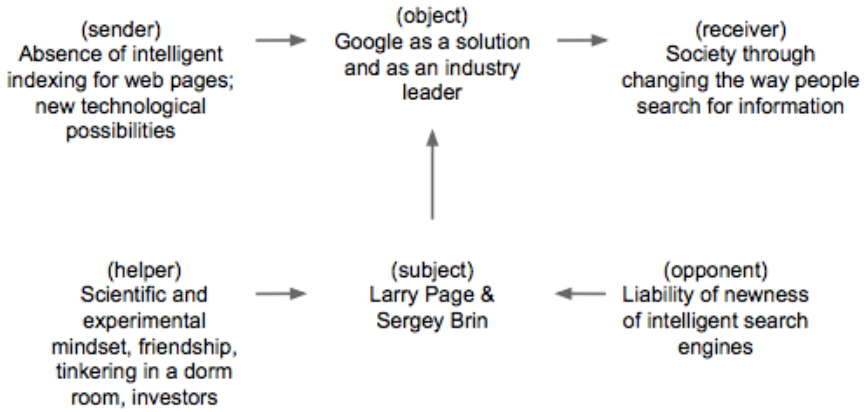
Page was assured that there was a possibility of changing the status quo:

> He believed that the only true failure was not attempting the audacious. “Even if you fail at your ambitious thing, it’s very hard to fail completely,” he says. “That’s the thing that people don’t get.” 34

With its clearly superior search engine, Google did not have problems securing investments. The first investment of 100 000 dollars came in 1998, and a larger, 25 million dollar funding round took place in 1999. Following these investments, Google soon moved out from Stanford campus to its own offices. In 2002, Google finally became profitable with the help of AdWords, i.e. a form of “sponsored links” that sold in a manner that resembled auctions. Later, Google AdSense would take advertising even further, offering more insights and feedback for advertisers. In 2012 alone, Google made 50 billion dollars in revenue.

As almost all of the startups that have managed to "grow up", Google works hard to maintain the startup feel in its corporate headquarters, called Googleplex, in Mountain View. There are bright colours everywhere, bikes that one can borrow to move from one building to another and food is free in the various cafeterias of the area. Google (along with many Facebook) also has its own busses that bring employees to work every morning, so they can work or relax during the commute. Furniture was often bought from fire sales of failed firms. Even in one of their earliest office spaces, the CEO Eric Schmidt is known to have said about his office, “make sure it looks like a dorm room.” (plex 129.)

Figure 5: Actantial model of the Google story



FACEBOOK (MARK ZUCKERBERG)

Facebook is a social network that allows people to create personal profiles and connect with their friends. Founded in 2004, Facebook is currently one 21st most valued brand in the world (Millward Brown 2014). Its annual revenue is around eight billion dollars, and it currently has over one billion users, which is the most active users that any social network has reached.

The story of Facebook began at Harvard University, as an idea between college classmates. The first version was "Facemash", a site where pictures of Harvard studends were pitted against each others with the sole purpose of figuring out who was the hottest person on campus (Kirkpatrick 2011, 23). The pictures were taken from the digital versions of the "facebooks" of all Harvard student houses. The facebooks primarily meant for identifying their residents. The project reached immediate popularity, but was then heavily criticized and closed. The idea got more sophisticated form when Zuckerberg later came up with "TheFacebook", a social network that operated with people's real names and pictures, but this time with people voluntarily creating their own profiles (ibid. 27-28). Alongside Zuckerberg, the co-founders of Facebook were Eduardo Saverin, Dustin Moskovitz, Chris Hughes and Andrew McCollum.

The first phase of creating Facebook took place in Zuckerberg's Harvard dorm room. But as the site became successful outside campus, the founders moved to Palo Alto. This decision was more about connecting to the culture of Silicon Valley than anything else. As Zuckerberg described the decision: "Palo Alto was kind of like this mythological place where all the techs used to come from. So I was like, I want to check that out" (ibid. 44-45). In Palo Alto, the early Facebook crew lived in a rented ranch house. This is when the founder of Napster, Sean Parker, joined the team. Parker was important, because he could "talk the language of venture capital" (ibid. 96). Zuckerberg, having heard of deals gone bad, thought that "VCs sound scary" (ibid. 48). Parker became an important advisor on venture capital issues. Facebook aquired its first funding from Peter Thiel, the founder of PayPal. In 2005 It received a larger investment of 12,7 million dollars. From there on, Facebook grew one school at a time until, in 2006, it finally opened up for anyone over 13 years old. Its valuation exploded in 2007 when Microsoft purchased a 1.6 % of shares for 240 million dollars. The valuation was now 15 billion dollars. In the initial public offering of 2012, the company was valued at 104 billion dollars. Not all investors were interested. For example, Paul Graham, the famous investor and the founder of Y-Combinator accelerator, did not consider Facebook as a good investment. In his own words:

> When I first heard about Facebook, it was for college students, who don't have any money. And what do they do there? Waste time looking at one another's profiles. That seemed like the stupidest company ever. I'm glad no one gave me an opportunity to turn it down. (Lapowsky 2013.)

As a startup success story, the story of Facebook is one that sets a good example of what "scaling" can mean in practice. The growth in user base was quick, and the valuation of the company followed quickly, when investors started to show interest. But the scaling was always painful. There was always the fear of alienating existing users by opening up the network to new groups (Kirkpatrick 2011, 150). Furthermore, each scaling was a challenge for the servers as the traffic almost multiplied with each act of scaling up.

The fear of alienating users was most vivid when Facebook was finally pushed to monetize its service. Finding a good revenue model was not easy: people were already used to Facebook being free of charge, so membership

fee was out of question, and intrusive advertising could easily ruin the uncluttered and simple user experience. Soon after Facebook had hired Sheryl Sandberg to turn the company profitable, in 2007, Facebook held a series of meetings to focus on monetizing the social network though intelligent use of ads. Interestingly, Zuckerberg took a month long around-the-world trip.

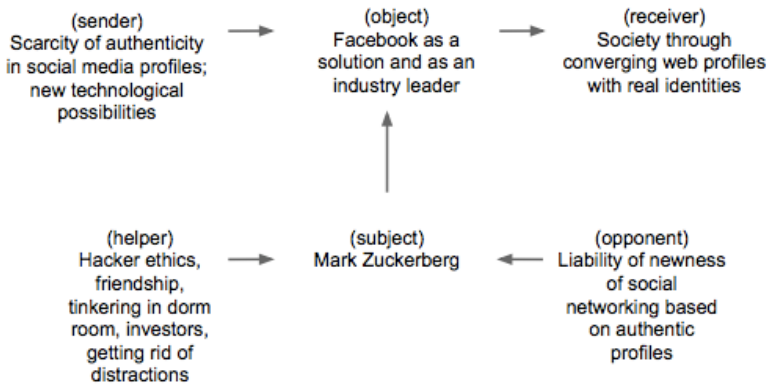
> Colleagues believe Zuckerberg timed the trip deliberately, to give Sandberg a bit of runway to establish her authority inside the company without his interference. But it is symbolically apt that her meetings about how Facebook could best turn its vast user base into a powerful business occurred with Zuckerberg – he of the ambivalence towards ads – out of town. (Kirkpatrick 2010, 257.)

Before this, Facebook had various monetization strategies that brought in some money, but not nearly enough to turn a profit. As a company, it was still burning through its investments. In 2010, Facebook was finally profitable, thanks to its new revenue model that was based on "engagement ads" as well as purchases of virtual goods and currencies that can be used in various games that are playable inside the Facebook platform.

Since its scaling and monetization, Facebook has repeatedly angered some of its users by making changes to the platform without asking the users opinions on the given changes. These have been especially difficult, when there has been changes in privacy settings. In an attempt to make Facebook's "theory of privacy" more explicit, Michael Zimmer, a researcher of information studies, crawled through hundreds of thousands of words of Zuckerberg's statements, interviews, letters to shareholders as well as his blog posts. He found that Facebook's approach to privacy boiled down to three ideas: (1) information wants to be shared, i.e. sharing information makes the world a better place; (2) privacy is a barrier to openness and must be overcome; (3) control is the new privacy, i.e. if people are able to control what is visible of them to their network, then we have enough privacy (see Zimmer 2014). Indeed, Zuckerberg does not try to hide his idealistic ideas about openness, although these ideas often seem to violate other people's ideas of privacy in internet. As Kirkpatrick writes,

> On his own Facebook profile, Zuckerberg has listed as his interests "openness, breaking things, revolutions, information flow, minimalism, making things, eliminating desire for all that really doesn't matter" (Kirkpatrick 2011, 11).

Figure 6: Actantial model of the Facebook story



AMAZON (JEFF BEZOS)

Amazon started out as an online bookstore that has grown out to be the largest internet-based retailer in the united states. Since it's founding in 1994, it has started manufacturing mobile devices and various other products of its own. In 2014, it was the 10th most valued brand in the world (Millward Brown 2014). It's annual revenue was around 89 billion dollars in 2014, and in 2015 it had surpassed Walmart as the most valuable retailer in the United States by market capitalization (Kantor & Streitfeld 2015).

Unlike the founders of the previous examples of startup canon, the founder of Amazon, Jeff Bezos, had progressed far with a corporate career before his startup days. During his university day, Bezos had actually planned on starting a business, but he decided to learn some skills first by working for someone else. Before taking the leap, he worked at various financial institutions, one of which was Banker's Trust, a "company at the intersection of computers and finance" (Brandt 2011, 35). Described by his co-worker, Bezos comes out like a disruptive thinker,

> He sees different ways of doing things and better ways of doing things. [...] He has no trouble puncturing someones balloon if he thinks they're proposing to do something the wrong way or in an inappropriate way. He'll argue his point very persuasively. (Brandt 2011, 36)

After Banker's Trust, he was hired as a vice president at D.E. Shaw, a global investment management firm where he created and led a team exploring new market opportunities (Brandt 2011, 39). Here, one collegue described him as Martian, although a "well-meaning, nice Martian" (ibid., 40). In D.E. Shaw, Bezos investigated the possibilities offered by the rapidly growing Internet.

> Most successful entrepreneurs start a company because they're passionate about the business they want to enter [...] But Bezos was simply interested in the fact that growth of the Internet meant somebody was going to make a fortune or two from the phenomenon, and he wanted one for himself. (Ibid., 46.)

People are often looking for specific books they have heard about, but local stores rarely have these. The business model for Amazon was to sell books of other stores and take a percentage of the sale price. Compared to previous examples of startups, the business model for Amazon was fairly clear from the beginning. Also, the reason for coming up with this specific idea was less personal than usual. Sure, Bezos loved books, but he did not start Amazon because of his passion for books. His approach was more practical and calculating. But the aspect of "unanswered scarcity" is there in almost every iteration of the Amazon story: the internet lacked a decent bookshop, and traditional booksellers thought that bookshop was something that could not be replicated online. Finally, Bezos made his decision using his "regret minimization framework", i.e. he asked himself, which would he regret most if he made either decision – that is, the decision on whether to start a company or not. (Brandt 2011.)

When Bezos finally took his leap of faith, a mutual friend recommended a programmer named Sheldon Kaphan to Bezos. After few months, Bezos teamed up with Kaphan and moved to Seattle, where the corporate taxes were lower than in California. He selected a home that had a garage big enough for housing his startup. In his book "One Click – Jeff Bezos and the rise of amazon.com" Richard Brandt describes this decision in the following way:

> He chose it in part because it had one crucial requirement – a garage, so that Jeff could boast of having a garage start-up like Silicon Valley legends from Hewlett-Packard on. [...] "We thought it was important for that garage start-up legitimacy," he said. "Unfortunately, it was an enclosed garage, so we didn't get the full legitimacy." (Brandt 2011, 60.)

The desk was made from a door. Cheap and used office furniture is something that Amazon swears by even today, even though it has a 75 billion dollar revenue and nearly 300 million dollar net income. In 1998, Bezos told Seattle Times why Amazon had stacked excess doors into tables:

> "These desks serve as a symbol of frugality and a way of thinking. It's very important at Amazon.com to make sure that we're spending money on things that matter to customers," said Bezos, 34. "There is a culture of self-reliance. (With the low-tech desks) . . . we can save a lot of money." (Fryer 1998)

This, however, was not completely true (Brandt 2011, 173; see also Fleishmann 2011). Bezos was actually more focused on sending signals of frugality than actually being frugal. According to a former controller, Bezos would say that if something “looks cheap” then they should "buy it because it reinforces our culture of being cheap and not wasting money". Bezos actively "made it a point to publicize his early frugality for year, sure to talk about his door-desks in interviews" (Brandt 2011, 172). Thus, these random acts of frugality were to send a message to both insiders and outsiders. In the market, and in the eyes of journalists, frugality could be seen as one sign that Amazon took the strategy of offering lower prices than competing online retailers, thus taking a major market share as quickly as possible. This meant being not only the best, but also the cheapest online bookseller. This didn't appeal to all investors, but Bezos did not budge. He told New York Times in January 1997 that

> We are not profitable. [...] We could be. It would be the easiest thing in the world to be profitable. It would also be the dumbest. We are taking what might be profits and reinvesting them in the future of the business.

Amazon forcefully drives its prices down by constantly tracking its revenue stream and putting all profits back into the system by lowering prices (see Evans 2014). Compared to its massive revenue of nearly 75 billion dollars, Amazon still doesn't have much profit. It does this with a pace and precision that are unheard-of in most corporate world. Almost no other company pushes its profits back into the machine so forcefully as Amazon. This makes it difficult for shareholders who are accustomed of getting rewards as the company grows. It has been said that Bezos is "treating Wall Street with mild disdain, just as Jobs did" (Lashinsky 2012). It does not end with shareholders; the frugality is felt by the employees and even senior level management:

> “We pay very low cash compensation relative to most companies,” says Bezos. “We also have no incentive compensation of any kind. And the reason we don’t is because it is detrimental to teamwork.” (Lashinsky 2012.)

If appearing as "frugality incarnate" was one of Amazon's ways of gaining legitimacy, then another source was Bezos attitude towards writing down long term business plans. For him, it seems, the future is uncertain, but it is surely coming.

> Another Bezos legend claims that Jeff wrote his business plan on a laptop in a passanger seat while MacKenzie [his wife] drove from Manhattan to Seattle. Others at Amazon, however, have said that he still hadn't finished writing his plan a year after the company was started. (Brandt 2011, 60.)

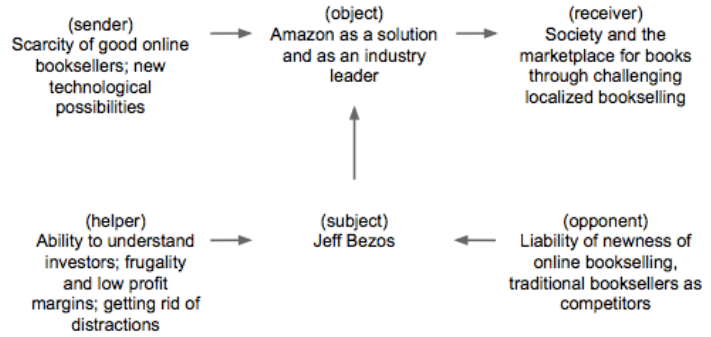
Bezos knew how to handle investors, having a background in Wall Street himself. But it also seems he was not intimidated by investors – Amazon did not intend to become profitable in the first years, so shareholders were skeptical. But having some revenue early on, instead of counting too much on outside funding, gave it more grit to survive the dot-com bubble of the early 21st century. After this survival, and after turning its first profit in 2001, venture capital started to pour in even though the company was not courting shareholders with great benefits. Compared to other startup stories, many of the articles written on Amazon make it seem almost as if Bezos could have grown his company without the turbo-drive provided by venture capital. This was partly because Bezos had bootstrapped his company early on with 300 000 dollars, and outside investments were fairly small during the first years, thanks to constant revenue (see Brandt 2011).

The company culture in Amazon has received some bad press as some employees feel that the company is too much focused on making every process as fast as possible and reducing costs. In these cases, the empoyees see that these are done at the cost of employee wellbeing and customer service quality. This is surprising, as "the superficial atmosphere around the headquarters of "Earth's Biggest Bookstore" is one of alternative-minded, almost New Agey liberalism", as one former employee has noted (see Howard 2006). The company culture also has its quirks that are less distressing. For example, the senior management meetings begin with a communal reading session that is a-typical for corporate management dominated by fast paced discussions and powerpoints:

> Meetings of his “S-team” of senior executives begin with participants quietly absorbing the written word. Specifically, before any discussion begins, members of the team — including Bezos — consume six-page printed memos in total silence for as long as 30 minutes. (Yes, the e-ink purveyor prefers paper. Ironic, no?) They scribble notes in the margins while the authors of the memos wait for Bezos and his minions to finish reading. (Lashinsky 2012.)

These memos range from observing new business possibilities to reports on how business is going. Amazon excecutives call these "narratives", and the point is that in order to write a narrative, you have to think more clearly than simply laying out bullet-points in a powerpoint (ibid.).

Figure 7: Actantial model of the Amazon story

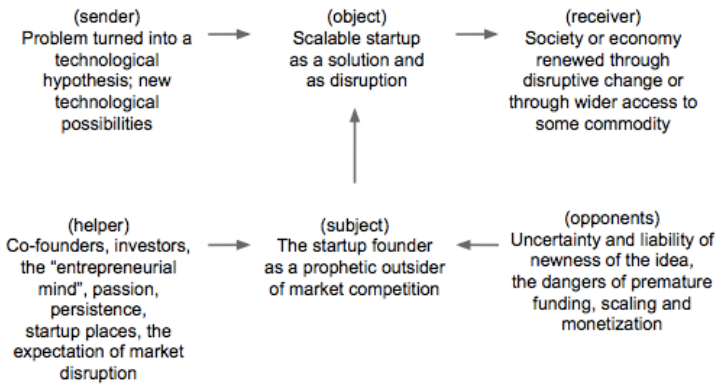


THE GENERALIZED ACTANTIAL MODEL OF STARTUP SUCCESS STORIES

Now that we have gone through five canonical success-stories, there is an understanding of how the story flows forward. We have also seen that there is a pattern in the way that the actants are structured and positioned in these stories. As any established standard story forged inside and between cultural niches, the formulaic success story of startup entrepreneurship has a well-defined set of actants, i.e. opposing forces that push the action forward. We will now move on to consider the more generalized actantial model of startup entrepreneurship, now referring to larger sets of data, i.e. articles that I have gathered from business magazines.

The general model presented in Figure 8 has been saturated through my readings of startup stories. It shows how startup narratives arrange the world in a certain recurring pattern: A freshly perceived scarcity (sender) sets the entrepreneur in motion. The entrepreneur (subject) begins his journey towards the scalable startup (object) that is seen to disrupt society and/or economy (receiver). This is done with the help of technology, co-founders, and startup spaces (helpers), and by resisting the urge to adapt to the existing market. To be successful, the startup has to overcome liability of newness (as described in Chapter 1) and the simultaneous need for money and the corrupting effects it might have on the startup process. This latter will be discussed in more detail in later chapters as it raises some questions that beg answering. Thus, we can draw the actantial model depicted in Figure 8 to present the generalized actantial model of startup stories. This is model can be seen to outline the actor-centric cosmology of startup culture.

Figure 8: The generalized actantial model of popular startup success stories



Following Greimas and his famous actantial model, we will observe startup stories as consisting of three axes: (1) the axis of knowledge, where something sets the story in motion and results in an altered state in the world; (2) the axis of desire, where a subject is depicted as being after a specific object; (3) the axis of power, where a central struggle takes place between the helpers of the subject and the opposing actants.

These are fairly obvious patterns for anyone to spot when reading startup stories from business magazines. As my aim is not to prove anything quantitatively, but rather to find an "ideal type" (see Turner 2006, 277) that enables comparisons across different startup narratives.[46] Because of this, data is not observed through counting

[46] On Webers use of ideal types, see Zaleski (2010).

the quantity of identical features in various narratives, but through observing how, irrespective of slight variation in stories, a certain pattern seems to repeat with slight variation. In this sense, our point of view is qualitative, but gravitating towards model-building in the sense that we want our model to work with the data at hand, leaving out – for the time being – the questions about whether it will run with some other data. But the actantial model is more of an heuristic here than anything. It will be useful as a background when we create and test our more ambitious model of communicative contexts that are coupled in – and through – startup culture (see Chapter 5).

Next, we will go through this generalized actantial model one actant at a time, and see what kind of repetition and variation takes place around these, according to our data collected from business magazines. We will begin with sender and receiver, proceed to subject and object, and arrive at helpers and opponents. This order is chosen not because it would proceed from the obvious to the less obvious – we would then begin with the subject. Rather, we proceed this way because we want to show how a major causality pattern is constructed (sender-receiver) and observed in the horizon, enabling a pattern of action (subject-object) to make sense as a secondary causality that connects with – or brings forth – new boundaries in society (helpers-opponents). This way of proceeding through the model enables us to get familiar with the idea that patterns of action take place between contextual and/or conceptual tensions. In later chapters this becomes even more important.

THE SENDER(S): PERSONALIZED OR HYPOTHETICAL SCARCITY (DUE TO NEW TECHNOLOGICAL POSSIBILITIES)

Startup narratives often attempt to capture the origin of the startup. When doing this, they often end up discussing how some problem was reframed through technology or through individual experience or both. This reframing is what appears as the solutions that the product offers. In the actantial model, this axis between this origin and its end-point is referred to as the axis of knowledge. By observing the axis of knowledge, we are simply observing what puts the narrative in motion and what end-state results – or is expected to result – from it.[47]

In startup stories, there are several ways of setting up the axis of knowledge. I will look at the ways of depicting the "sender" first, and then the common ways of portraying the "receiver". Often, the idea appears as the sender – it is the epiphany that suddenly appears and sets the startup in motion. The idea and the epiphany can happen on a very abstract level, as in the case of Google:

> Larry Page recalls the night in 1996 when he was 23 years old and had vividly dreamed about downloading the entire web onto computers. "I grabbed a pen and started writing," says Google co-founder and CEO Page. "I spent the middle of that night scribbling out the details and convincing myself it would work." (Byrne 2012.)

As startup-ideas are almost always more innovative than basic business ideas, this moment of epiphany makes sense. The ideas are abstract, and have to be almost accidentally stumbled upon. But "abstractness" is not a defining quality of the "sender" in startup stories – quite contrary, often the idea as well as the epiphany arise

[47] I will present this actantial model starting from the axis of knowledge instead of axis of desire, simply because the sender can be seen as the primary mover in the cosmology of the narrative. The analysis was done starting from subject and object, and considering how each subsequent actant relates to them.

from a personal need or from hours of tinkering with technology. Stories that revolve around a personal need are often startups that revolve around business innovations (Zappo's) instead of technological innovations (Google), and stem from the founder's experience as a consumer. In the case of Zappo's online-shoestore, the source of epiphany was simply the tediousness of being a consumer:

> One day I was at the mall and couldn't find a pair of the Airwalk desert boots I wanted. So I thought, Why not do an online shoe store? I went to Footwear Etc. in Sunnyvale [Calif.] and said, "I'll take some pictures, put your shoes online, and if people buy them, I'll buy them from you at full price." The store said okay, and I got a few orders. Then I went to a shoe show and thought, I need to put this giant collection online. (Eng 2012.)

Another such example is True & Co webstore for custom bras:

> LAST SUMMER Michelle Lam spent two hours in the lingerie section of a San Francisco department store trying on "20 different bras, one after the other, in what seemed to be a random trial-and-error sequence," she recalls. She ended up leaving empty-handed, but the experience sparked an idea: an online bra store where women could find the perfect fit. (Leahey 2012.)

When we observe the initial startup idea as the "sender" of a startup story, there is more emphasis on problem-reference than on market reference. The startup is ignited as the consumer starts looking for solutions to the problem, or as the market fails to answer the customers needs.

In the case of Google, we can talk about "invention", i.e. new creations without economic import at the time of invention. In the case of Zappos and True & Co, there is a hint of economic import: in both cases the founders were customers who thought that they could offer better service. In cases like these, there is a more clear sense of innovation, of market disruption, right from the start (for investigation of the concept of innovation, see Godin 2006). However, as the entrepreneur is presented primarily as a consumer, a citizen, a student or a nerd, not as an entrepreneur who is committed to building a business as a form of income. In this sense, economy is set on the other side of the equation. The origin of a startup is often searched from these epiphanies that alert the founder about a problem that is not answered. Following Joseph Cambell's (1954) monomyth model, we can see a resemblance to what is called the "call to adventure" in the hero's journey (this is even directly referenced by Blank 2005). Now, the university student or customer has to rise up to the challenge and become an entrepreneur.

To sum up, the market is observed from the outside, from the viewpoint of consumer or an engineer with possibly some new technology or an idea for a new solution. Thus the common theme between beginnings is an unique experience of what might be scarce although nobody has stated this scarcity yet. In other words, the problem appears as a product hypothesis due to technological possibilities that enable relatively easy scaling. This is in contrast with attaching to an already discovered scarcity with an already discovered approach, e.g. a shoe store that brings only slight variation, if any, to the common concept of a shoe store. I will discuss the new technological possibilities, and how they are reflected in the stories, in Chapter 4.

THE RECEIVER: DISRUPTED MARKET, INDUSTRY OR SOCIETY

The end-point of startup stories can be either known or unknown depending on if the startup has reached success or if it is still trying to convince potential customers and/or investors of its value. In the first case, the end point is clearly visible; we can see how Facebook, Twitter, or YouTube have taken their place in economy and society. In the narratives where the end-point is unknown, it is often summoned into being as an utopia, i.e. as a formulation of "how things ought to be". This utopia is visible in the very epiphanies that act as a sender: an area of life or commerce can be reorganized, thus changing the way we do things in society. After this, it is enforced by laying out the "visions" that the entrepreneur paints in the article.

If the sender is the personalized, unanswered scarcity, then the receiver appears to be the transformation of society by discovering, validating and answering the scarcity. The receiver is not just the market, but often the society that, with the help of the startup, learns to handle this previously latent form of scarcity. In other words, the disruption that the startup narrative summons is either market disruption or societal disruption. This is part of the allure of tech startups that use web as a platform from which to restructure the ways people buy, but also communicate with and observe one-another. In an article titled "Chief Disruption Officers", pinpointing interesting startup CEOs, Forbes wrote that the internet

> (...) is like a radioactive accident in a comic book – mutating everything it touches. These CEOs use the Web to give old markets new superpowers. (Forbes 2012b.)

Startup narratives often observe startups as gambling on the future and, when interviewed, entrepreneurs tend to point this out themselves. The startup is conceptualized in the future in contrast to big companies that are doomed to contemplate the past and react to the changes in the present situation. For startup “the future is happening” as the CEO and founder of Amazon, Jeff Bezos, said when he was interviewed by Charlie Rose:

> The Internet is disrupting every media industry, Charlie. You know, people can complain about that, but complaining is not a strategy. Amazon is not happening to book selling; the future is happening to book selling. (Charlie Rose Show, aired on Dec. 1, 2013.)

The startup seeks to bring no less than the future, and "future” is seen to indicate a disruption of some sort. The transformation of markets is an after-effect of technological change. The job of the startup entrepreneur is to remove obstacles that blocking disruption in different fields. Some disruptions stay in the marketplace, but some have transformed the ways people communicate. The trivialness of services such as Facebook and Instagram can be debated, but often some less trivial form of use uncovers itself. This was the case with Twitter when it was adopted by political and protest movements, and furthermore with "tweets" appearing as the real-time “vox populi” when broadcast news are covering political elections. Something that was previously accomplished through "man in the street" interviews was suddenly the man in the Twitter.

Although many startups only achieve very small scale disruptions if any, the narratives relish the possibility of disruption. Disruption appears as the possible end state, and it is often thought of as societal disrution rather than simply a disruption of a market or an industry. For example, in an article recounting the success story of Twitter, we read the following about the startup and its CEO:

> Like Jobs, Dorsey is a disrupter on an epic scale and a repeat offender. Twitter, the microblogging service he cofounded in 2006, has turned a reported 500 million people worldwide into broadcasters of messages capable of starting revolutions. (...) Twitter gets credit for helping to topple Arab dictators. (Savitz 2012.)

As another example, consider this description of the startup called Square, a company founded by the same Jack Dorsey:

> Square's plan is to disrupt the multitrillion-dollar payments system. Originally called Squirrel (as in squirreling money away), Square set out to make it far easier for small merchants to accept plastic, with a smartphone peripheral that can swipe cards, for a 2.75% transaction fee. (Savitz 2012.)

Here, the disruption is aimed at market, but were Square to succeed, it is likely that the disruption would go beyond market by heavily affecting the whole payment system and the institutions around it. This obvious difference between innovation and disruption should be kept in mind when observing startups and their avid use of the term "disruption". Innovation is something that challenges the market, but can be contained in the current market, while disruption implies radical change in various institutions that are connected to the market. We will analyze the concept of disruption in detail in the next chapter while searching for an counter-concept that would shed more light on it.

THE SUBJECT: THE PROPHETIC ENTREPRENEUR

At this point, having observed the axis of knowledge, the general mold of the identity offered for a startup entrepreneur has already been depicted. He is a creative genius and an entrepreneurial spirit, who attempts to correct some simple problem that is not generally observed as a relevant problem. The end-point of his journey is the disruption of some specific market (e.g. market for taxi services) and its surrounding institutions. If it is yet to happen, the disruption is expressed by taking the side of the future and setting it against the present that is hindered by past, i.e. by old technologies of business models. The entrepreneur is a person who has visions of the future. This "prophetic ethos" (see Chapter 1) of business leadership, that goes well beyond entrepreneurship, is visible and taking new forms in the character of the startup entrepreneur: with his future revealing epiphanies and his ideal of disrupting markets, he is a prophet of a sort. But as a prophet, the startup entrepreneur is highly peculiar since he is also presented as an outsider of the business world, often lacking the experience that is expected from CEOs or entrepreneurs. The startup entrepreneur is often presented either as a college student, a hacker or a suburban youth, who lacks the seriousness and toughness that characterizes many big corporation excecutives. Joe Einhorn, the founder of the photo-based e-commerce site Fancy, is described in the following way:

> It's easy not to take Joe Einhorn seriously at first. The skinny, boyish-looking 31-year-old habitually dribbles a basketball during meetings at his rooftop office in Manhattan's Meatpacking District, where large windows look out onto a lush patio and a basketball court. He flashes Lanvin sneakers and drops the term "dope" about as often as a Valley girl abuses the term "like." (Elliott 2012.)

Yet, in the background, there is always a lingering sense of the prophetic. The intriguing thing about the startup entrepreneur is indeed the combination of the prophetic and the casual. This is most visible in the way most tech entrepreneurs dress. Entrepreneurs are rarely seen wearing suits or even dress shirts with slacks, which are

part of the normal corporate attire. This, however, does not mean that startup entrepreneurs or programmers have no dress code to begin with:

> Silicon Valley, of course, is known for its casual dress, which means t-shirts, jeans and sneakers. But don't be fooled, techies care a lot more about fashion than they let on. Or put another way, there's a lot of code in the Silicon Valley dress code. (...) "Hoodie signals young talent," said Dan Woods, a techie we stopped on the street. (Kim 2014)

Thus, compared to professional CEOs, the startup entrepreneur is an everyman, but in a very defined way. According to some, the dress code has now turned into a "tech uniform", a stereotype that is actively emulated by aspiring entrepreneurs who want to look the part and send the right signals with their wardrobe choices (Chan 2014). In the context of business magazines and business organizations, this casualness of the tech uniform can be seen as the opposite of the suit and tie dress code of a more traditional business organization. Clothing is only one way of many in which the startup entrepreneur is given the role of an eccentric outsider, or a stranger, in the business world. This marking happens on other levels also, not just on the level of clothing. Taken together, these distinctive qualities might be labeled under "promising eccentricity". The attributions of promising eccentricity come in many guises and are not easy to define in a uniform way. Events and details are summoned, that make the entrepreneur look other-worldly. These passages can be humorous, but there is always the possibility that they are actually the signs of a prophet:

> Efrusy urged Zuckerberg to write down his thoughts about strategy and process. The next week Zuckerberg brought to their meeting a little leather-bound diary. "It looked like what Chairman Mao would carry around," says Efrusy. "He opened it up and it was page after page of tiny two-point handwritten text" (...) It was titled "The Book of Change" (Kirkpatric 2005, 134-135.)

Descriptions such as this are interesting as they emphasize the quirky qualities of the entrepreneur and leave them for the reader to interpret. But success always looms in the background, either as possible or something already actualized, thus keeping us guessing where we would otherwise prehaps see ignorance. In cases such as this, the entrepreneur appears as an idiot savant of the economy, a "knowledgeable idiot" of whom we might expect great things despite showing the opposite. A sense of positive mystery always prevails. Episodes of eccentricity are recollected without referencing to them as rational or irrational.

More common sense versions of entrepreneur's character can be found from the ways that intuition and passion are presented as important factors of success. The frequent attributions that entrepreneurs make to "passion" and "intuition" have also been noted in earlier research (see Blume & Covin 2011 and Cardon & al. 2009 and 2013). These studies state that tech entrepreneurs and business media alike keep referring to passion and innovation in rather ritualistic ways, even though there is some truth to these attributions. We will deal with intuition and passion more as we observe the actant of "helpers" in startup narratives. What interests us now, however, is that intuition is sometimes synonymous with the entrepreneur's inability or reluctance to give rational explanations for his decisions. This is in contrast with how retrospective sense-making operates in more established business organizations, in which success and failure are almost always attributed to rationality or its failure (see Merkl-Davies & al. 2011, see also Figure 2). What these episodes convey is a sense that the reason behind a decision cannot be translated to normal language, but instead has to be experienced without further analyzing. In its most basic form, it plays out like this example from the book Facebook Effect:

> “Mark, I’m open to having my mind changed,” said Cohler. “Explain it to me.”
> “I can’t really explain it,” answered Zuckerberg. “I just know.” (Kirkpatrick 2005, 85)

Of course, intuitive decision making happens in every organization, but in startup narratives it is considered as a more legitimate way of making decisions. There might be obvious reasons for this: the future is unknown, hence the entrepreneur should embrace the unknown by sometimes setting passion and intuition ahead of rational calculation. The defiance against the pressure to offer rational justifications for everything can even reach a point where rational arguments are bypassed. This was most visible in the case of Steve Jobs and his infamous “reality distortion field”, i.e. his ability to convince people of things that were not otherwise possible, and to disregard the rational arguments that people might make against his ideas (Isaacson 2011). It is his image that other entrepreneurs are often compared to, as in the following example where the attributes "wizard", "mystical", "nerdier" and "impresario" are brought together to form a vivid picture of Twitter founder Jack Dorsey:

> At 35 this philosophical entrepreneur reminds you a little bit of another technology wizard with mystical leanings. But Dorsey is nerdier than Steve Jobs (he is a programmer first, an impresario second), and his ego seems in check. (Savitz 2012.)

At times, it seems that the startup entrepreneur is a "gnostic" of the business world who turns to his product to seek answers instead of turning to the markets and competitors as sources of inspiration. Epiphanies, intuition, passion, eccentricities, and the denial of the business dress code tell a story about entrepreneur who seeks economy by distancing himself from the common semantics of economy. This is comparable to the gnostic strategy, and "apophatic theology" in general, where God is found by not trying to think about God, but rather through contemplation of more simple things.

Object: scalable startup (implying also monetization and/or disruption)

Disruption and monetization might be the desired end-products of venturing, but the startup entrepreneur is described as being after simpler things. He seeks validation for his startup idea, and the biggest validation is to scale the operations from few users to thousands and then millions of users. Thus, making his startup a “scalable startup” seems to be the primary goal of the startup entrepreneur. This is a matter of exponential growth compared to linear growth, the latter being more common goal in more traditional manufacturing and service industries. We already went through the characteristics of startups in Chapter 1. Summarizing some of these, we might say that instead of competing in a specific market, the startup aims at transforming this market; instead of taking a resource intensive route to scaling its business, the startup aims to scale by leveraging the internet; instead of linear growth, the startup should produce exponential growth; instead of market research, the startup does research with its own users/customers (see Blank 2005, Ries 2011). The object is not just to enter a market by starting a business, but to create a new way of doing business either by finding a new business model or unique technology that could transform the market.

We might say that in the beginning of a startup narrative the entrepreneur is the startup. However, at this point of a startup narrative, the startup has not yet proven to be scalable. In this sense, the axis of desire is also the axis between the startup as a new venture, and the startup as scalable – if not already scaled – startup that is ready to be monetized.

As we have already observed, startup narratives focus on startups on the level of action systems and thus focus mostly on the axis between subject and object. Due to this, almost everything is attributed to the subject, and the trials and initiations that the subject goes through become the most important pieces of the story. The challenges that the entrepreneur as a subject faces can be many, but there are few challenges that are most distinct. They are distinct in the way they are habitually recounted in these narratives, but also in the way they are formed around new concepts that resonate especially well - if not exclusively - among startups. These are the challenges of creating a product, gaining traction, scaling up and monetizing the product. Additionally, we might consider getting funded as one challenge, as startups often need a long enough "runway" of finances to develop the product, user base or technology further. All of these have something to do with the “liability of newness” faced by new businesses, and will be addressed as we turn our attention to the "opponents" in the actantial model of startup narratives.

For now, it is enough to understand that the entrepreneur, as a subject, is after a “scalable startup”, and to reach this it has to develop a product, find traction, and then reach monetization. Each of these has to be fitted together with the idea of a scalable startup. The product has to be disruptive in some sense; the traction has to happen before a business model can be properly implemented; and in the optimal case, monetization seals the scalable startup as a business. The stages leading to the scaling phase can be referred to with different names, for example one could call them “discovery”, “validation”, “efficiency and “scale” (Marmer & al. 2011, see also Blank 2005).

Opponents: liability of newness, double bind with economy

As we saw in Chapter 1, previous studies have already observed that startups have to deal with the liability of newness that comes with creating new products and business models, as well as with entering markets as new players. Furthermore, they often lack experience in organizing their business, and rarely have “relations of trust” in their network that could open doors to success (see Stinchcombe 1965). The liability of newness has many facets, but with startups the newness of the whole product concept (or “product hypothesis”) puts a fresh spin on things. Already in the first chapter we observed how the startup has to convince potential customers about the usefulness of their product and, often at the same time, signal investors about the potential lucrativeness of their venture. Both of these are difficult, especially as the problem, the product and the business model that the startup is offering might all be new iterations, thus being hard to grasp for customers and investors alike. In the narratives of successful startups, the problem-solution schema often seems to appear as something obvious from the start. However, this sometimes gives the wrong impression as the startup has to constantly refine and develop its idea while moving forward. We will discuss this more in the next chapter, when observing the meaning of startup pivot.

Another subgroup of difficulties that a startup entrepreneur often faces deals with developing the product in a way so that it not only answers a real problem in a novel way, but also fits or disrupts a market formed around that product. Of course, the initial startup idea might recognize the problem, but not always the final form of the product or the business model. We will deal with some famous startup-pivots later, but for now, the idea is enough. For example, according to PayPal founder Max Levchin, PayPal was "really not founded to do payments" but to focus on security and cryptography (Livingston 2008, 16.)

> We had six different business plan changes, and then the last one was PayPal. If that one didn't work out, if we still had the money and the people, obviously we would not have given up. We would have iterated on the business model and done something else. I don't think there was ever any clarity as to who we were until we knew it was working. By then, we'd figured out our PR pitch and told everyone what we do and who we are. But between the founding and the actual PayPal, it was just this tug-of-war where it was like, "We're trying this this week." Every week you go to investors and say, "We're doing this, exactly this. We're really focused. We're going to be huge." The next week you're like, "That was a lie." (Livingston 2008, 16.)

Pivots can be major or minor, and they may concern the product, the technology or the business model, but they always present a reformulation of what the startup is actually doing. This is obviously a challenge, but startup seem to go around it with ease. There is less pressure to "know what one is doing" - arguably this would not be the case, if the business had clearly laid out plan, an already decided revenue model, or a large amount of risk-averse stockholders who demand rational explanations. Entrepreneurship is not always passion, but more of a lack of passion towards being part of an predefined organization that fixes expectations:

> [Interviewer:] Was there anything that was misunderstood about what you were trying to do?
> Levchin: No, because I think we didn't know what we were doing. I think the hallmark of a really good entrepreneur is that you're not really going to build one specific company. The goal – at least the way I think about entrepreneurship – is you realize one day that you can't really work for anyone else. You have to start your own thing. It almost doesn't matter what the thing is. (Ibid.)

We will take liability of newness as one facet of the opponent-actant, and move on to consider some more surprising ones. One of these opponents is lack of money, as the startup has to deal with scarcity of resources. To overcome this, it needs funding, a runway made out of money so it has enough time and resources to "take off" with its idea. Getting funding is one of the common challenges that successful startups have faced. Paul Graham describes funding in the following way, talking about his experience of founding a company called Viaweb:

> Running out of money. That was the big worry. Running out of money and having to go and get more funding. Getting funding is very painful. It's so much harder than actually making a successful company.
> Livingston: What advice can you give about raising money?
> Graham: The advice I would give is to avoid it. I would say spend as little as you can, because every dollar of the investors' money you get will be taken out of your ass - literally in the sense that it will take stock away from you, but also the process of raising money is so horrible compared to the other aspects of business. You can't work your way out of it like you can with other problems. You're at other people's mercy. The way not to have to raise money is not to spend money. Do everything as cheaply as you possibly can. What you want in a startup is this feeling of cheap and hip. Not miserably cheap, but cool, bohemian cheap. That's what we strove for. (Livingston 2008, 221.)

This excerpt summarizes something that many startups strive for, some by "bootstrapping", i.e. by self-financing, and others by using "lean methodology" (Ries 2011), i.e. taking quick and simple steps to test and develop its idea. These are ways of avoiding the need for early funding while also creating more leverage for dealing with potential investors. Both of these will be discussed more in the next chapter, but what is important for now, is

the fact that money is needed, but perceived as a liability. This tension, or "double bind" relationship with money, becomes even more obvious when entrepreneurs discuss their experiences of transforming users into customers, in other words monetizing their business. Whereas in traditional business setting monetization is obvious from the start of the business, in startup entrepreneurship monetization is often something that is to be done very carefully when the time is right. The emphasis is on creating a following before translating it into payments. The entrepreneur chooses to keep distance to economic definitions of the situation and, instead, articulates the startup in terms of its "traction", i.e. its following in terms of users or customers. Even startups that are able to create revenue from the very beginning seem to gravitate towards self-descriptions that emphasize user base, traction and scalability over monetization.

One challenge that regularly appears in startup success stories is the sudden popularity of the product/service and the ensuing struggle to scale up the operations quickly, so that the momentum of the exponential growth moment is not lost. Some companies, such as Facebook in its scaling phase, manage to do this gradually, but others are taken by surprise and risk crashing under the sudden increase in demand. This might not be the challenge a startup has, but it is often the most gripping one, as there is suddenly so much to lose, and very little resources and know-how to prevent losing it. As James Hong, the founder of the Hot or Not photo-rating website, described:

> We were panicking at this point. There was no plan for a business, it was just, “How the fuck do we keep this thing going?” We weren’t trying to figure out what kind of boat we needed to build, we were trying to keep from drowning. But we did know a few things: we had to reduce our costs, we had to make it make money somehow, and we needed more machines. And because the idea could be so easily copied, we had to get as much press as possible to lock out anyone else from getting publicity. So it was panic. The whole point was just to keep going, keep going, don’t stop. I got 8 hours of sleep in the first 8 days, and finally they made me sleep because I was literally shaking. (Livingston 2008, 379)

And similarily, Sabeer Bhatia, the founder of Hotmail, recollects,

> [...] then the tough part was scaling up to that growth. We had to worry about scalability problems and how to add servers and make it more reliable. It was not all smooth sailing. (Livingston 2008, 24)

Scaling presents a danger also if it is done at the wrong time, especially if the problem-solution fit or the product-market fit has not been yet validated. Premature scaling has been found to be the "most common reason for startups to perform worse" (Marmer & al. 2011, 5).Of course, the success stories and stories of potential future success that we refer to show little signs of premature scaling. This is obvious since they are in good shape. But scaling is definitely a challenge, as displayed in the two examples.

Interestingly, when startups successfully scale up, they all attempt to hold on to their startup identity. This is done by respecting the startup dress-code and other cultural details of startup entrepreneurship, but also by creating offices that look like playgrounds, giving employees more freedom than is usual in workplaces, and making statements that give the impression of thinking beyond markets and investors.

HELPERS: GARAGES, COMMUNES, PIVOTS, CO-FOUNDERS, PASSION, INTUITION, INVESTORS

The axis of power is where the startup overcomes obstacles with the the help of specific attributes or characters. The most common "helpers" of startup or the entrepreneur are heterotopias (Foucault 1986), pivots, co-founders, passion and intuition.

In startup narratives, innovation seems to occur naturally. We see the passionate, intuitive entrepreneur that has an idea for an innovative product, and we see that idea being iterated into an actual product. In this iteration, the co-founders as individuals, and their friendship, is depicted as a central helper. This makes sense: according to Scott Page (2010), the central element of the entrepreneurial creativity could be described as an act of "recombination" (see Page 2010) where technologies, problems and features are combined in unique ways. In the narratives, this is often explained through an intellectual friendship that celebrates playful competition between the friends. It is as if a “sense of dissonance” (Stark 2011) is kept constant through this playful competition between equals, and then cultivated through entrepreneurial action. The more institutionalized form for this playful competition seems to be the hackathon-event, where programmers try to solve problems or create programs in a restricted timeframe. But, in startup stories, we can find a more casual representations of playful competition. For example, Max Levchin, the founder of PayPal, describes his first meetings with Peter Thiel in the following way:

> We hit off really quickly. I have this IQ bias – anybody really smart, I will figure out a way to deal with. It was very positive. Both of us are really competitive and really – not mistrusting, but not willing to assume that the other guy knows what he's talking about. When we met, we sort of hung out socially, and then one night we had this showdown where we sat around in this café for like 8 hours and traded puzzles to see who could solve puzzles faster – just this nonstop mental beating on each other. I think after that we realized that we each couldn't be total idiots since we could solve puzzles pretty quickly. (Livingston 2008 14.)

Along with friendships, places of quiet seclusion and tinkering seem to be of high importance. For example, the common spaces of origin for statups are university dormitories and small garages. They have a strong place in startup stories, as will be shown later in this chapter as we compare our actantial model with the canon of startup stories. There is room to wonder why these two spaces, the garage and the dorm, have become so popular in startup stories. They both represent a limbo, but one that connects with technology. As a storage for vehicles and tools, a garage is a space for technology. As a place for tinkering, it is also a place where making a mess is allowed. One could see it being part of a house, but it is a place for ”outdoor things” and one that has a bigger opening to the outside world. Home is “un-technologized”, “clean”, and “inwards turned”. The outdoors, instead, represent a horizon of “serious experimentation” where the products of tinkering are brought to bear the test of reality. Both of these – home and outdoors – are left on the unmarked side of the distinction.

A dorm room has many similar connotations, albeit with some interesting differences. Depictions of dorm rooms in popular culture are full of messiness and youthful un-seriousness, but also a space where friendships are built. For youths moving in to live in a campus, the dorm is in contrast with ”home”, but also with the university as a serious institution. In this sense, dorm rooms become places for tinkering with ideas or, in the case of startup stories, for coding. They can be seen as places of “playful experimentation” in contrast with the “serious experimentation” that happens inside the university’s research departments.

So far, I have suggested that garages and dorm rooms are evoked in popular startup stories as spaces of tinkering and playful activity. The story of the forest coder (Chapter 1) is an extreme version of this semantic, almost becoming a parody of the theme. Furthermore, observing the institutions that have evolved around startup ecosystem, we can find examples of this retreat. Even institutions such as incubators, accelerators and startup mansions seem to repeat the semantics that express "retreat" from logics of orgnizations, instead helping the startup reach a playful mindset that enables it to go through conpeting identities as a company.

Here, I am referring to institutions such as incubators, accelerators and startup mansions. Of these, incubators have entrepreneurs coming and going individually, while accelerators concentrate on a single cohort at a time. Accelerators are also more active in helping to push the company to the market while incubators are usually present in the earlier phases when the technology has not yet translated into a business idea. They both offer coaching and connections for the founders as well as space for to work in. But they are spaces that actively encourage tinkering with technology and ideas while keeping economic considerations secondary – at least until the product starts "gaining traction", i.e. gets a significant user base.

Compared to incubators and accelerators, startup mansions are a more recent phenomenon. They are houses where aspiring entrepreneurs can live together and dedicate time to building their companies. Mostly acting as living and networking spaces, startup mansions are not as active in coaching or helping their entrepreneurs as accelerators of incubators, but they usually arrange events that bring together potential investors with entrepreneurs and act as connections between investors and entrepreneurs. In these spaces, the startup is able to be in a state of disorganization in the sense of not locking its identity in its relation to the outside world. This is possible, because it often has not began its existence in the market – if anything, it has only been speculated on by an investor, thus securing for it more time outside the market and its more framing. The options stay open as the entrepreneurs go through different possibilities.

In management literature, spaces meant for this have been called spaces of "serious play" (Schrage 2000) or "play zones" (Pinault 2004) that help organizations produce new innovations (see Costea 2007). But in startup stories these spaces are more: they represent origins for specific startups, but also for the startup culture in general (through the HP garage). These places contain attributions that build a stable identity for startups, and if there are no garages and dorm rooms, there are startup mansions and other "in-between-places" where entrepreneurs can linger.

Having constructed this very general model, we can now look at its different "axes" (Greimas 1983). These are the axis of knowledge, the axis of power and the axis of desire. These three axes capture the tensions between sender and receiver, subject and object and helpers and opponents. For us, these will tell about the attributions with which the organization is made visible. Each axis reveals a struggle, or what Joseph Campbell (2008, originally published in 1949) would have called "initiation through trials".

The Three Axes: Desire, Knowledge and Power in Startup Stories

Now that we have observed the main actants, we can elaborate on the three axes that govern the micro-cosmos of the startup success story. These axes depict the important constraints and impulses of the stories from the perspective of the actor – the startup entrepreneur – who sees the world in terms of his intentionality (self-reference) and the world reacting to this intentionality (other-reference). These are important for us, because in

later chapters we will turn to observe the startup culture from a polar viewpoint – this being the viewpoint of a sociologist who observes cultural niches that make specific forms of intentionality and orientation meaningful. Thus, becoming familiar with these patterns is important even if they are nowhere near our final destination.

The axis of desire (subject/object)

The axis of desire is about what the protagonist is explicitly after in the story. This axis does not reveal much new insights for us. In startup stories we see the founder and his startup directed towards the ideal of a scalable startup. Profit does not take a center stage until some base level of scalability is attained, this scalability revealing itself through rapidly growing user base or through a promising technological breakthrough. If the narrative would simply celebrate the early profits, or early traction, without presenting ideas about scaling, it would be a more traditional entrepreneurial story instead of being a "startup story". The desire of the entrepreneur has a gnostic flavor, as passion and intuition are often mentioned as the core traits (see Chapter 1 and Chapter 4). Thus, the entrepreneur is depicted as operating mostly on instinct whilst taking distance to dogmas of all kind.

> Summary of the axis of desire: the startup entrepreneur and his startup appear as a unitary figure that turns to itself and/or to society instead of turning to markets, thus going after problems that don't yet have market solutions. The object that the entrepreneur is after is the product that is – in the optimal case – scalable, disruptive and monetizable.

The axis of knowledge (sender/receiver)

The axis between sender and receiver is the axis of knowledge (sometimes called "axis of transmission"). This axis tells us what knowledge initiates the action and what knowledge brings it to end. The startup narrative is initiated by an observation of a new form of scarcity that is, at least seemingly, not yet addressed in society and economy. This scarcity can take the form of problem, but it is often expressed as a scarcity that can be solved. The narrative ends when disruption is brought to society or to economy, or with a reminder of this disruption possibly happening in the future. It is noteworthy that this disruption is not limited to markets, but can have various different effects on society. In stories that do not reach notable disruption, the monetization is what ends the startup action by stabilizing it as a more established firm.

> Summary of the axis of knowledge: a latent scarcity or a newly discovered problem initiates the startup and sends it towards the ultimate goal of "disruption" of a market and/or society. Technological possibilities make the redefinition of problems possible, and thus also act as sender. In the receiving end, we often encounter society, as many startups seek to re-organize the way we observe problems and their solutions.

The axis of power (helpers/opponents)

The axis of power tells us what conflict takes place and who are involved. Interestingly, there is no market competition, as the startup attempts to bypass markets (even though this is often superficial). Instead, the founder has to struggle for his idea to be taken seriously. This can happen explicitly inside the narrative, or in the article presenting his startup as a viable model for future markets. Indeed, the entrepreneur is offering a future, but the present is stuck with what has been confirmed in the past. This is the basis of liability of newness that might present a danger to the startup as it might make securing funding and finding users/customers more

difficult. In bringing the future to present, the entrepreneur has various helpers such as co-founders, mentors, accelerators and investors, but also places such as garages and dorm rooms, what might be called "heterotopias" (Foucault 1986, see Chapter 4) in relation to economy.

> Summary of the axis of power: startup faces opponents such as uncertainty of its idea and the resulting liability of newness, but is aided by helpers such as co-founders, startup-heterotopias and investors who enable the entrepreneur to mediate – and to find a compromise – between the roles of an inventor and a CEO.

At the intersection of these axes, we have the "standard story" of startup entrepreneurship, and – when talking about the big success stories – the startup spectacle. We can also see how the vocabulary of motives, i.e. the reasoning that supports actions, is supported. The basic level of motive is naturally the **axis of desire**, where the entrepreneur is after scalable startup. On this level, the motives are the ones that depict scalable and disruptive startup as desirable goal to go after – it suggests bypassing competition with technology and innovative ideas, and promises great wealth as well as power to affect how things are done in the world. **The axis of knowledge** is a level where the motives seem to gain a higher legitimacy, as now we are beyond the simple desires of the entrepreneur – a new idea offers itself to the entrepreneur and needs to be answered, as a market or society deserves to be disrupted. **The axis of power**, on the other hand, is where we see the more day-to-day motives, as things to not align with the entrepreneur's desires nor with the knowledge that he is a vessel for. On this level, we see the motives that are about overcoming obstacles to return to his knowledge and desire.

Excursion: Startup Stages, Startup Curves and temporal horizon of a startup

Along with popular narrative patterns, even more simplified representations have emerged to make sense of the temporal dimension of building a scalable startup. First, we will look at startup stages, i.e. common typologies that are used for explaining what "phase" a certain startup is in. After that, we will consider two popular curves that visualize the stages, one from the investment perspective and other from the perspective of the entrepreneur. What is interesting here, as will be shown, is that the perspectives of the entrepreneurship and financing have converged – the entrepreneur's temporal dimension is mostly parallel to the temporal dimension of the venture capitalist.

Venture capital firms pay a lot of attention to different stages that firms go through. As the VCs have invested in a company, and as they maintain significant control over its board, they want to make sure that right decisions are being made at the right time (see White & al. 2007, 123). For this reason, it is important to know what stages a venture goes though, and what actions are most important in each stage. The growth stages of a firm are as follows: (1) the "seed stage" that involves the "determination of the commercial potential of a planned product or service"; (2) the "startup-stage" that involves the "development, marketing, and sale of the initial product"; and (3) the "expansion stage" where the company "is profitable and has a large customer base, and the company is thinking about expansion by either going public or acquisition" (ibid. 123-124).

Interviewing venture capitalists, White & al. (2007, 130) have noted that the seed stage is where a "product-minded CEO" is often sought for, while in startup stage and expansion stage an "empire-builder" CEO is needed. Finding entrepreneurs who have the ability to magage with challenges of all stages is , and – arguably – one reason why founding teams are often preferred over solitary founders.

Moving on, the typology of funding stages – seed stage, startup stage, expansion stage – resonates behind many other models. One of these is the six stage model proposed in the Startup Genome report (Marmer & al. 2011, 14-15). Often referred to as "Marmer stages", this model has the following stages:

1. Discovery stage: validating whether the problem is meaningful, and whether the solution is interesting. Takes 5 to 7 months.
2. Validation stage: validating the product by first sales or attention. Takes 3 to 5 months.
3. Efficiency stage: refining the business model and customer acquisition in order to scale. Takes 5 to 6 months.
4. Scaling stage: aggressive growth that is often powered by series A round investments, an IPO or acquisition. Takes 7 to 9 months.

With these, the life cycle of a startup seems to be around two years – after this it should either find an exit, do a major pivot or simply give up. Marmer (ibid.) also lists two "additional stages" – Profit maximization (#5) and Renewal (#6) – but these could also be seen as marking the ending of the startup phase, and the beginning of an established company, constantly trying to improve its profit margin while keeping up with market fluctuations.

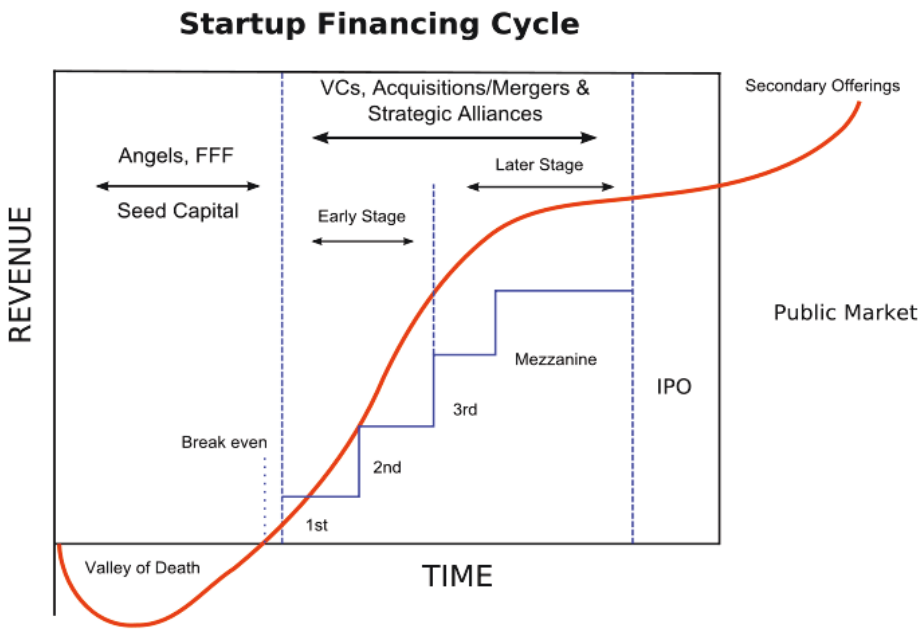
Before Marmer, the clearest depiction of startup stages – from the perspective of startup instead of investors – was offered in Steve Blank's (2005 & 2008) Customer Development Model (referred to in Chapter 1 and more closely observed in Chapter 4). This model divided scalable startup process into four phases: customer discovery, customer validation, customer creation and company building. While Blank's main point was about shifting attention away from "product development" and into "customer development", it was the first popularized typology of startup stages, later echoed by Marmer (2011) and Ries (2011).

The "funding stages" model utilized by the investors has been depicted as a curve and labelled as the "Startup Financing Cycle" (see Figure 9). In this curve, we see how the startup begins its journey with a dip into what is called the "valley of death", as it is burning through some initial resources without any revenue to counter this loss. Even after the first minor investments, the startup will lose money as it makes its first hires and moves into its first office. Building a more serious organization around the startup often means a sudden increase in the "burn rate", the speed in which the startup uses its shareholder capital[48]. If the seed investment and its allocation is done carefully, and everything plays out nicely, then the startup either establishes a lean burn rate or is able to find a revenue stream that counters the burn rate, or secure further investments that give it a longer "runway", i.e. extra time before the cash runs out. If everything aligns properly, the startup rises from the "valley of death". The startup in question does not have to have any revenue in order to go into early stage VC funding rounds – often a solid growth of user base will do, especially if the startup has a highly disruptive idea and it seems to operate outside serious competition. From this on, the startup is on a mezzanine that leads from "series A rounds" to ever increasing investment rounds. If everything goes perfectly, at some point the company reaches a state where it is ready to make an initial public offering, or accept an acquisition offer from a more established company that wishes to gain strategic advantage by acquiring the company in question. Or, alternatively, the company is able to monetize its service without going public.

[48] Usually, a burnrate refers simply to the amount of cash that the startup spends per month.

In 2015, business media started discussing the rise of unicorns, i.e. companies that were able to grow to billion dollar valuations, often without going public. (In this sense, all talk about a bubble is somewhat confused, as there is far more private money in startup deals than in the dotcom bubble.)

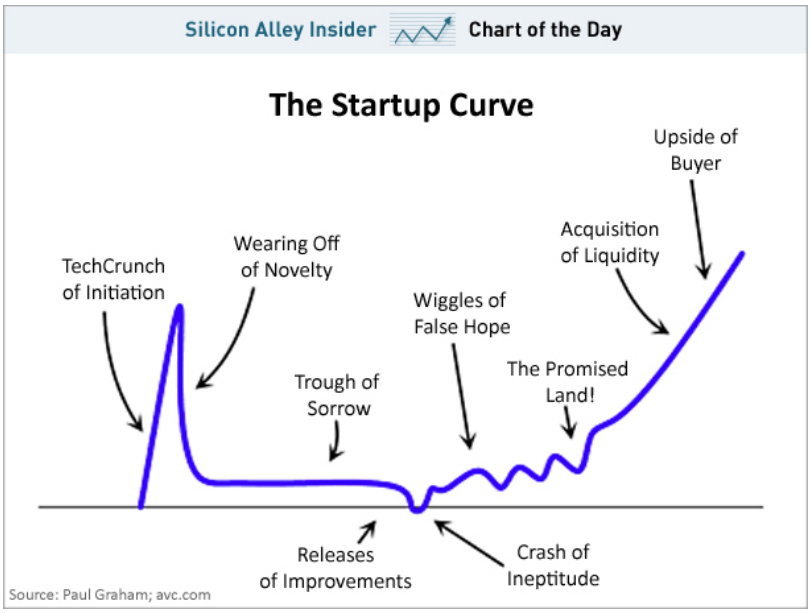
Figure 9: VCs perspective on the startup journey



The Valley of Death is not much emphasized in this curve. It is a stage that has no clear characteristics in this commonly depicted figure, except for the fact that most startups end there. Of course, from the entrepreneurs perspective, the Valley of Death contains much of the interesting drama that we observed in the popular startup narratives. From the investors perspective, however, this is an area where "economy" is not present, not yet articulated in meaningful ways other than as pure potential. But as we saw when observing the general startup narrative, there is a lot going on here. Economically, the startup might be dipping under the surface, but emotionally it is on a rollercoaster.

Another curve, generally known as Paul Graham's Startup Curve (Figure 10), counters this in a nice way. Even though it has a very similar shape to it, the Startup Curve depicts the psychological journey of the entrepreneur. Having been an entrepreneur himself, and having mentored hundreds of startups, Graham wanted to give his take on how enthusiasm of the founder (or co-founders) fluctuates in the course of building a startup. Now, surprisingly, we have an early peak of excitement, followed by all kinds of emotional turmoil and "wiggles of false hope". The valley of death is not a short interlude as it was in the previous curve (funding stages) – instead, it is the voyage itself.

Figure 10: Entrepreneur's perspective on the startup journey



I wanted to pinpoint these two curves as they show how the startup journey appears – similar as it is in its overall-shape – in different light depending on whether it is observed by the investor or by the entrepreneur herself. The venture capitalist condenses the uncertainty faced by an early stage startup by conceptualizing this as the "valley of death" that every startup has to go through. The uncertainty is a calculated risk, and is left mostly for the entrepreneur to solve, as it is in this phase about building a solution that actually works. The investments for seed stage startups are small, and failure rate is high. For a VC with a diverse portfolio, the stakes are not as high as they would be in a series A investment rounds, for example. The end of valley of death is when seed money is invested, and the startup has gained some market traction. Now, the uncertainty can be calculated as possible turned into economic calculations about revenue models, market value and future profits.

For the entrepreneur, on the other hand, the early stage is a series of more detailed struggles. There is a pressure to make big decisions with very little data, and it is easy to see how the uncertainty can easily become paralyzing. It is as if the entrepreneur lacks the cynical attitude of the venture capitalist, and is bound to be disappointed (e.g. "wearing off of novelty") somewhere around the early stages. Whereas the VC brackets out the early stage uncertainty as a "valley of death", the entrepreneur might consider his early stage struggles as the real success story. In Chapter 4, we will see in a more detailed way how this distance between the entrepreneurs and the venture capitalists is reduced through concepts – or semantics – that condition the

relationship between different social systemic logics. As we proceed with the semantic analysis, it is useful to reflect on these curves, thinking of how the two curves have been "synchronized" enough so that the two observer-cultures are talking in the same language – a language whereby personal and financial perspectives are able to shake hands despite the uncertainty of startup entrepreneurship.

Reflecting on what has been learned: Startup as a meaningful pattern of actions and actants

So far, we have been introduced to the world of startup narratives. We can now more or less tell the pattern of the standard story that this culture tells itself about itself. We know the actants and the resulting basic tensions. We know the framework inside which the "vocabulary of motives" of startup entrepreneurs lives. Each startup story has to interact with this pattern by further iterating on it, whether closely emulating it or clearly diverging from it. This is the blueprint for the "royal progress" (Geertz 1983) of a startup.

The actantial model does a fine job depicting the cosmology inside a startup story. However, it does not go beyond making explicit the structure of the standard stories. The actantial model, outlining the narrative structure, oversimplifies the context that supports the story itself. As we saw in the early part of this chapter, a story needs a point of view that connects contextual shifts into a smooth causal tunnel though which actors are seen to proceed. The drawback for this form of simplification is that contextual complexity of society disappears as meaning horizons are fused together, as if the world around had only one meaning to offer. Our next challenge is to re-construct the contextual complexity behind this narrative form. To do that, we have to go deeper into the concepts that are utilized by startup culture. This will, hopefully, enable us to trace the central differences that the culture makes, and gain a perspective on the contradictions that the culture has built itself on. If cultures resolve contradictions, then what conceptual contradictions does startup culture resolve, so that it is able to sustain itself in society?

CHAPTER 4: THE SEMANTICS OF STARTUP ENTREPRENEURSHIP

> Resolving the paradox means a reintroduction of identities that enable continued operations. (…) The resolution of paradoxes can only occur in stages, that is, creatively (which does not mean arbitrarily). Culture seems to be the medium in which forms for resolving paradoxes can take on stable and, in their own time, plausible identities. Culture is the stock market where operations for paradox resolution are traded.
> - Niklas Luhmann (1998, 102)

The social theory of Niklas Luhmann has yielded several ways of dissecting, analyzing and synthesizing empirical phenomena. In the present study, we will combine three slightly similar, but nevertheless separate ways of making sense of data, all derived more or less from the sociology of Niklas Luhmann (Andersen 2010; Baecker 2006; Knudsen 2010). With the help of these approaches, and with our observations based on our data, we will form a sociological theory of the scalable startup. It should be noted that the word "method" will not be used. Following Andersen (2010, 2011), I will use the term “analytical strategy” in order to stress the deliberate choice of working with an “empty ontology” (Andersen 2010, 99). This fits our theoretical framework that can be labeled as "operative constructivism" (see Chapter 2). Furthermore, “analytical strategy” and “modeling” (see Chapter 5) are used, because our aim is to build a sociological theory of the startup. Note that this is a sociological theory that does not override other theories – and ontologies – of the subject matter (e.g. Leans Startup), but rather displays how these theories work to reduce uncertainty by communicating in a certain way. These actor-centered concepts, stories and theories turn uncertainties into options for decisions, thus creating more room for actions to appear meaningful.

If the startup methodologies and startup concepts offer us ontologies, then what would an “empty ontology” even look like? As Andersen (2010) writes, working with an empty ontology means leaving aside the question “what is out there”, and instead focusing on how these questions and their answers are constructed by observers relying on different logics of sense making, i.e. observers utilizing different systems references, finding different ways of making dissonant system logics fit together. The difference in relation to a method is this: whereas a method observes objects in the world with a goal of producing new knowledge, an analytical strategy (empty ontology) observes observations as observations in order to “de-ontologize” (Andersen 2010, 99). This brings us to a central point about our conceptual framework – the world consists of observers observing observers. “An observer is anyone or anything to whom or which something matters and makes a difference” and, by this standard, these observers “need not be persons” (Fuchs 2010, 81).

The observers that we observe are first-order observers. We, as observers of observers, are second-order observers. As Andersen (2010, 105) writes,

> On the level of first order, the outlook is mono-contextual. The observer sees what he sees. He makes use of a distinction without being able to distinguish. On the level of second order, the outlook is poly-contextual.

We will thus trace the poly-contextuality that is left out when first-order observations are made. In the next chapter, it is of interest to us that firms observe themselves – and are observed – mainly as economic entities operating in markets, while mostly bracketing out their other contexts (see Baecker 2006). Startup entrepreneurship, as a new observer-culture, and as a new horizon of expectations, shifts this observation of the relevant environment into a more complex position. In this chapter, we gather some evidence to show how this is so, and what is the complexity underlying these new condensations of meaning.

For a researcher utilizing an analytical strategy, and thus working with empty ontology, the point of departure is

> (…) empirical wondering beginning in observing how a system develops a certain interest. So what defines your interest as a researcher is that the systems 'out there' develop an interest in something. Your shifter is an interest for interest. (Andersen 2010, 115.)

The "interest for an interest" in this case is our wondering (presented in Chapter 1) about the sudden popular interest in startup entrepreneurship as something to be distinguished from regular business leadership and entrepreneurship, a new cultural form and a new pattern of meaningful actions. This began our "empirical wondering", that was the basis of Chapter 1. But now we have reached a phase where our "empirical wondering" has to become more rigorous, and thus questions of methodology arise.

We will follow Andersen's ideas on how to utilize an "analytical strategy" for connecting empirical insights with theoretical conceptualizations. For Andersen, an analytical strategy is a way of switching from ontological observations to the framework of "operational constructivism" where every observation is dependent on the observing systems operations. We are observing how different observers observe, not "how things are in the world". This is in line with Luhmann's systems theory, where the focus is on observing how social systems process events, and how change in this processing become visible through semantics and forms that are commonly used (see Chapter 2). Every observing system can only use their own operations to observe, and make sense of, their environment. Even for sociology, there is no vantage point from which to observe society in a pure manner, unaffected by systems of communication.

Operating with an analytical strategy affects the way we approach data – we see it not as a collection of facts, but as a collection of perspectives, each of which necessarily contains an outside and a blind spot[49]. In order to observe something, we always have to ignore other things/forces/logics/causalities/etc. The central point that Andersen makes is that when doing constructivist research, we have to reflect on these blind spots and outsides. The problem, however, is that methods often take an ontological stance towards reality, and thus prevent this reflection. This is where we need to think in terms of an analytical strategy instead of methods.

The differences between methods and analytical strategies can be summarized with the dichotomies presented in the Figure 11. In short, the focus turns from objects to observations, the goal changes from knowledge production to de-ontologizing the subject matter (i.e. showing how the situation is "constructed"), and the rules for knowledge production are replaced with the question of how to go further into the context that sustains the observations.

[49] For similar view, see Fuchs (2001, 338): "Sociology is not about social facts, but about how and when such facts emerge, and when not."

Figure 11: Key differences between methods and analytical strategies according to Andersen (2003, XIII)

Method	Analytical strategy
- Observation of an object - The goal is to produce true knowledge about a given object - What rules and procedures are needed to produce scientific knowledge?	- Observation of observations as observations - The goal is to question presuppositions, to de-ontologize - Which analytical strategies will enable us to obtain knowledge, critically different from the existing system of meaning?

According to Andersen (2013, 69-71), operating with analytical strategy means three things for the systems-theoretical observer. He must (1) account and substantiate for his choice of guiding distinction, (2) account for the conditioning of the chosen guiding distinction, and (3) account and substantiate for the implications of the exact observation point.

Accounting for the guiding distinction means that – when using Luhmann's systems theory – we explain what guiding distinction we use. In this chapter, we will be using semantic analysis, where the guiding distinction is condensation/meaning (see Andersen 2003, 86-88). Semantic analysis will be accounted for in the following subchapter, as it is the strategy we will be using in the current chapter. Within semantic analysis, we will make clear why condensation/meaning makes sense as a starting point when studying startup entrepreneurship. Then, in Chapter 5, we will use two other analytical strategies: form analysis, which has the guiding distinction unity/difference, but also systems analysis, which has the guiding distinction of system/environment. In Baecker's form model that we will introduce in Chapter 5, these two intertwine as we will be observing a "complex form" that explicates how the environment is re-entered into the systems operations (see Chapter 6). In Chapter 5, we will thus have to account for using the guiding difference unity/difference, as well as reflecting on different social systems and their environments that are observed as a unity with the help of the communicative form of startup entrepreneurship.

Accounting for the conditioning of the guiding distinction means that we will be clear as to what will be observed as the inside and the outside of the distinction. In semantic analysis, we are looking at how the central concepts of startup entrepreneurship condense information (packaging meanings in a new way) while also generalizing it (offering it for further use). form in their specific use and, through their condensation, carry fresh meanings into society. The condition for finding such semantics is not that the concepts have to be invented by startups, but that they have to appear there in repeating patterns. The condition for form analysis of Chapter 5 will be similar: we will look at the results of our semantic analysis in order to see how the conceptual categories we will map in this chapter would re-arrange the Baecker (2006) model of the firm, and what this means for a startup.

Accounting for the implications of the exact observation point means that we will always state what is the system that is observing. In the current chapter as well as in the following one, we are looking at the startup as observer. In Chapter 6, we will flip this around and observe the models we have created from the viewpoint of society, trying to locate a functional equivalent so that we can see on a more general level what is happening with this communicative shift to startup semantics. But saying that the organization is the observer does not

mean that the semantics, nor the form, is the organization itself. Rather, they are depictions of a "mode for observing society", that have emerged amidst the system observing itself in its perceived environment. This is the reason we refer to observer-cultures – not just organization but also interaction systems or even psychic systems, can observe the world from inside this constellation of environments, using it as a "gearbox" for changing between various systemic logics.

With these rules in mind, we will now consider semantic analysis as a specific way of studying meanings[50]. The central idea is that every concept is a distinction, where one side is indicated while the other side is left "unmarked", i.e. without explicit reference. When distinctions are repeated in concepts or in other forms, we can talk about condensation of meaning into semantics. The focus on concepts is not necessary, but convenient when approaching a spread out phenomenon such as the culture of startup entrepreneurship. As Andersen (2011) notes, even though semantics can take the form of ideas, symbols and images, they are most clearly presented in the way concepts work. A concept is condensation of meaning into a form where the concept itself is indicated while something else is seen as the "outside" of the concept. If we recall that meaning is the constant fluctuation of the actual and the potential, then it becomes clear that concepts are never unambiguously definable (Andersen 2011, 254). In other words, there is always a horizon of possible meanings available. Because of this ambiguity, we should begin by making sure that there is a "conceptual reservoir" that has emerged to support a specific discourse (Andersen 2011). Later in this chapter, we will begin our analysis by presenting this reservoir in manageable chunks, or categories, in order to locate some of the latent functions that these concepts might have when they operate in unison.

SEMANTIC ANALYSIS: OBSERVING CULTURES THROUGH THEIR CONCEPTUAL RESERVOIRS

Semantic analysis is the analysis of how meaning – as a loosely coupled "medium" – becomes condensed into the tightly coupled forms, that is, concepts (Andersen 2011; see also Luhmann 2012, 113-120). Other way of expressing this is to say that concepts turn open contingency into fixed contingency (Andersen 2003, 245). Possibilities for meaning are bundled so that, in certain situations, we know approximately what to expect (even if the expectation is not always actually realistic). We know which meanings generally go together with which other meanings. Thus, looking back at the problem of double contingency (Chapter 2), we can again see how concepts are one of the ways in which expectation structures become visible. As Andersen (2011, 254) writes, "to use a particular concept in a communication establishes particular expectations about the continuation of the communication". Thus, a concept condenses and generalizes meaning and expectations. Often many expectations are packed into one concept. Offering a simple example, Andersen writes that,

> If one is told that someone is a social worker, this information immediately creates a horizon of different expectations such as, for example, 'she categorises people', 'she is probably liberal', 'she is social and caring', 'she smokes a pipe', 'she removes children from their homes', etc. A concept is a kind of expectation structure. (Andersen 2011, 254.)

Furthermore, a concept is always "held in place" by a counter-concept (ibid.). Sometimes the counter-concept is obvious, as in the case of man/woman. The expectation of what a woman is like places certain restrictions on

[50] For a historian's perspective on Luhmann and his semantic analysis, see Hollander 2012.

what a man is expected to be like, even when "man" is not explicitly mentioned (ibid.). Sometimes the counter-concept has to be made visible through analysis of the concept and what it is seen as arguing against or leaving out of the picture in its specific context. In the latter case, the analyst should have reached a good understanding of his subject matter to guide him in his analysis. According to Andersen (2011, 255),

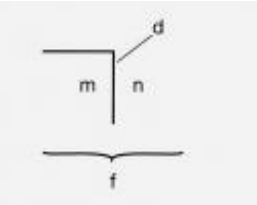
> Semantic analysis, then, employs historicism as a way to describe the current conceptual reservoir. How are meaning and expectations formed, it asks, and how do these become condensed or generalized into concepts, which then establish certain semantic reservoirs for certain communication systems?

In semantic analysis, we do not try to examine all the different connotations a concept is able to include, but instead try to observe what other meanings it is differentiated from, and what remains in the "blind spot" of the distinction when it is operative. Instead of the immediate denotations or connotations of the concept, the counter-concept, and the form that is created between these two sides, becomes central to our interest. Only by looking at the form are we able to see how a concept reduces a phenomenon. Every distinction has a blind spot, since the observer using the distinction cannot simultaneously use a distinction and observe it from the outside. This has the repercussion that, if we want to study concepts, we should look at the "form" of the concept instead of the immediate content it provides (see Figure 5). By form, we mean the distinction concept/counter-concept that differentiates the concept from other possible meanings. With semantic analysis, it should be noted that even though we are talking about concepts and counter-concepts, the implications are much more general – we are talking about "culture" and "cultural forms", not just about terminology (see Chapter 2 for a more detailed discussion of meaning and culture).

> Semantics is defined […] as the stock of generalized forms of differences (e.g. concepts, ideas, images and symbols), which can be used in the selection of meaning within the communication systems. In other words, semantics are condensed and repeatable forms of meaning available to communication. (Andersen 2011, 253-254.)

The concept of form is important, and will be discussed in more detail in Chapter 5. We will give a general idea here, as it is an important heuristic in the present chapter, and will be used to visualize the concepts and counter-concepts of startup entrepreneurship. In Figure 1 we see a an indicated marked state, *m,* differentiated from an unmarked state, *n,* with the operation of distinction, *d*, resulting to a form of distinction, f. The form is the "unity of difference" of m, n and d (Baecker 2014, 24). The distinction that a specific indication presupposes is made visible, and we can observe how the form operates, paradoxically, as the unity of the distinction. This paradox should not be seen as alarming, but as productive, as meanings are generated out of confusions (see Chapter 2). The distinction and the indication appear simultaneously, as a single operation. It is important to note that, if this operation prevails, i.e. is repeated in similar patterns, then there is an environment that resonates with this operation. By environment, however, we do not mean something outside communication but, instead, something that might be called a "system" or a "frame" that is produced by the communication itself, and that – as a commonly recognized pattern – guides subsequent communications.

Figure 12: The Form of the distinction with distinction d and form f also visible (from Baecker 2006)



Proceeding with Semantic Analysis

In our analysis, we will proceed in the following order: First, we will present the conceptual reservoir that has emerged around startup entrepreneurship. Specific concepts are chosen because they resonate loudly and frequently in startup literature, and because they – from the perspective of the second-order observer – form categories. The categories reflect our own ability – as second-order observers – to see connections between the concepts and the possibilities for meaning that they open. Thus, by categories, we mean our own reflections on what concepts can be seen as serving a similar function (latent or manifest), especially in the way that they narrow down the meaning horizon to include only certain meanings while making other meaning relations appear less meaningful. It should be clear that the concepts are easily observable, but the categories demand that one follows our observations step by step and accepts, if not all, then at least most of our arguments as to how meanings operate in society and how they should be observed (the core of our framework is presented in Chapters 2, but chapters 3, 4, 5 and 6 contain arguments that should also be considered).

The concepts that we observe may seem ordinary and self-explanatory at first, but – as we will see – the horizon they open for a startup is not the same as it is in other contexts. We will venture into the performative functions of these concepts in the sense that we are interested in how they arrange, or rearrange, meanings. This focus on the performative side does not serve a goal of questioning the validity of the descriptive function (i.e. how they describe a perceived order of "world") that these concepts have – in other words, they might or might not be the most fitting concepts to use if we consider some current state of "events" taking place behind the meanings themselves, but this level of validity does not affect their apparent functionality in relation to the flow of "meanings" in society.

In presenting the conceptual reservoir of startup entrepreneurship, we will proceed by giving an overview of each category, and then present each concept, or group of similar concepts, inside that category. In analyzing each concept, we try to look for fitting counter-concepts that would explain how the current concept is able to "make a difference" (Bateson). We will display concepts with the help of the form, as displayed in Figure 13.

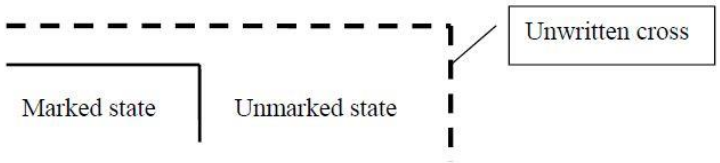
Figure 13: How concepts and counter-concepts are presented in this chapter



This is how we come to make our own distinction as scientists attempting to uncover the "unwritten cross" (see Figure 14). Imagine communications about apples. The apples are then the marked state, and the unmarked state would be the background that the apple is observed against. For example, we might see that in this special

case of communication apples are set against oranges, and thus defined through their differences to oranges. As communication proceeds and evolves, other unmarked states are added and made visible by further second-order observations. The "unwritten cross" is always pushed further, and revealed retrospectively. Our distinction is a second-order distinction in the sense that it is observation of observation, but it is also itself a first-order observation, thus having its own blind spot. Thus, even with careful analysis, we will be adding determinacy and indeterminacy simultaneously – we will reveal what determines the original distinction, while simultaneously causing the phenomena of interest to become more divided in its meanings, thus more indeterminate.

Figure 14: Revealing the unmarked state by redrawing the "unwritten cross" (from Seidl 2004)



Lastly, at the end of this chapter, we will give a summary of the "generalized expectation structures that are made available to communication" in the semantics of startup entrepreneurship (Andersen 2011, 255). Here, we will make more general observations about the semantics as well as the categories that we have grouped them in. This will act as a stepping stone for Chapter 5, where we will build on the semantics, while building a communicative model of the startup. The "communicative model" will refer to the fact that we are not focusing on startup as an organization that uses communications, but as communication that makes the startup organization – as a specific actor position – possible.

Something should be said about the use of data in this chapter. Because the phenomenon of startup entrepreneurship is fairly recent, and because our interest focuses on forming a sociological model of the startup (Chapter 5), we will not do a historical analysis of the semantics. Some previous research has been presented as to in what circumstances startup's started to emerge (Chapter 1) and how the first startup stories gave tools for sense making. In Chapter 5, Dirk Baecker's ideas on the "form of the firm" will give us a glimpse of what could be called general business semantics, so we can observe how startups appears as a historical mutation on a more general form of the firm. Thus, instead of a historical analysis, this chapter will focus on mapping the concepts and counter-concepts that are relevant for startup entrepreneurship (for a similar emphasis, see Andersen 2008).

Our data for this chapter is four-fold:

- Startup stories taken from business magazines 2011-2015 (*Forbes, Fortune, Fast Company* and *Inc.*)
- Interviews of startup founders taken from the book *Founders at Work* (Livingston 2008)
- Startup guidebooks: *The Lean Startup* (Ries 2011) and *Seven Steps to Epiphany* (Blank 2005)
- The stories and the narrative analysis presented in Chapter 3

Each of these plays a role in analyzing startup culture as well as in arguing for possible counter-concepts for the central concepts this movement. Interviews, participant observation and other secondary data will not be explicitly referred to, even though they have played an important part in giving affirmation to the analysis.

The initial analysis was done using a data set of three business magazines from the years 2011 to 2012. The magazines were Fortune, Forbes, Inc. and Fast Company, chosen because they were all business magazines that focused on entrepreneurship, covering startups, but also having a wider perspective on entrepreneurship, thus fitting the phenomenon together – as well as differentiating it – from more traditional forms of entrepreneurship and new venture creation.

CONDENSATION/MEANING: OBSERVING AND RE-CATEGORIZING STARTUP CONCEPTS

In order to bring more structure to my analysis, I will arrange the semantics into categories. Each category takes up its own subchapter and presents the semantics that respond to it. There are four categories, all of which have emerged during analysis. The categories should explain themselves as one reads the subchapters and observes the wealth of concepts that relate to each other thematically. The braking into categories should not be surprising, as we have already seen some examples regarding the preferred concepts and themes of startup entrepreneurship. In the previous chapter, however, our focus was on the narratives, and the concepts were left with less attention.

Some categories contain terms that have very similar connotations, even though they seem to denote different things (incubator, accelerator, garage, startup mansion). Other categories contain concepts that have noticeable differences in meaning – both denotative and connotative – but form a category by having the same system reference (e.g. economy referred to in "pitching", "funding", "revenue model", "valuation", "monetization"; or organization and decisions referred to in "pivot", "startup methodologies", or the reification of founder's "gut-instinct").

In Chapter 3, we observed how startup stories focus on the entrepreneur, and build categories around him by observing different forces that are seen to affect his startup. We used the actantial model to make these forces more explicit see how they relate to each other. The reason we did this is that (1) we now have some insight into the "sense making" around startups and what is considered as "relevant" in this context, and (2) we have this basic formula to compare our semantic analysis against. Whereas in Chapter 3 the focus was on how the actor and his actions as the source of meaning, we will now look at the conceptual forms as the primary source of meaning, i.e. as the tools with which the actor and action come to make sense.

Again, the unity of any one category presented here is simply derived from the observation that a group of concepts seems to fit a similar theme. This is a matter of interpretation, and can be criticized as such. Furthermore, the naming of the categories should be understood as a heuristic, i.e. the categories are not seen as fixed entities, but are seen as "fuzzy" and often overlapping each other. What the categories help us to see, however, is that there is some pattern behind these conceptual formations, and we should be methodical about uncovering the root of this pattern.

The categories that I have constructed from the semantics are as follows (central concepts in brackets):

- Semantics of retreat (e.g. incubator, accelerator, dorm, garage, startup mansions)
- Semantics of resonance (e.g. disruptive ideas, traction, passion and intuition)
- Semantics of experimentation (e.g. , startup methodology, product hypothesis, minimum viable product, pivots and failures)

- Semantics of valuation (e.g. unicorns, valuations, displays of defiance towards investors, monetization, business models)

The semantics are seen to be programmatic. They set the limits, implicitly or explicitly, for the goals and motives that the actors become meaningful, when set against. The semantics are the horizon of meaning, against which a startup narrative would make sense, even when the narrative would not refer to the concepts themselves.

Here, it is important to see how this relates to our analysis of startup narratives. The actantial model (see Chapter 3) made explicit the framework of meanings that makes action appear as meaningful for the first-order observers. It was the sense making revolving around action and motives. Thus, it is not completely compatible with what we will come to see when using the semantic analytical strategy. In actantial model, we saw how forces are explicated in the story, but in semantic analytical strategy, we will be inspecting how concepts would behave if they were observed as distinctions, i.e. pushing something away while opening up a more stable, more limited horizon possible meanings.

Next, we will go through the semantics that are used in startup communications to make sense of the specific uncertainty faced by startups. These semantics will make more sense as we observe them in relation to their context, i.e. in relation to society and the social systems that appear in it.

The Semantics of Retreat

> *The semantics of retreat are conceptual tools used by startups, and culturally initiated observers of startups, to emphasize the distance in relation to existing markets, industries and business organizations. These conceptual tools are most visible in the identification with specific "outside-spaces" compared to markets such as garages, dorm rooms, accelerators and incubators, startup communes and hostels, office/corporate campus as a resort.*

In Chapter 3, we had multiple examples of narratives where the early startup was situated in a garage, dorm room, or a suburban house. This was presented as a form of authenticity, and indeed the nearly religious aura that surrounds the HP garage is one such celebration of independence and authenticity. The startup inhabits a periphery in a positive connotation of the word – it is the periphery of possibilities, of possible markets, possible products and possible futures. The places carry added meaning in startup culture, and this is what we are after when discussing semantics of retreat[51].

The story of Shockley Semiconductor Laboratories and its "traitorous eight" could perhaps be seen as an early archetype of retreat. This story is not a startup story as such, but it has interesting parallels. William Shockely, the founder of Shockley Semiconductors, was known for his domineering management style. Tired of this, and ambitious to develop something new, the eight scientists left the company to form a company called Fairchild Semiconductor Laboratory as well as dozens of other companies around Silicon Valley. Fairchild, the first company that the traitorous eight formed after leaving Shockely Semiconductor Laboratory, adopted a more

[51] As there is nothing outside communication, the places are meaningful (not just "real"), and thus dissect the world in specific way as any concept would do. They are thus part of startup semantics.

egalitarian culture, which was not common in 1950s (Guglielmo 2013). According to some descriptions, it was the real-world Neverland:

> "If Fairchild had a corporate culture, it could only be described as volatility incarnate. [It was a] company-as-a-frathouse [...] The Fairchildren, as they would one day be called, stole each other's women, crashed cars, chopped down trees out front of the plant, and started lifelong feuds and friendships. And somehow, in the middle of it all, they also managed to invent the integrated circuit, the defining product of the late twentieth century, and in the process helped to create the modern world" (Malone 2007, 157).

This retreat into a wild and creative state, a state of nature where normal rules do not apply, has many variations in actual startup stories. Here, we might even talk about "hererotopias" (Foucault 1986), places that seem to be outside of all other places. Heterotopias are spaces reserved for processes that, for one reason or another, need to have a constructed "nowhere place" where the event can appear without an overflow of meaning. One subcategory of heterotopias is "crisis heterotopias", reserved for individuals who are, in relation to society and to the human environment in which they live, in a state of crisis: adolescents, menstruating women, pregnant women, the elderly, etc. In our society, these crisis heterotopias are persistently disappearing, though a few remnants can still be found. For example, the boarding school, in its nineteenth-century form, or military service for young men, have certainly played such a role, as the first manifestations of sexual virility were in fact supposed to take place "elsewhere" than at home. The "honeymoon trip" can also be seen as a remnant of a heterotopia, as the young woman's deflowering could take place "nowhere" and, at the moment of its occurrence the train or honeymoon hotel was indeed the place of this nowhere, this heterotopia without geographical markers.

a) Garages and dorm rooms

In the startup narratives we observed in Chapter 3, garages and dorm rooms appeared as important stepping-stones for early startups. We will now continue on this theme. As should be clear by now, we will bracket out any discussion of why certain kind of spaces appear rather than others – there are many reasons for this – and will instead focus on what these spaces offer on a more conceptual level. We consider what possibilities they open for meanings, and how they condition further communications. We will begin with some general observations on garages and dorm rooms, and will then move on to consider different variations on the ideal startup space.

What would be the appropriate counter-concept for garage as it appears in startup stories? First of all, we might think of garage being part of a house. A garage is a special part of the house in the sense that it is not clearly inside the house, and not clearly outside the house. It is not decorated, but appears as a toolshed. It is also not an office, but a space where one might do some technical work in order to repair some problem or simply for one's own pleasure. With this phenomenological sketch, we might say that a startup garage is differentiated from anything that indicates home, office, or that is clearly inside or outside. It is, as we said, a heterotopia. Precisely because of this, it is difficult to find a precise counter-concept for a startup garage – there is an obvious lack of things that could stand as the opposite side. With a reference to Simmel's famous idea, we might say that the whole concept of "startup garage" designates the entrepreneur as a stranger, when he is actually in his own environment. We have the following form:

Startup garage / home, office, outside, inside

Turning our phenomenological gaze to the dorm room, we can observe similar qualities. For a university student, the dorm room is in contrast with classrooms, with his home, and with his possible workplace. It presents him with, again, a heterotopia, where no institution appears to dictate the rules. Startup dorm room is between these different meaning horizons, thus lacking in institutionalized meanings. With regard to dorm rooms in startup stories, we have the following form:

Startup dorm room / class room, work place, university

With both heterotopias, the connotation of playful activities is present. The fact that these are not institutionalized and organized spaces means that they are not spaces where actions are reflected against past and future decisions. Garage and dorm room are "playful spaces". The following observation by Andersen and Pors (2014, 180) seems to fit well with startup heterotopias:

> compared to the normal mode of organizational operation, namely, decision-making, play represents an almost antagonistic logic: Decisions try to absorb uncertainty by bringing the future into the present as decision premises transforming the unknown future into a planned and calculable one. In contrast, play seeks to bring the future to the present. The future here represents a horizon of contingent possibilities.

Thus, we have a radically different logic for absorbing uncertainty. Instead of decisions fixing the contingency of the future, the early startup brings its "product hypothesis" to face the test of reality. This testing happens in playful manner, as will become clear when we reach the Semantics of Resonance and Semantics of Contingency.

B) Accelerators and incubators

Garages and dorm rooms are the canonical examples of startup heterotopias, but they are just one side of the coin. On the other side, we have the institutionalized versions of garages and dorm rooms, or more precisely: accelerators, incubators and startup mansions.

Incubators are the older institution of the two, one that predates startup entrepreneurship. According to Wikipedia ("Business incubator" 2015), the first incubator was founded in 1959, but it spread across the world in the 80s, mostly in the form of innovation centers and business parks. The creation of incubators has often been tied to economic policy needs, and this is one of their main differences when it comes to accelerators that are often private companies that do not have an overarching goal, except to help entrepreneurs create scalable businesses and make money in the process.

There are other differences also. For example, incubators have entrepreneurs coming and going individually, while accelerators concentrate on a single cohort at a time. Accelerators are also more active in helping to push the company to the market while incubators are usually present in the earlier phases when the technology has not yet translated into a business idea. They both offer coaching and connections for the founders as well as space for to work in. But they are spaces that actively encourage tinkering with technology and ideas while keeping economic considerations secondary – at least until the product starts "gaining traction", i.e. gets a significant user base.

On a conceptual level, the term accelerator implies that startups have to be somehow "brought up to speed" before they can succeed. The market is fast – it seems to suggest – and startups have to develop momentum before they can challenge it. Furthermore, we could see accelerator enables the startup to accelerate outside the market, whereas firms normally accelerate in the market.

The counter-concepts for incubators are mostly similar, except that with "incubator" we have a somewhat opposite connotation compared to "accelerator". Now it seems that the startup does not need so much speed as it needs nurturing. The market appears to be something that does not offer enough space for contemplation for the entrepreneur to refine his idea, thus the incubator is needed. As with accelerator, we might also see that while companies mature through business, the startup matures in incubator.

Again, the semantics of retreat seem to position the startup in between two opposites – startup appears as something that needs to be accelerated, but also something that needs to be incubated. The incubation is the incubation and refinement of the idea so it will be disruptive or scalable, the acceleration is the acceleration of the startup into reaching traction, financing and revenue. The common denominator between these is finding a rhythm that enables one to challenge the market, and this rhythm is not taken by acting in the market. The temporal dimension of meaning takes the front-stage here, and the temporality of market is simultaneously too fast and too slow for the startup.

c) Startup mansions, hacker hostels and other forms of communal living

Alongside with incubators and accelerators, lesser trends have emerged that open up similar distinctions. We will go through some of these here, focusing on how the startup movement has embraced communal living and creative workplace-design.

So-called startup mansions are a more recent phenomenon that extends the idea of startup space. They are houses – often in sub-urban areas – where aspiring entrepreneurs can live together and dedicate time to building their companies. Mostly acting as living and networking spaces, startup mansions are not as active in coaching or helping their entrepreneurs as accelerators of incubators, but they usually arrange events that bring together potential investors with entrepreneurs. In these spaces the startup is able to be in a state of creative disorganization, while getting some guidance and access to a valuable network. Startup mansion is, as accelerators and incubators, outside markets, offices and homes. The counter-concept would be anything that forces the startup to define itself more clearly in relation to markets, or causes it to identify with its procedures and past decisions – i.e. identifying with organization.

Startup mansion (homely office) / offices, homes, rule-based organizations

There is no denying that multiple variables play into this phenomenon of communal living among startup entrepreneurs. For example, due to the technology boom in Silicon Valley and San Francisco, the price of living has greatly increased. Young people do not have enough money to live alone while starting a company, unless, of course, they have secured funding. The gentrification of San Francisco has become such a burning topic, that there has been several demonstrations against tech companies, as the tech boom has caused a rise in housing costs. Aspiring entrepreneurs are finding it harder and harder to find decent place to live and begin their company from, so all forms involving communal living simply make sense to them. Communes arise, because not everyone can fit into dorm rooms, garages, accelerators, incubators or startup mansions. The phenomenon

appears to be strongest around Silicon Valley and San Francisco, but entrepreneurial communal living seems to be surfacing in other cities and countries too (for an example in New York, see Kaysen 2015).

Some of the communes that are owned and managed by a third party are often referred to as “hacker hostels”, as they house tech workforce or aspiring entrepreneurs. They offer a bunk bed but rarely anything else. The ascetic setting accentuates the general impetus of the startup semantics to focus is on ideas, not on possession.

> If the Summer of Love – era commune was for anti-capitalism and political ideals, Startup Basecamp — a start-up itself, freshly incorporated—has rebranded the co-living space as a vehicle for the entrepreneur lifestyle and its big-money IPO daydreams. Here, the average stay is just ten days, and many of the residents—almost all of whom are men, between 22 and 37—have made the pilgrimage from overseas. Some arrive looking for gigs with H-1B visas, others to network or to get “feedback,” the term that seems to have found its way into all their accented English. (Smiley 2014)

Along with the length of the stay, hacker hostels differ from startup mansions in their ascetic settings. If startup mansions present us with the more comfortable side of communal living – suburban houses with pools and help from mentors – then hacker hostels present us with the more ascetic side of things. As one journalist described the hostel she had visited,

> Not just anyone can stay at the hostels. Like any startup incubator, you actually have to be working on something to be accepted. Tenants are screened by hostel captains, all of whom are women, to make sure they'll contribute to the hacker community. Tenants also have to have a good attitude or they're kicked to the curb. (Shontell 2012)

Overall, communal living runs deep in startup entrepreneurship. It is, one could imagine, also accelerated by the rising cost of living in entrepreneurial hubs like San Francisco. However, it also fits well together with the startup culture – it is hard to imagine entrepreneurs in more traditional sectors relying so heavily on communal living. The much touted “sharing economy” – or perhaps more precisely “access economy”[52] – is not only in the products, but in the culture as well. And access economy, if understood correctely, is about “convenient and cost-effective access to valued resources, flexibility, and freedom from the financial, social, and emotional obligations embedded in ownership and sharing” (Eckhardt & Bardhi 2015).

An article that appeared in SF Gate newspaper was titles “Tech entrepreneurs revive communal living”. The piece presented the communal living phenomenon as a normalization of the more temporalized forms that are offered by mansions

> Across San Francisco and the region, young technocrats are taking over the leases of grand estates and transforming them into modern-day communes. Unlike hacker hostels, these "co-living spaces" are meant for entrepreneurs seeking a more permanent home and adopting a lifelong philosophy of communal living: shared groceries, family dinners and an emphasis on group perks (i.e., yoga rooms and bowling alleys) over personal space. (Bowles 2013)

[52] See Eckhardt & Bardhi (2015): "The Sharing Economy Isn’t About Sharing at All" in Harvard Business Review.

An example of a more organized concept of co-living spaces is The Embassy Network that offers various locations that provide services and accommodation. According to its website, The Embassy Network is an "experiment in creating a home built around purpose, intention, and exploration". The houses "provide residence and accommodations for creatives, professionals and modern nomads traveling the globe for projects and collaborations." (Embassy Network 2015.)

Excursion: Similarities between startup spaces and corporate "skunkworks"

Before we get into the implications of the semantics of retreat, it should be noted that spaces of "retreat" are not entirely new phenomenon in business. It is not uncommon for more established companies to give freedom and space to their research and development, sometimes even encouraging a playful attitude so that new ideas are able to develop and prototypes can be built without bureaucracy hindering the process. When this differentiation of the R&D department is taken to its extreme, the concept of "skunkworks" is sometimes mentioned.

Skunkworks refer to temporary, self-managed units where new ideas are created and tested without the established company intervening in the process (see Bommer & al. 2002). For an established company, this is a way of avoiding the "this is how things are done here" attitude as well as having people doing unrelated day-to-day chores while attempting to innovate. Much like the garage technology startup, the concept of skunkworks emerged during World War II (Brown 2004, 131). In 1943, an aerospace company called Lockeed Aircraft Corporation was asked to build a jet fighter. As the factory was next to a plastic factory, there was a bad smell around the factory. Partly due to the secrecy of the project, and partly due to the bad smell, an engineer answered "skonk works" to the phone. This was a reference to the popular Li'l Abner comics, more precisely to the fictional "skonk works" factory that grinded dead skunks in order to make "skonk oil" (see also Li'l Abner 2015.)

Brown (2004, 134) defines skunkworks in the following way that, indeed, makes it almost identical with what we have described with startups and their semantics of retreat:

> (…) an isolated and highly skilled team designed to accelerate the research, but especially the development of innovative product/services. This team typically works outside the bounds of the parent's rules and regulations and under time pressure.

It should be remembered, however, that skunkworks are mandated by their parent corporations, and they tend to have differing goals from startups. The goal is not so much to "disrupt" or "scale", as it is to "innovate" in a fast-paced manner and without constant contact with the parent company. We will return to the concept of innovation later in this chapter.

Of course, skunkworks are just one example of innovative place, but one that has had an impact in the way innovation projects are considered. In management literature, such safe havens for innovation have sometimes been called spaces of "serious play" (Schrage 2000) or "play zones" (Pinault 2004) that help organizations produce new innovations (see Costea 2007). However, it seems that technology startups have taken this as their natural environment, pushing the boundaries of playful space even further. These places contain attributions that build a stable identity for startups, and if there are no garages and dorm rooms, there are startup mansions, accelerators and retreats that draw the same distinction.

Implications of the Semantics of Retreat

It might seem strange that most of the concepts we have observed here are about places, and thus do not seem abstract enough to indicate anything beyond locations. However, from the perspective of our conceptual framework, there is no real difference in whether the concept refers to something that we consider to be concrete. This is because a location can only enter a social system – or a psychic system – in the form of meaning, thus forming boundaries between "meanings", not between "spaces". As the same places are considered worth mentioning, and referred to again and again with the same concepts, then we can ask what meanings are opened, and what meanings are closed, with these concepts.

With spaces, we can of course locate opposites, but it is more convenient to find connotations and their opposites, so that we get the implications. The latter of the two figures shows the marked sides and unmarked sides when observed through their implications. Note that in the other semantics, we do not have to do this, as the concepts are refer more directly to qualities and modalities.

Figure 15: Semantics of retreat observed as a difference

Self-description: Creative heterotopias	Other-description: Established and ordered locations
Garage Dorm room Accelerator (pre-market space) Incubator (pre-market space) Startup mansion	House University or home Market-defined spaces Market-defined spaces Office/apartment

The hypothetical opposites pose difficulties, as the startup spaces are often in-between-places, designating something temporary and disorganized. A garage is part of a house, but at the same time something else. Often, there is more entropy in a garage than in the house – things make a mess, and this mess is allowed to exist. The same holds true to other startup spaces. They all appear to represent a heterotopia that gives meaning to being "productively outside" some systems or some definitions. To make it more clear, it is better to consider these spaces not just as containers, but as conceptualizations of something meaningful. If we do this, we can see that they share similar connotations: they all appear to be playful and emergent compared to an office space of a business organization.

Figure 16: Semantics of retreat observed through some of their connotations

Self-description: Emergent order	Other-description: Implemented order
Playful Messy and emergent order Pace set by the entrepreneur	Orderly Organized and planned order Pace set by the market

With these connotations, we can see how a difference emerges in relation to what might be considered the structure of formal organizations. Even with this reference to space as our only guide, it is easy to see how this difference actualizes in all meaning dimensions. Indication of the startup space does not differentiate merely a space. It also differentiates a time-zone, a group of people and the topic of startup entrepreneurship. When there is no garages, accelerators or communal living in a startup story, the condensed meanings (i.e. semantics) of the startup space have to be evoked in other ways. For example, the office has to appear playful, the time-zone should stand distinct from tightly scheduled business hours, and emergency should be built into the office culture (Google attempting to middle management or Supercell hosting various self-organizing teams). In startup, we have a peculiar situation where the central ideas of skunkworks seem to represent the main identity of the organization, and the "firm" is something to try out later. This will become more clear as we observe the other categories of the startup semantic reservoir.

The Semantics of Resonance

> *Semantics of resonance are conceptual tools used by startups, and culturally initiated observers of startups, to place emphasis on societal perturbation instead of observing past and present sales or, more generally, supply and demand on markets. These conceptual tools include the following: disruptive ideas, traction, passion and intuition of the entrepreneur, and the startup pitch.*

If the semantics of retreat suggests closure as well as difference from traditional business world, the semantics of resonance presents us with opening to the outside world. This opening takes a more free-floating form compared to the way that traditional firms open up – now, markets appear as one environment among many, and one that should not be taken as an image of the reality. Instead, startups are geared to value weak indicators more than market research, the weaker signals taken to signal about some hidden part of reality, i.e. reality that has not yet been made meaningful. The emphasis is on overall resonance instead of resonance in a pre-given market. The following concepts will show how this is the case.

a) Disruptive (not just innovative) ideas

The concept of disruption appears frequently in articles concerning startups, and even more so when startups are pitching their ideas to journalists or potential investors. It is a central term in the startup world, and one of the largest startup conferences is named "TechCrunch Disrupt" (TechCrunch 2015). An idea, product, or a company can be referred to as "disruptive" if it is expected to disrupt a certain market or industry, thus completely changing how a certain product or service is bought or used.

The term was first presented by Clayton Christensen in his co-authored article "Disruptive Technologies: Catching the Wave" (1995) and then popularized in his book "The Innovator's Dilemma" (2013). The idea, in a nutshell, was that companies reject innovations on the grounds that customers cannot currently use those innovations, thus setting their own failure as the market would inevitably be disrupted at some point. The central idea in the Innovator's Dilemma was somewhat parallel to Thomas Kuhn's idea on paradigm shifts in science – the paradigm of "normal science" would satisfy everyone operating inside it until suddenly bursting under new, incongruent findings (Kuhn 1970; see Merriam-Webster 2015 for a definition).

In recent years, the term “disruption” has received criticism for being an overused concept and a buzzword that gets thrown around too easily. For example, it has been suggested that talk about “disruption” is often used as an “acquisition-bait” (see Bedigian 2012), i.e. as a bait for attracting investors, or as a buzzword to create interest among journalists:

> Spend ten minutes talking to, listening to, or reading about anyone in the startup community, and you'll almost inevitably hear the word "disrupt" in one of its many forms.
> They're going to disrupt the industry. The company is disruptive. It's a classic disruptor.
> The startup and tech worlds have taken a perfectly useful word and turned it into something devoid of meaning — a cliché thrown around by would-be insiders. While it originally referred to a strategy scrappy, young companies used to beat out giant firms, it's now bandied about to describe almost any effort to alter or improve a business. (Nisen 2013.)

However, it is dubious whether the theory of disruptive innovation is even a valid strategy, or whether it is just a map of common pitfalls of large, established technology companies. Christensen presented a theory about how and why the reluctance of market leaders to introduce innovations to the market would almost inevitably lead to their failure. Thus, contrary to how the book was sometimes marketed in popular press, there was no real recipe for success there, but only descriptions of the common failures patterns of technology companies.

> Disruptive innovation is a theory about why businesses fail. It’s not more than that. It doesn’t explain change. It’s not a law of nature. It’s an artifact of history, an idea, forged in time; it’s the manufacture of a moment of upsetting and edgy uncertainty. Transfixed by change, it’s blind to continuity. It makes a very poor prophet. (Lepore 2014.)

Nevertheless, as a “manufacture of edgy uncertainty”, the theory of disruptive innovation has become a household concept among technology companies. From the perspective of our conceptual framework, it opens up the temporal dimension, taking some weight of the present moment and setting it on the shoulders of future. An uncertain investment can be observed as positively ambiguous, if it is deemed as disruptive – for if we are expecting something game changing to happen, then focusing on current scoring is not of great importance. It is this constant expectation of some game changing event that bends the temporal horizon in favor of the future, thus giving “disruption” the performativity it has among some social systems, especially in economy, where future scarcities.

Excursion: Disruption and the residuals of “hacker culture”

Steven Levy's (2001) book Hackers: Heroes of the Computer Revolution was one of the first to capture the culture of coding and obsession over computer technology, especially as it appeared in United States in late 70s and the 80s. Levy (2001, Chapter 2) observed that there was a special form of ethics, i.e. “hacker ethics”, at play in this rising sub-culture. Hacker ethics guided the action of these people and differentiated them from the culture around them. The main principles of hacker ethics were:

1. Access to computers—and anything which might teach you something about the way the world works—should be unlimited and total. Always yield to the Hands-on Imperative!
2. All information should be free.
3. Mistrust authority — promote decentralization.

4. Hackers should be judged by their hacking, not bogus criteria such as degrees, age, race or position.
5. You can create art and beauty on a computer.
6. Computers can change your life for the better.

These ethics are mostly alive and well, although some compromises have been made in their transition to startup culture (for a critique about the ethical claims made by technology startups, see Morozov 2013). But even though the ethics may falter in the case of most startups, the principles are still a strong part of the self-descriptions of startups (see Levy 2012). In Facebook's IPO letter for shareholders[53], "the hacker way" and "hacker culture" are explicitly referred to and discussed in five paragraphs that are somewhat strange in an IPO letter. I will quote these paragraphs in full:

> The word "hacker" has an unfairly negative connotation from being portrayed in the media as people who break into computers. In reality, hacking just means building something quickly or testing the boundaries of what can be done. Like most things, it can be used for good or bad, but the vast majority of hackers I've met tend to be idealistic people who want to have a positive impact on the world.
> The Hacker Way is an approach to building that involves continuous improvement and iteration. Hackers believe that something can always be better, and that nothing is ever complete. They just have to go fix it — often in the face of people who say it's impossible or are content with the status quo.
> Hackers try to build the best services over the long term by quickly releasing and learning from smaller iterations rather than trying to get everything right all at once. To support this, we have built a testing framework that at any given time can try out thousands of versions of Facebook. We have the words "Done is better than perfect" painted on our walls to remind ourselves to always keep shipping.
> Hacking is also an inherently hands-on and active discipline. Instead of debating for days whether a new idea is possible or what the best way to build something is, hackers would rather just prototype something and see what works. There's a hacker mantra that you'll hear a lot around Facebook offices: "Code wins arguments."
> Hacker culture is also extremely open and meritocratic. Hackers believe that the best idea and implementation should always win — not the person who is best at lobbying for an idea or the person who manages the most people.

It is not just Facebook's IPO letter, but also other startups letters to shareholders that take this ethical tone. We will return to IPO letters later in this chapter when discussing the semantics of valuation. For now, it is interesting to see how culture is given a better foothold in a text like this, instead of bypassing culture for the sake of discussing "markets" or "customers". In a similar fashion, hierarchies are downplayed and iteration is raised to the forefront – as Zuckerberg writes, "hackers would rather just prototype something and see what works" than take part in endless debates and office-politics.

It is quite easy to see that various hacker ethics are alive in startup culture, but I will refrain from going deeper into this connection. A separate study could be made about how these two cultures relate to each other, and how startup culture possibly imitates, or iterates from, the hacker culture. Our present mission is to investigate

[53] The IPO letter is a general statement written by the company's founder or top manager, and included in the financial information the company offers when doing its initial public offering (IPO), i.e. when first offering the possibility to buy shares for general the public. The IPO letter is often a down to earth statement about what the company aims to achieve, how it will achieve it, and why it has advantage over the competition.

the startup culture in its own right and leave comparisons aside until we have found how it operates as a form of meaning.

B) TRACTION AND USER BASE

In its everyday use, traction is a very general concept that is mostly used to indicate that something is gaining momentum, thus producing "traction" with its surroundings. It is mostly used in physics, of course, but it also serves as a common metaphor when talking about immaterial things such as "business". In business, traction may be used to indicate the interest that is generated by the startup and its product. The value of traction as a concept is that it is not tied to purely economic concepts such as revenue or sales, but implies a more general interest towards the company or its product. It is in frequent use in startups, where the more economic concepts are often out of reach, at least in the beginning. It often refers to users, sometimes to customers (see Weinberg 2014), but on a general level we can say that it refers to the fact that the interest of potential customers is evoked and harnessed in some way, e.g. by having a growing number of subscribers (free or not) to a service.

In this usage of the word, "traction" is the signal that tells the startup whether it is on the right track in building something that people want. The simple definition would be "quantitative evidence of market demand". This definition is often credited to Angel List co-founder Naval Ravikant (see Greenstein 2011). In a more general sense, traction can be seen as the "buzz" that a startup has made with its product. Here, we must differentiate the buzz in the customer segment from the media buzz that the entrepreneurs have created. The latter may create traction, but it is not traction in itself: whether journalists find the business idea interesting does not imply that the customers will take the product. The important side of traction is the fact that it is an indicator that people are using the product, to an extent at least (e.g. the numbers showing off a startup's traction can often refer mostly to non-active "users", thus being more of a result of marketing than a great product).

However, traction is rarely defined in a detailed way, often having a more variety in meaning than "quantitative evidence of market demand", thus leaving it a rather opaque concept in its common usage. It could refer to several different things, for example, that a company (a) has sales, customers or users; (b) that it has recruited a strong management team; (c) that it has built an advisory board with notable names on it; (d) that it has secured strategic partners; (e) that it has obtained a "letter of intent" from to-be customers, who are excited about getting to use the product (Soorjoo 2015). Thus, traction can refer to almost any "interest" that is displayed towards the startup and its product. But one way is to see it as a negative correlate of "risk", especially from investors point of view:

> The reason traction is so important to investors, is because it typically demonstrates a shift from an idea to something that is on the path to being a profit making business. Traction is progress or momentum. One Venture Capitalist described it to me as being as one 'measurement of risk'. More traction can equal less risk. (Soorjoo 2015.)

To sum it up, traction sometimes refers to gaining actual users for a product and sometimes to more fuzzy forms of attention that the startup is getting – in both cases, however, it functions as an indicator of possible future profits, i.e. that the product hypothesis is not just a theoretical construct, but has some momentum in the real world.

In The Lean Startup, Eric Ries (2011) does not use the word “traction”, but operationalizes it with the concept of minimum viable product. We will get to this in the next part, when observing the semantics of steering. However, it should be noted that the idea of going after “traction” is there, filling in for going after sales and profits.

c) Passion and intuition of the entrepreneur

Passion and intuition are such common concepts that observing them as semantics of startup entrepreneurship could easily be dismissed. But as studies have observed the rise of these attributions (see Blume & al. 2011 and Cardon & al. 2013 for an overview on both concepts are used by entrepreneurs), it is worthwhile to inspect them more closely. What should be kept in mind, however, is that they are not exclusively used in startup entrepreneurship, but also in entrepreneurship in general. But with the conceptual reservoir of startup entrepreneurship, they seem to carry slightly different meanings. We will get to this after introducing each concept.

Entrepreneurs often attribute decisions to intuition, but what is meant by intuition is rarely clear. Instead, as Blume & al. (2011, 147) write, “the label of intuition is often used euphemistically when we are not certain about the basis on which we arrived at a particular decision”. It is thus the attribution to intuition itself that makes sense, when there is no real trace of sense-making for the actor. According to Blume & al. (2011, 147) there is a reason to suspect that entrepreneurial attributions to intuition are one way of rationalizing risky pursuits:

> If entrepreneurs believe that intuition is affecting their decisions, they may more easily rationalize the pursuit of inherently speculative entrepreneurial opportunities. Thus, entrepreneurs' attributions to intuition may be a useful concept in explaining why entrepreneurs underestimate or do not recognize the risk of entrepreneurial situations.

Furthermore, these attributions are often made even when other factors were the real decision drivers (Blume & al. 2011, 146). Drawing on previous research on entrepreneurial intuition, Blume & al. (2011, 142) propose that

> The strength of an entrepreneur's tolerance for ambiguity is positively related to the strength of that entrepreneur's attributions to intuition as a basis for venture founding decisions.

In startup stories, it seems that the concept of “passion” is similarly used as the concept of intuition. It, too, is used where motivations behind decisions cannot be completely rationalized with reference to existing markets or scarcities, but have to be tied to the person of the entrepreneur. The entrepreneur here stands for the unknown future in a similar, but not in identical way, as in case of intuition. For example, as Cardon & al. (2010, 375) write,

> Given the uncertain success of launching new products and services, and the challenges of developing new organizations with limited resources, passion can become a key driver of entrepreneurial action. More concretely, passion can “fuel motivation, enhance mental activity, and provide meaning to everyday work” (…) Moreover, passion has been associated with the ability of entrepreneurs to raise funds from investors (…)

This is not to deny the value or authenticity or entrepreneurial passion or intuition. We are, once again, merely questioning the emphasis that is placed on these concepts in entrepreneurial communications. What connects passion and intuition in entrepreneurial communications, then, is the fact that they are used where rationalizations would normally be used, but where there is too much ambiguity about the state of affairs. In communication, one latent function of passion and intuition is to enable descriptions of decision-making, when there is not enough rationality involved to attribute the decisions to. We could also pinpoint other similar concepts that have the exact similar effect. As Dodd (2002) writes,

> There is a strong sense of the entrepreneur as iconoclast, shattering the mold, "wreaking havoc", "going against conventional wisdom", being a "renegade", changing the rules of the game, etc.; thus, "I believe that entrepreneurs like to be the oddball, that they want to be the grain of sand that irritates the oyster to make the pearl". Another entrepreneur spoke of the need for "this crazy unsubstantiated faith that this is going to happen", and many noted with humor that family and former colleagues considered them "nuts".

In these descriptions of going against conventional wisdom, startup entrepreneurs seem to excel – possibly because the hacker culture lives strong in startup circles, with its idea of hackers as heroic outsiders. We saw reflections of this in in chapters 1 and 3. The entrepreneur seems to be a character who goes to extremes, and defies calculations.

We will not cover the semantics of passion, intuition and eccentricity extensively here. They are shared by the wider entrepreneurial community. What should be understood here, is they appear in startup communications, they can be observed as being part of semantics of resonance, implying that the idea resonates in the entrepreneur himself. There is thus resonance, even if there is not yet traction nor even a product. In startup scene, the concept of passion has also faced criticism, which again shows how the culture has become self-reflective (of critical comments see for example Marla 2014). How "passion" is overblown in startup culture is perhaps best displayed in how overconfident many founders become after being able to scale their company even moderately (see Wasserman 2014). We will return to this when discussing semantics of valuation, as the "rise of unicorns" – startup companies with billion dollar valuation – has caused new startups to turn down good deals in order to reach better ones.

D) PITCHING

In the startup world, "pitching" is a synonym for presenting one's idea to potential investors, co-founders or partners. It usually involves a powerpoint deck with main points about the startup idea, the problem it addresses, and the means of building it into a scalable and monetizable product. Startup pitch can mean at least three different things. There is the quick and casual "elevator pitch" that an entrepreneur makes if he gets couple of minutes of an investor's time. This is a quick sales speech to open up the door for further discussions.

There is the even shorter "high-concept pitch" that is often included in the elevator pitch. In high-concept pitch the entrepreneur alludes to other startups and/or products in order to give an overview of what the idea is about. In movie business, films are often pitched as combining some two things, e.g. describing Aliens as "Jaws in space". The formula for creating a high-concept pitch in startup circles is usually this:

[your startup] = [a known startup] + [new target market]

Giving a high-concept pitch, YouTube could have referred to itself as “Flickr for videos”. Or the gaming video-streaming site Twitch could be described as “a YouTube for gamers”. In this way, a high-concept pitch is meant to reveal what is the imitated innovation, and what is the new iteration to this innovation, e.g. the new market segment that is sought after with this specific iteration.

Lastly, there is the pitch as a presentation to a larger audience, often given in a “pitching event” where entrepreneurs are presenting their ideas in front of potential investors, whether venture capitalists or business angels. These are sometimes organized on an individual basis, but special pitching event organizers have emerged, such as Startup Weekend, Startup Pitching Night, Ultra Light Startups, PitchForce and Launch Conference. Of the yearly events with higher production values, TechCrunch Disrupt (in US), Slush (in Europe and Asia) and SXSW (originally a music festival) are some of the more notable ones. Pitching events often refer to events where the startups are not incubated by the organizer, but come from the outside. Differing from this, “demo days” usually refer to pitching events where the startups have been incubated in the same organization. For example, Startup Weekend events have aspiring entrepreneurs pitching startup ideas first to each other, before they team up to work on the ideas that have been voted best, and finally pitching to investors during the last day of the event. However, the pitching itself does not differ in demo days and more general pitching events.

The pitches in pitching events and demo days usually have a length of 5 to 20 minutes, and the emphasis is on making a case that there is problem that has not been solved, and offering a product/service as a solution while explaining how it can be scaled and monetized. All this is often done with great enthusiasm and showmanship, as the competition is tough. The manifest function of pitching is persuading potential investors into investing, thus building a “runway” for the startup to further iterate and scale its idea. But pitching is not solely about persuasion. If we were to consider what the latent functions of pitching are, we could say that there are at least two things it enables.

The first latent function is opening up the idea to irritations, thus catalyzing further iterations and pivots. Pitching events, much like pitching directly to investors, will bring the entrepreneur in contact with difficult questions, different observations compared to their own or their customer feedback. Pitching is a methodological exposing of the idea – and in this sense – an initiation rite of early startups. The second latent function that is immediately recognizable is the fact that in these events, more than in anywhere else, the startup world comes to celebrate itself – or to observe itself with a critical eye (see, for example, Orlando 2013). Here, the startup semantics are actively reflected – and not just used – as similar actors are trying to fit in while differentiating from all other startups that are pitching themselves. It is this imitation with variation – the copying of “individuality patterns” – is at the heart of every cultural movement (see Luhmann 2013, 165; this line of thought has roots in the ideas of Georg Simmel and Gabriel Tarde).

Each year some large startup event causes a ripple effect where both excited and critical opinion pieces take issue with different facets of the startup culture. Investors, entrepreneurs and journalists alike try to make sense of what is actually useful and what is “fluff” or “hype” in these events. There is not much consideration given to how cultures work, what they need in order to work, and what they enable in the form of shared meanings. But it is these recurring waves of discussion that take place around startup events – both the contrarian views and the “hype” – that help to refine and spread the cultural toolkit of startup entrepreneurship further.

IMPLICATIONS OF THE SEMANTICS OF RESONANCE

The semantics of resonance appear to bracket out some of the more common concepts of business venturing. For example, disruption can be seen as disruption of an industry, but it often carries a wider connotation of disrupting some pattern of communication or action. Only as a breakdown of these patterns of action or communication does a product or industry become obsolete, as the innovation is able to remove or rearrange the scarcity that was the basis of a the (now obsolete) industry or market. We have unspecific resonance that is observed as potential economic resonance. The unmarked other side for semantics of resonance would be the resonance that comes through market and the concepts that go with observing markets. Commonly used terms that go with market-based self-descriptions are revenue, sales and market research – all of which are either considered to be out of date by startups or, at least, not central enough to be reflected on in constant fashion.

Figure 17: Semantics of resonance observed as a difference

Self-description: Resonance in society (openness to complexity)	Other-description: Resonance in pre-defined markets
Disruption Epiphanies of UX[54] Passion/Intuition Traction Pitching	Competition Business epiphanies Business plans Revenue/Sales Marketing

THE SEMANTICS OF EXPERIMENTATION

> *The semantics of experimentation are conceptual tools used by startups, and culturally initiated observers of startups, to emphasize the cyclical nature of entrepreneurial work, where everything can be attempted again. These conceptual tools are most visible in the use of concepts such as startup methodologies, product hypothesis, minimum viable product, pivot, failure and business model.*

Product hypothesis, pivot, minimum viable product and freemium are examples of concepts that are strongly connected to "startup methodologies". On this level, the organization turns experiences into further actions, and actions into expectations. Here, the various contingencies of coming up with disruptive ideas, of achieving traction, and monetizing that traction, are all processed into a recipe for success. Although the startup methodologies are rarely used in dogmatic manner, the concepts have become highly important for describing

[54] UX is an abbreviation for "user experience".

what startups do. Furthermore, they enable entrepreneurs to reflect on their actions and experiences, i.e. to see "entrepreneuring" as meaningful even if it is not making money, nor securing investments.

A) Startup Methodologies and business models

In Chapter 1, we already referred to the two most notable "startup methodologies" as we were defining scalable startups. These were the Customer Development Methodology developed by Steve Blank (2005) and The Lean Startup Methodology developed by Eric Ries (2011). The two overlap, as Ries was a student of Blank, and his Lean Startup Methodology can be seen as a combination of Customer Development and Lean Manufacturing principles that were popularized by Japanese auto industry (for more on overlapping, see Lohr 2010). When a definition of a startup is given, it is very common to refer to either one of these methodologies (for definitions, see Chapter 1).

Blank's innovation was to shift attention from product development to "customer development", i.e. to finding out what customers really want through early feedback. Especially in software and consumer web services, it is important to gain knowledge of customer acceptance and market adoption. Startups fail because of lack of customers, not because of product development failure. Thus it is important not to begin with the product, but proceed by discovering customers and validating them. In discovery phase, the startup tries to locate a problem and form a product concept around it. In customer validation phase, the startup builds a repeatable model for selling the product – this is about adjusting the revenue model, price and sales cycle for the product. In customer creation phase the startup thinks about positioning, launching and marketing of the product. This is all about the market it is after, and weather the market is an existing one, a re-segmented market or a completely new one, and selling to that market, thus going beyond first users. The fourth phase is company building, where the startup focuses on management and organization in order to scale up. (Blank 2005; for an overview see Blank 2008)

From the perspective of Lean Startup Methodology, the Customer Development Model can still be seen as being valid, but it has taken a cyclic structure. Ries calls this cyclic process a Build-Measure-Learn-cycle. The entrepreneur starts with his hypothesis, proceeds to create a minimum viable product, and ships it to first customers in order to get feedback. The feedback is important, because the startup needs to iterate fast, finding features that actually solve a problem while dropping features that make the product complicated. In order to find a relevant problem, the product-market-fit is measured by asking (in one way of another) whether losing the product would make people upset. Often, the startup is thrown off its course many times as it falsifies its original product hypothesis while gaining new insights into what is the problem that potential customers need help solving. Thus, the concept of pivot, a "structured course correction", is very central in Lean Methodology – the startup has to be able to reinvent itself if the initial idea fails. If it is not able to do this, it is not really a startup, but simply a "new venture" that failed.

The entrepreneur might be fooled into developing his product in silence for too long – this often leads to long development time that ends when the product is shipped, but there is no response. Startup methodologies and guidebooks go to great lengths to help entrepreneurs avoid this autistic mentality in product development. Conceptual tools such as "build-measure-learn" -cycle, "minimim viable product", and "contiuous deployment" address this problem well (see Chapter 4 and Ries 2011).

Both methodologies give a step by step process that an entrepreneur can follow. This might seem trivial, but it is somewhat a new phenomenon – entrepreneurship is more often observed as something that comes naturally to some, but not for others. It is seen as something that entrepreneurial people do, not something that can be observed as having a methodology. Both methodologies can be contrasted to traditional product development, where the product and the customer are known – or at least assumed to be known because of earlier products or market research. In startup methodologies, the product and customer have to be iterated into being through experimentation, the product development being dependent on customer development, and customer development being dependent on trial and error.

The methodologies thus make decision communications more reflective in an area of entrepreneurship that is very uncertain, and that does not offer much for the decisions to latch on. Next, we will go through the individual concepts of these methodologies. They give us a more detailed view on the semantics of experimentation, and what exactly is controlled by startup methodologies and their concepts, besides the entrepreneurial process they explicitly focus on.

Thinking through a “business model” rather than through a “business plan” is something that is central to startup methodologies. We will return to this concept in the semantics of valuation, as it also resonates towards economic side of startup. The strength of business model, in contrast to business plan, is that models can be fitted on top of what works, whereas a “plan” suggests that one has to know where one is heading. We will dwell deeper into this when observing the semantics of valuation.

b) Product Hypothesis and the Minimum Viable Product

We have already noted that startups create “product hypotheses”, and take action to prove the hypothesis correct or false. The point, according to Ries (2011) is that many startups build a product that they think people want, not the one that people would actually use. Then, when the product is launched and does not sell, it is too late to go back to the drawing board. Because of this, it is better to communicate with the potential customers as early as possible. This, according to Ries, is best done by developing a minimum viable product and launching it as early as possible in order to initiate communication.

Minimum viable product is from Lean Startup, but it has roots in Blank’s work (see Ries 2011, 294; Steve Blank uses the notion of the "minimum feature set"). We will use definition offered by Ries, as his is the definition widely referred to by startup entrepreneurs. Minimum viable product (MVP) is a product that has the main features of the service and can thus begin the learning experience, or the "Build-Measure-Learn feedback loop" as Ries calls it. The concept of MVP challenges traditional notions of quality (ibid. 106). If the product is not ready, then it is probably not a quality product. Ries (ibid. 107) solves this contradiction by noting that, if we do not know who the customer is, then "we do not know what quality is". Quality is defined only, when the company gains information about what is relevant in the product. This is parallel to the ideas of that come naturally in all kinds of modeling, and that are often referred to as "abduction" in social sciences: build a model, put in test, rebuild it according to how it works, test again.[55]

[55] This is an interesting parallel between the current research and it’s subject matter: both are taking distance to the idea of data proving some thesis right or wrong, and instead emphasize a modeling approach where a model is simply rearranged until it fits the data. For more on the philosophy of modeling, see beginning of Chapter 5).

A company that wants to make money immediately has to be somewhat sure about its product. Furthermore, a company that is already making money in a market has the pressure of maintaining its brand. An MVP might send signals of bad quality or the product being of irrelevant. A startup is allowed to be unsure about the final form of the product, as well as its final product-market fit. What makes the wide use of MVPs possible is that a startup does not yet represent a corporate brand that can get damaged. Ries writes that startups "have the advantage of being obscure, having a pathetically small number of customers, and not having much exposure" (ibid. 112). In other words, startups have room to experiment. But this experimentation is expected to lead to "traction" (see next concept).

The interesting thing about MVP, and the whole Build-Measure-Learn cycle for that matter, is that it removes some of the pressures to make decisions concerning the product. Startup can ship an unfinished product and see what happens, wait until the decisions become so obvious that they disappear as decisions. Paul Graham (2006) has written that "since you don't know your users, it's dangerous to guess what they'll like. Better to release something and let them tell you."

Connected to the Minimum Viable Product is another “MVP”, namely, the Market Validation Process. This refers to the process of finding out “if the market wants your product and is willing to pay for it” (Hanchke 2011). In some sense, the minimum viable product is a natural part of this process, but market validation can be understood as a preparatory stage where research is done concerning the potential customers and the current competition. Market validation is not just something that startups do, but a more wide spread concept, as companies consider new products. However, we can see that Minimum Viable Product takes market validation and makes it even more dynamic and hands on for startups, using the product (instead of market research) as a vehicle for market validation.

What possibilities this opens for further meanings? Hypothetical speculations are nothing new for economy nor for entrepreneurship, but the explicitness of this way of talking is.

c) Pivot and failure of a startup

This concept was popularized by Eric Ries in The Lean Startup. Pivot is a special kind of "structured change" (Ries 2011, 178). The point is to test a new hypothesis while also keeping the better functioning parts running: "A pivot requires that we keep one foot rooted in what we've learned so far, while making a fundamental change in strategy in order to seek even greater validated learning" (Ries 2011, 154).

Pivot is closely tied to the fact that startups are "temporary organizations" (see Chapter 1) that either fail or transform into actual companies. Being a temporary organization leads to a special conception of time - it is always running out. Startup's runway is often defined as the money it has left divided by the monthly "burn rate" of that money. According to Ries, it should be defined as "the amount of time remaining in which a startup must either achieve lift-off or fail" or, as a sub-heading says, "startup' runway is the number of pivots it can still make" (ibid.). If its product does not gain traction, it has to decide whether to pivot or persevere.

There are several kinds of pivots: zoom-in pivot where a single feature of the product becomes the whole product; zoom-out pivot where the whole product becomes a single feature of a bigger product; customer segment pivot where the product is offered to a different customer than anticipated; customer need pivot where the problem-solution fit is restructured, but for the same customer segment; platform pivot where an

application is turned into a platform or vice versa; business architecture pivot where the startup switches from high margin to low volume or vice versa; value capture pivot where a alternative way to monetize the startup is found; engine of growth pivot where growth strategy is changed; channel pivot where the channel used for the solution is changed; technology pivot where nothing else changes but some technology for achieving the solution. (Ries 2011, 173-176.)

In Lean Startup, pivot is observed through the pressure to decide whether to pivot or persevere. The entrepreneur has to decide whether his startup could produce more traction, better solutions, or a more viable business model, or is it good as it is. But this not the counter-concept for pivot. This is simply how the decision appears to the decision maker. What pivot achieves as a concept, is *making uncertainty actionable* - the entrepreneur can enable new self-descriptions without contradicting itself. This is possible, as the uncertainty is observed as the action of the entrepreneur.

Pivot as the "uncertainty of the product made actionable" reveals something rather paradoxical about startups: when observing themselves through the concept of pivot, they are organizations that *intentionally search for accidental solutions*. Pivot – as a concept – shares some meaning with another term that is also commonly used in startups, namely the verb “to iterate”.

> “In the tech industry, a company like Facebook likes to say that it ‘iterates,’ ” Caroline McCarthy explained in a recent article on the technology site CNET. “Old products are killed. New ones are rolled out one at a time, rather than bundled together in a huge annual relaunch. Experimental features emerge and disappear.” (…) No object for the verb is necessary, but it is often followed by the preposition on (as in “to iterate on a previous product”). A recent job listing for a software-development engineer at Amazon singled out the “ability to iterate on an idea” as a critical qualification. (Zimmer 2010)

The full implication of pivot is that failures are rarely final. In the technology startup world, it is very common to talk about one’s past failures openly. This is something that established companies are not as keen on doing, and even the general population of entrepreneurs has not developed an interest on failure that would be parallel to startup world. There is even a conference where startups tell about failures, called FailCon (FailCon 2015). This enthusiasm that startups display towards pivoting has had its share of criticism, some reading it as a sign that entrepreneurs are milking money out of investors.

> To pivot is, essentially, to fail gracefully. While the term has been in the start-up lexicon for decades, it is coming up more often in the current Internet boom, as entrepreneurs find that many investors are willing to keep money flowing even if a start-up takes a hard left turn. (Wortham 2012)

This is at least partly true. But it is also a fact that for an investor, the team is more important than the idea. Ideas almost never develop into profitable businesses without major transformations along the way. This is something that the startup semantics are very aware of. In this ambiguous situation, terms such as “iterate”, “pivot” and “innovate” – often without a clear object in the sentence – make action meaningful even when there is no goal in sight.

> Pivoting has become part of the business and technology lexicon, the Moore's Law of startupology. Only a soothsayer can know what will happen before it happens, and only the savviest (or luckiest) entrepreneur can take an idea from the initial inspiration to market and beyond without a few hiccups along the way. So perhaps it shouldn't be surprising that pivoting isn't just common, it's become the rule more than the exception. (…)
> Despite its slippery definition, the term has gone through the usual cycle of acceptance. First it was absorbed into the entrepreneur-startup world with gimlet-eyed embrace, which quickly swelled into widespread acceptance. Now there's the predictable backlash. It's "the most overused word" in the startup community and it really means "your startup plan sucks, but we'll figure out a better plan later." It's "prototyping without a vision." (Penenberg 2012.)

This uncertainty, visible in the concept of pivot while simultaneously de-paradoxified by it, is partly what is pushing the individual, and even more so: the team, into the limelight when venture capitalists consider investing into a company. As observed by one expert working in an executive search firm, venture capitalists often give mediocre ideas a pass if the team is good.

> Given the high degree of uncertainty associated with early-stage investing, VCs bet on the jockey over the horse because they need to have a high level of conviction that the team has the necessary skills, domain expertise and diversity to evolve just as quickly as the industry does. (Hartwig 2013)

In this way, "pivot" works two ways: the startup organization is able to describe itself in a rational manner for itself and for its investors, even if it constantly reinvents its essence. Semantics of "pivot" create foothold in the midst of the uncertainty that comes when one operates with a product hypothesis instead of tested product concept. At the same time, it hides a large portion of hypotheses that have gone wrong. In this way, the idea of "not having success" is replaced with the idea of "not yet having success". Time is extended (with new financing rounds or with bootstrapping), so something disruptive can happen.

d) The Midlife Crisis of a startup: Cultivating the Experimental Mindset As a Large Company

Startup companies are famous for their playful office spaces. When they start making money, they often design elaborate offices that capture the playful nature of the startup culture. The corporate campus often means[56]. All of the big tech companies in Palo Alto are competing for employees by offering free food and services, sometimes going into excesses.

> It's a cliché by now that every big tech company's campus is a mini-resort. Apple's proposed new site looks like the set of Close Encounters of the Third Kind. Facebook boasts Ping-Pong tables and Xbox 360s. Employees at the "Googleplex" in Mountain View can take after-work dance classes and then get massages before hopping a free shuttle home. Zynga, the gaming company in San Francisco, lets

[56] The concept of "corporate campus" emerged after the Second World War. This is not to say that there wasn't anything like a corporate campus before this, but merely that the concept took a clear form during this time, and that an esthetic started to develop around corporate campuses. There are many earlier examples, where corporations have tried to build their own utopias, but they were single cases. One of the earlier ones was the "Square Deal" that the shoe manufacturer Endicott-Johnson Co offered to its employees in early 1900s. The deal included many benefits, but also environmental design such as swimming pools and parks around company premises and employee housing. However, according to critics, it was partly an attempt by the top management to discourage unionizing. See: http://en.wikipedia.org/wiki/George_F._Johnson#Endicott-Johnson_Co._.26_The_Square_Deal

> employees bring their pets to work. And, of course, free food everywhere – food for your dog can't be far off. Even AOL, that nineties relic, has a fancy new Palo Alto building, complete with a pinball machine, a Razor-scooter dock, and a room with a drum set. (Bean 2011)

Even in smaller startups, the office often has a "game room" where employees can take brakes, as well as some wacky furniture and color combinations to lighten up the atmosphere. This ideal of playfulness has become such a staple of startup world that many business magazines write regularly about new, exciting office interiors. For example, Mashable (2012) had a series of articles focusing on the interiors of startup offices, and Business Insider regularly lists the "coolest startup offices" (Shontell 2013; Lorenz 2014). One of the startup cliché's is having a pingpong-table in the game room. One reason for this is that it is said to boost the player's brain power (see Beeche 2015). Furthermore, it is a very fast paced and competitive game – its dexterous nature reflects the values of the startup world.

Some startups have begun to expand into creating co-living spaces either for their employees or members. For example, WeWork – a startup offering flexible co-working-spaces – had housed 80 of its members and employees in 45 apartment units in early 2016, and was planning to create co-living spaces for several hundred people (Kessler 2016). What is interesting in this is that the company is embracing – and forcing its employees to embrace – co-living instead instead of offering them separate apartments. In a statement given to the Fast Company magazine the company wrote that the concept is "another layer of our platform focused on enabling people to live more fulfilling lives" (ibid.). In essence, it is seen as a direct continuation of the flexible co-working-spaces that the company offers as their primary product.

One notable challenge to the playful and experimental mindset of a startup offered by the need for more hierarchical management as the firm grows in size. The startup has to take at least some steps towards more hierarchy, adding more management structures, if it wants to operate as a serious company. Maintaining the experimental mindset is not easy during this transition, and many startups have attempted to create their own ways of preserving the mindset of the early days. Google is a prime example of this resistance to top-down hierarchy in startups – co-founders Larry Page and Sergey Brin were determined to create an organization without middle managers:

> In 2002 they experimented with a completely flat organization, eliminating engineering managers in an effort to break down barriers to rapid idea development and to replicate the collegial environment they'd enjoyed in graduate school. That experiment lasted only a few months: They relented when too many people went directly to Page with questions about expense reports, interpersonal conflicts, and other nitty-gritty issues. (Garvin 2013; in more detail see Levy 2011.)

Another example – and a more infamous one – is Valve, the game company that denied having any kind of hierarchical chain of command. Similarly to Google, also Valve faced a new set of problems:

> Because of Valve's success and profitability, the unconventional management structure — or, more accurately, the lack of one — has achieved a kind of legendary status. The much-circulated Valve employee handbook (PDF) explains: "Nobody 'reports to' anybody else. We do have a founder/president, but even he isn't your manager. This company is yours to steer — toward opportunities and away from risks. (Warr 2013)

The problem was that the eradication of middle management did not lead to a flat structure, but rather to a seemingly flat structure. The flipside, of course, was that invisible power structures were now the only power structures. As one former employee recounts,

> "It is a pseudo-flat structure where, at least in small groups, you're all peers and make decisions together," she said. "But the one thing I found out the hard way is that there is actually a hidden layer of powerful management structure in the company and it felt a lot like high school. There are popular kids that have acquired power in the company, then there's the trouble makers, and everyone in between." (Warr 2013)

The aspiration to go beyond management is understandable, as startups obviously value creative and disruptive thinking. However, this tendency can easily turn into its head, worsening the problems that it tried to solve (see Schumpeter 2011).

Also further problems can arise. For example, in the startup job market, there is what some have labelled a "cult of the right fit" (Finley 2014), the search for a similar person.

> One way flat organizations ensure the work gets done is by hiring people who "fit the culture." Ostensibly this means hiring self-motivated individuals. In reality, though, it often means hiring people similar to the founders – usually young white men. This lack of diversity creates a few problems. An unprofessional work atmosphere quickly can become disguised and defended as a "casual culture." (Finley 2014)

Some have complained that this trend of hiring only likeminded people has resulted in a "brogrammer" culture, where the culture acknowledges men, or "bros", while programmers and founders who happen to be women have problems fitting in (for links, see "Brogrammer" 2015). This comradery between young men – combined with the aversion towards management and formal office culture – reminds one of how rock bands are often formed, as "garage bands" that revolve around ideas of not fitting in with the rest of the society. Interestingly enough, the idea of a garage background associates startup with rock bands, and this is indeed a good reference point. Perhaps this should not be surprising, as great programmers are often referred to as "rock stars". But although the similarities are many, considering startups as similar to bands is rarely done explicitly (there are exceptions, e.g. "The Startup as a Band" in chapter 5 of Hernan 2012).

IMPLICATIONS OF THE SEMANTICS OF EXPERIMENTATION

Here, we should remember to keep our focus on social systems. An organization decides only what it cannot decide on (Nassehi 2005, 186), i.e. it only makes a decision when it has problematized a particular choice. In the case of startups, we have the semantics of experimentation that leaves a lot of room for ambiguousness and continuous change. The unmarked other side of these semantics, as a whole, seems to be the tendency of an organization to transform open contingency into fixed contingency and thus reducing possibilities to a set of options to be decided on (see Luhmann 2005). As an organization, startup makes decisions, but it is able to re-open contingencies, and attempt to fix them again. reduces the things that have to be actively decided upon. This reduction of active decision-making is experimentation.

Figure 18: Semantics of experimentation observed as a difference

Self-description: Experimental organization	Other-description: Plan-based organizations
Startup methodology Product hypothesis Customer development Pivoting Self-organized work	Business strategy Product Product development Planning Managed work

THE SEMANTICS OF VALUATION

> *The semantics of valuation are conceptual tools used by startups and culturally initiated observers of startups, to describe the economic value of a startup from the second-order perspective of venture capital, while incorporating these conceptualizations into the more product oriented perspective of the entrepreneur. These conceptual tools are most visible in terminology that is appropriated from financing world, and that observes a company through its market share, and stock-market value, rather than through its revenue and profit margin, or through semantics of resonance. These concepts include: valuations and unicorns, defiant attitude towards investors, monetization, and business model*[57]*.*

Startup entrepreneurs are embedded in the vocabulary of venture capitalism, sometimes even to the point of giving these concepts primacy over more entrepreneurial concepts. For example, a tech startup often reflects on its pitch, its valuation, or its monetization strategy. Of course, there is nothing outright strange in the fact that companies are valued before they have revenue streams. What is peculiar is the fact that startups have taken so many concepts from finance and appropriated them into their entrepreneurial jargon.

A) VALUATIONS AND UNICORNS

In investment terminology, a company's "valuation" refers to the way that investors and entrepreneurs come to an understanding of the future value of the company. In its simplest form, a valuation depends on two things: how much the investor invests money into the company, and how large part of company shares it receives in exchange. If, for example, an investor invests a certain amount of money and gets one fifth of the company equity in return, the valuation of the company is five times what the investment is (because a fifth of the company was "sold" for the price of the investment, and five times the investment is the full value). There are different ways of looking at valuations (such as pre-money and post-money valuation), but this is the basic logic.

What should be noted, of course, is that the valuation reflects the expectations that the investor has concerning the company. High valuations thus reflect high expectations. From the investor side, high valuations can often be read as an "anticipation of some highly lucrative, initial-public offerings for tech companies" (Savitz 2011).[58] For

[57] Note that "business model" as a semantic also appeared in the semantics of experimentation. However, we reserved its further elaboration for this subchapter, as it carries a special weight in relation to eoconomy.

[58] Beyond this anticipation, the venture capital firms are not always able explain clearly the decision processes for choosing which firms to invest in (Zacharakis & Meyer 1998). This way, they seem to share with startup entrepreneurs the appreciation for intuition when making decisions.

the startup, higher valuations tend to draw in more investments, and investments enable a better runway for scaling the company, thus creating a monopoly – or a near-monopoly – in the marketplace. If a startup company has a promising product, and has secured notable investments from notable investors, the valuation can quickly rise up to be enormous.

The pinnacle of getting a big valuation is to get on the so-called "unicorn list" (see Fortune 2015), i.e. the list of companies that have gained billion dollar valuations. Startup unicorns have been so common in recent years because of the scalability and disruptive qualities that tech startups have. The rise of the unicorn might resemble the high valuations of internet companies during the dotcom boom, but this time the bubble is less of a bubble in the real meaning of the world. This is because more startups have at least some revenue model working early on, and furthermore, many companies avoid going public for as long as possible, building their businesses with private investments as far as possible. Being private, these companies are able to bypass two of the biggest drawbacks of publicly listed companies: the pressure to report everything to shareholders, and the pressure to turn a quick profit each quarter, instead of focusing on long term goals.

The "age of unicorns" is a new and fairly recent phenomenon, as the billion dollar valuations soared in 2014, continuing far into 2015 (see Figure 19 by CBS Insights). "Unicorn" has quickly become its own buzzword in the startup world, something that every startup aspires to be. It is easy to see how the unicorn status can have performative value for a startup. As one unicorn CEO noted, if you manage to get onto the unicorn list, you have "credibility and the ability to hire some very important people", and you send a sign that you are "looking to build a long-lasting worldwide brand" (Griffith & Primack 2015). As the founder of Slack software commented on its billion dollar valuation, "it's the psychological threshold for potential customers, employees, and the press" (ibid). It is thus no surprise that more and more founders are specifically looking for "1-on-1 deals", i.e. deals where 100 million investment gives the company a 1 billion valuation (see Griffith 2015b). Investors sometimes feel that startups are arbitrarily pushing for billion dollar valuations, just to get on the unicorn list.

> (…) when Sacca [famous investor] asked how much they were looking to raise, they requested a $1 billion valuation.
> When he pressed the company to come up with why they needed all that money, they called a billion dollar valuation "table stakes" for a company at their stage.
> "If we're going to recruit we have to be on a list of unicorn companies, so it has to be at least a billion," he was told. (Frank 2015)

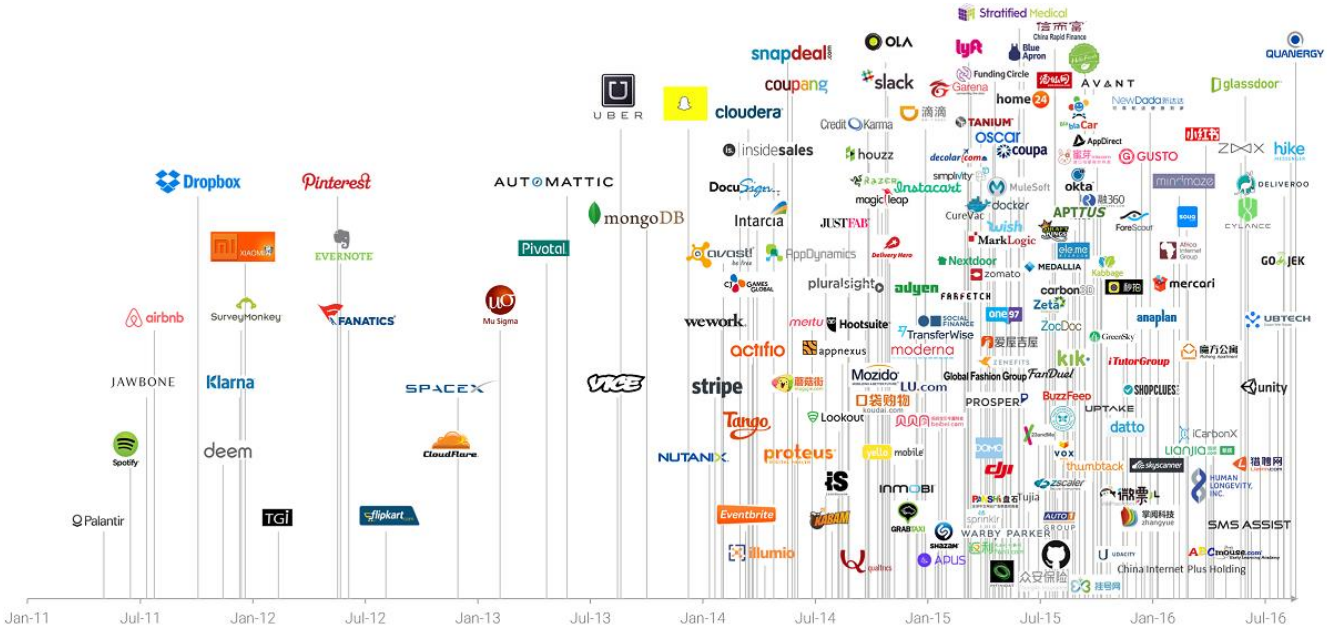
Stewart Butterfield, the founder of the business software company Slack, gave a similar comment when interviewed about why he was pushing for a billion dollar valuation:

> There's another, slightly less rational reason Butterfield decided to raise more money: He wanted a $1 billion valuation. If Slack couldn't get that, he wouldn't raise anything. The cachet of the figure is meaningful in an intangible way, he says. It means "we're a part of that conversation about companies worth $1 billion."
> He elaborates: "It's definitely a psychological threshold and it helps for certain kinds of customers. When [we're] negotiating with a Fortune 500 company on legal terms of service for some detail about what sort of deal they will get in the third year, then having the comfort of knowing we're highly valued and financially secure, that really helps." (Griffith 2015)

Of course, the valuations do not stop at one billion mark. Uber, the ride sharing company that is disrupting the taxi industry, had reached a valuation of 40 billion dollars in early 2015. It had a good revenue model at place as well as a stellar growth rate, but its valuation is still mind-boggling – 40 billion is larger than the taxi markets of United States and Europe combined (Blodget 2015). The question is, how can a company be valued higher than the market it is trying to conquer by transforming it?

But as with all risky investments, there are no clear answers as to what would be the right valuation. For us, it is important to take note that – in startup semantics – investment concepts such as "valuation" and "unicorn" are used as entrepreneurial sense-making tools that are central to the identity of the startup. Even when a startup functions in the first-order economy (i.e. payments), it still reflecting on second-order economy of investment world (i.e. payments reflecting on future payments).

Figure 19: A timeline of private valuations of over one billion dollars, 2011-2016 (CB Insights 2016)



B) Displays of Independence and Defiance in Investor Relations

We already saw how the semantics of resonance allow entrepreneurs to keep distance to concepts such as "sales" and "markets" by finding non-economic replacements for them, in the likes of "traction" and "users". This distancing takes a slightly different form when the startup secures large investments, whether public or private. With private investments, there seems to be an understanding of the freedom that a company might need, when it is seeking traction and scaling. The story of Facebook pranking a respected venture capitalist by giving a half-assed pitch in pajamas is a famous story (see Carlson 2010, originally in Kirkpatrick 2010).

Although this was mainly because of Sean Parker's old grudge with Sequoia Capital, it reflects a culture where defiance against investors is valued in itself, considering that the startup in question is able to choose where to take investments from, or whether to take them at all. Indeed, instead of pranking, the defiance is expressed in

the way that extremely large investments are turned down – more and more – by up-and-coming startups. We saw a glimpse of this when discussing valuations and unicorns – companies are demanding extremely large numbers, some even walking away from unicorn, or close to unicorn, valuations (Shontell 2013).

When startups go public, they package this defiance in a different way. For example, the letters to shareholders that accompany initial public offerings take an overall ethical tone that has not been very common among IPO letters- This tone goes beyond just mentioning “corporate social responsibility”, but instead attempts to locate a social basis for the company and its actions. For example, Zuckerberg's (2012) letter states that Facebook is on a social mission to "make the world more open and connected" as there is an opportunity to "give everyone a voice". Hacker ethics, discussed earlier in this chapter, is also mentioned as Zuckerberg differentiates Facebook from more traditional stock listed companies that are there to serve investors. Furthermore, he writes, “We don’t build services to make money; we make money to build better services".

Similarly, Google's letter to investors, written by Larry Page (2004), states that "Google is not a conventional company. We do not intend to become one." Under the sub-heading "Don't be evil" Page expresses his and Sergey Brin's willingness to exchange short term goals for long term goals, and compare their transparency to that of a "well-run newspaper" that keeps the difference between advertisements and articles visible. Under the sub-heading "Making the world a better place", it is stated that "We aspire to make Google an institution that makes the world a better place." In Amazons IPO letter, Jeff Bezos (1997) goes to great distances to express how he will always put the long term perspective over the short term one, even when it does not align with what the investors might be used to: "we may make decisions and weigh tradeoffs differently than some companies", and because of that, the investor should confirm whether it is in line with their own investment philosophy. Of course, all companies make also long term decision, but it is hardly customary to present long term and short term benefits as conflicting in IPO letters. Especially when stating that the company will gravitate towards the long term thinking, often resulting to less stock options for shareholders.

In order to showcase this tendency, I will provide some excerpts from each letter to shareholders (Amazon 1997; Google 2004; Facebook 2012). Note how they all make their case for not being an ordinary company, and together they could be read as a manifesto that says “you can not tell us what to do” to shareholders.

Amazon’s (1997) letter to shareholders:

> Because of our emphasis on the long term, we may make decisions and weigh tradeoffs differently than some companies. Accordingly, we want to share with you our fundamental management and decision-making approach so that you, our shareholders, may confirm that it is consistent with your investment philosophy:
> We will continue to focus relentlessly on our customers.
>
> - We will continue to make investment decisions in light of long-term market leadership considerations rather than short-term profitability considerations or short-term Wall Street reactions.

Google’s (2004) letter to shareholders:

> Google is not a conventional company. We do not intend to become one.

…

As a private company, we have concentrated on the long term, and this has served us well. As a public company, we will do the same. In our opinion, outside pressures too often tempt companies to sacrifice long term opportunities to meet quarterly market expectations. Sometimes this pressure has caused companies to manipulate financial results in order to "make their quarter." In Warren Buffett's words, "We won't 'smooth' quarterly or annual results: If earnings figures are lumpy when they reach headquarters, they will be lumpy when they reach you."

…

Although we may discuss long term trends in our business, we do not plan to give earnings guidance in the traditional sense. We are not able to predict our business within a narrow range for each quarter. We recognize that our duty is to advance our shareholders' interests, and we believe that artificially creating short term target numbers serves our shareholders poorly. We would prefer not to be asked to make such predictions, and if asked we will respectfully decline. A management team distracted by a series of short term targets is as pointless as a dieter stepping on a scale every half hour.

Facebook's (2012) letter to shareholders (for more, see the earlier excursion on hacker ethics):

> Facebook was not originally created to be a company. It was built to accomplish a social mission — to make the world more open and connected.
>
> (…)
>
> People sharing more — even if just with their close friends or families — creates a more open culture and leads to a better understanding of the lives and perspectives of others. We believe that this creates a greater number of stronger relationships between people, and that it helps people get exposed to a greater number of diverse perspectives.
>
> (…)
>
> We hope to change how people relate to their governments and social institutions.
>
> (…)
>
> Simply put: we don't build services to make money; we make money to build better services.

Although things like "emphasis on the long-term" or allusions to corporate social responsibility might be somewhat common, they are rarely reflected with this kind of conviction on shareholder letters. What this opens up, however, is an understanding of the startup (or former startup, should I say) serving society, and creating profit as a side-product. This takes the problem-solutions-schema of startup methodologies and presents it as the main purpose of the company, albeit a purpose that eventually breeds monetary gains. It reminds one of the Greek myth of Medusa, the monster that will turn you into stone if gazed at directly, but that can be safely observed through a reflection. But now we have the startup playing the part of Perseus, attacking the Medusa of economy, while observing it through the mirror of society.

c) Monetization, runway and burn rate

Monetization is commonly used in startup talk, and it usually appears in the form of questions or answers, e.g. when an entrepreneur is asked "how do you plan on monetizing your startup?", or when he gives an explanation of his planned monetization strategy. It is a way of discussing traction from the viewpoint of economy – but this

time being more explicit about the economic implications of the startup and its early experiences with potential users/customers.

As has been the case with most other concepts we have observed, monetization is not a concept that is exclusively used by startup entrepreneurs, but in somewhat wide usage. It seems to have become a more popular after the rise of the internet. If one googles the word "monetize", then most of the hits are about "monetizing your blog". It simply means a way of getting money from the social interaction you are generating with your blog or website. In blogging, the word monetize is more at home, as blogging is in general an activity that is not done for profit, but for sharing ideas and getting feedback. In entrepreneurship, however, it seems partly out-of-place, as if the entrepreneurial action was not economic, but rather something that can be observed through the lens of economy, if one so wishes.

In its usage as a general term in finance, monetization can be used to mean many different things. For example, we could say that the Federal Reserve can "monetize" national debt through the act of purchasing debt, thus increasing the money supply. But in the hands of startups and venture capital firms, monetization has become to mean how to turn a firm's operations into an actual business. It is almost a synonym to "implementing a business model" or, to be slightly more specific, creating a working "revenue model" where the target audience, value offered and pricing are defined.

So why is "monetization" so commonly used in startup jargon, and how should we read it? First, we should remember that the semantics condition – for the observer-culture – how different communicative logics are turned from irritation to information. When we keep this in mind, then it seems that monetization is useful because it allows many kinds of "exit strategies" to be entertained side-by-side, instead of focusing primarily on revenue through sales. Monetization can refer to revenue gained from advertising, from selling access to data gathered from users, or it can refer to more traditional revenue streams such as paid subscriptions to the startup's service. Alternatively, instead of monetization of the product or service, the term can refer to the way in which the whole startup is monetized – "cashed out" by arranging an initial public offering, or by accepting an acquisition offer by a larger company.

Traction and monetization are connected as concepts – together they draw the boundary between the startup as a social experiment and the startup as economy. This distinction has taken over the semantics of business/no-business, revenue/no-revenue. Both concepts imply each other – traction implies future monetization, and monetization implies that there is some traction to be monetized – and together they enable more complexity into the definition of entrepreneurship, so that payments.

As Eric Ries (2011, 52) writes in Lean Startup, it is often easier to raise money when the startup has zero revenue than if it would have a meager amount of revenue. This is because "zero invites imagination, but small numbers invite questions". In this way, monetization poses a risk, if it only means meager profits, possibly only making the startup "ramen profitable", i.e. able to pay the living expenses of the founders. There is also another risk in monetizing: as monetization often fixes and complicates the relationship between the startup and its users by introducing payments into communications, it becomes harder to pivot if a pivot is needed. There is not so much room to breathe, when monetization has begun.

In the discussions around monetization, some have interpreted this second-order attitude towards making money as a sign of a coming bubble. This line of thought suggests that a healthy company has to make money now instead of merely entertaining ideas about how it can monetize its operations. But the "grow first, monetize later" strategy is clearly paying off for many startups. It seems that current technology has revolutionized the way money is made – not so much by sales, but by offering new ways to connect advertisers and sellers with users of internet based apps and services. There might be many reasons for this. Andrew Chen (2011), an entrepreneurial blogger and an ex venture capitalist who often defends this way of thinking, has written the following:

> Regarding monetization, I'll note that…
> - in general, consumer products mostly suck at monetizing
> - any business model built on 1% subscriptions of 0.1% ads need millions of users
> - costs are ridiculously low for new startups, and N millions of users is not expensive
> - ignore this for products like marketplaces where monetization is part of the value prop

In another post, Chen has noted that "Business models are a commodity", meaning that they are easy to get hold to when the audience is large enough to be monetized. From this perspective, clearly shared by some major venture capital firms, the question "how will they make money?" is not an interesting question. Chen (2012) continues,

> - you can plug into 100s of options for monetizing an audience, if you have one
> - We're working with 20X the internet audience compared to the dotcom bubble, and 1/10 the cost of starting a company
> - Facebook is hitting $5B in revenue via sheer growth, not monetization innovation
> - You should aim to hit 100 million active users, and get an off-the-shelf monetization solution later

Thus there is more sense in evaluating new companies on "market size and ability to grow to 100 million actives, rather than monetization methods" (Chen 2012). In startup narratives, this often appears more as a principle, or as a code of honor, where the product is put first, and business models second. For example, an insider said about Zuckerberg that "He vetoed anything that smacked of interference with the fluid use of the site, no matter how much revenue it might generate." (Kirkpatric FE 2011, 140.) Or, as the co-founder of Hotmail, Sabeer Bhatia, puts it:

> The one lesson that I've learned in my experience while I did Hotmail and since I did Hotmail is you have got to own the customer. The customers came to us for free at Hotmail. Even though they were free customers, what the last 10 to 15 years of my experience of the internet has taught me is that it's OK if you don't monetize them right up front. Eventually you will be able to. But having that customer base and being able to tap into that customer base and upsell them on services, or advertise – you can always make money off them." (Livingston 2008, 28)

Of course, the clock is ticking for the entrepreneur to monetize his business. The two common concepts used by investors and startups that reflect this ticking clock are "runway" and "burn rate". The money invested in a startup, whether through investment rounds or bootstrapping, forms the runway that a startup can use to take

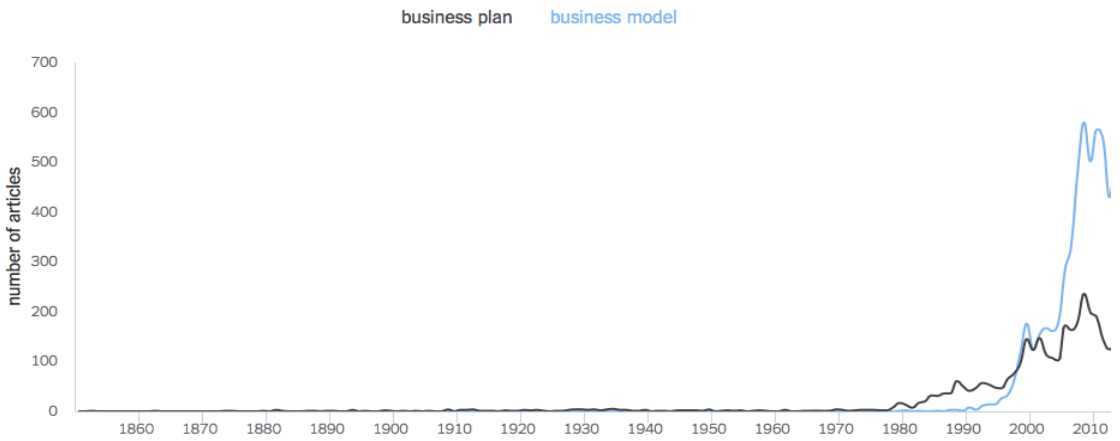
off, to establish itself. The runway is the time it has to create traction, to pivot and to search for a fitting business model. "Burn rate" is simply another way of putting this – it is the speed at which a startup is traveling on its runway, i.e. the speed with which it burns its initial capital. Monetization is often reflected through this ticking clock. There are contradictory views on whether investors should worry about growing burn rates of startups. The more pessimistic view in this debate is that burn rates are extravagant, and make the startups less appealing for potential investors and buyers (see Shontell 2014). The optimistic view is that there is a bright future ahead, promised by technology, but that this future can only be opened with high burn rates:

> The most valuable, important companies of the decades ahead are building the future today, executing quickly and burning money in the process. The best investors understand this and invest accordingly. In fact, not only is the conventional burn rate wisdom wrong, it's also misleading. For companies in the upper-right quadrant with great businesses and a path to profitability, striving to *increase* burn rate — in order to increase milestone rate — is usually best. To suggest that a company developing something the world actually needs — e.g. a cure for cancer or unlimited clean energy — should slow down execution is an attack on progress. (Nolan 2015.)

d) Business models instead of business plans

As we already noted in the previous section, there is a strong sense of monetization taking place naturally at some point, thus not being the central concern of the entrepreneur. Connected to this is the idea that one should think in terms of business models instead of business plans, and thus avoid falling into the "fallacy of the perfect business plan" (Blank 2013). Of course, business models and business plans can be seen as complementary, but we can also note a shift in which one is more emphasized. For example, in NYT Chronicle, we can observe that in 1990 the term "business plan" appeared in 50 articles while "business model" only in one article. In 2011, "business plan" appeared in 188 articles, but "business model" was now referred to in 566 articles (see figure 20).

Figure 20: Articles referring to "business model" (blue) or "business plan" (black) in The New York Times[59]



[59] This graph was made using the New York Times Chronicle web service that creates graphs based on NYT archives.

According to Steve Blank, major business schools have taken note that, indeed, startups are finding great success while they have given up the business plan in favor of the business model mindset:

> As business schools embrace the distinction between management execution and searching for a business model, they're abandoning the business plan as the template for entrepreneurial education. And the business plan competitions that have been a celebrated part of the MBA experience for over a decade are being replaced by business model competitions. (Harvard Business School became the latest to make this switch, in 2012.) (Blank 2013.)

The shift from the concept of "planning" to that of "modeling" suggests a move towards retrospective approach to business: plans are *followed* while models are *implemented*. A business model is a somewhat separate component that can be attached to the solution offered by the startup, if the solution is good, and gains users. A business plan, on the other hand, implies a set of decisions that pressure the startup to consider the solution as a business from a very early point in development – thus the solution becomes attached, from the very beginning, to some specific way of making money with it. This is a serious constraint for innovation, and hinders the startup's ability to pivot and iterate. In this way, the semantic of valuation affects the way that economy is conditioned as something that can be fitted retrospectively on top of the scalable startup.

IMPLICATIONS OF THE SEMANTICS OF VALUATION

The semantics of valuation show a communicative shift, as the investor perspective becomes part of the entrepreneurial jargon. Here, startup entrepreneurship takes in economy in its second order form, i.e. not as market actions producing revenue, but as observations of current losses (burn rate, bootstrapping) turning into future profits (monetization). As the popular term "business model" suggests, the money-making mechanism can now be delayed, even installed retrospectively. This is in stark contrast with the common way of thinking in terms of business plans that either succeed or fail, i.e. plans that are made before anything else is built, and that are at the core of the identity of the firm, thus not easily discarded or changed. Business model, on the other hand, has a more flexible meaning in this sense.

Figure 21: Semantics of valuation observed as a difference

Self-description: Valuation through resonance and disruptive potential	Other-description: Valuation through actual sales/profits
Valuation of possible disruption Defiance in investor relations Monetization Business model "Our job is to change the world"	Valuation connected to sales and market position Investor relations at the heart of management Revenue Business plan "Our job is to make profit"

The semantics of valuation, when observed together with the other semantics suggest something interesting about how the observer-culture of startup entrepreneurship reflects itself against the world of venture capital.

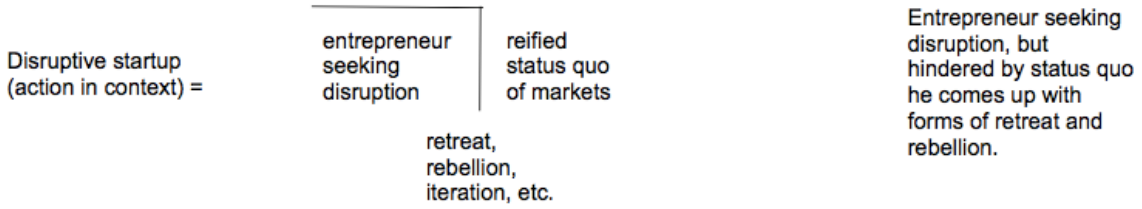
To be more specific, we see what could be described as a love-hate relationship with venture capital – the startup culture is highly indebted to venture investors, even borrowing concepts from its realm, but rebels against a strictly economic definition of a startup, seeking to open up a wider meaning horizon for its self-description – one that incorporates new connective and communicative possibilities. Economy is first suppressed, and then amplified – thus brought with a slightly "neurotic" twist. By neurotic, we mean that it is not a straightforward in its opening to economy, but a culture that accentuates the performative side of communication as it "pushes out" economy and "pulls it in" at the same time. Outside this cultural perspective, of course, a startup is a new venture that has an obvious relationship with economy. But in the self-descriptions of startup culture we find first a distancing act, where the locations and motivations are constructed as being outside of economy, and then a hubris that takes place when investors start seeing some potential in the startup. This neurosis is at the heart of startup semantics, giving the relationship with venture capital a mythological flavor of "atonement with the father" (Campbell 1949) – a son indebted to his father (or a god-figure), but determined to fight him, until he reaches him and finds atonement with the father's perspective.[60]

CONCLUSION: THE STARTUP DIFFERENCE

What have we found out so far by observing some examples of startup semantics? First of all, we have seen how startups appear to have a self-description as organizations and as economic entities. Profit and growth may not be completely absent from startup jargon, but they are not driving factors. One could argue that this is semantic shift is obvious, as startups are essentially new ventures. But even so, we are looking at a popular semantic that appears in the pages of popular newspapers, and that carries a more performative function along with its descriptive function in that it sets meaning at place. As we noted in Chapter 2, a semantic reaching popularity is a communicative process that "distinguishes between the professional audience and its outside" (Stäheli 2013, 9). These popular economic semantics reveal what meanings activate meaningful couplings in the economic system. Startup semantics show that there is a turn into a second-order entrepreneurship, the focus opening up to unknown scarcities, or unknown modalities of known scarcities. This is the state of affairs that my analysis of the conceptual reservoir points to. We can condense the semantic categories into a two-sided form depicted in Figure 22, now seeing how the narrative is a distinction where each semantic draws a distinction that indicates the disruptive startup, and creates ignorance – if not rebelliousness – towards the status quo of the markets. This seems to repeat what we already saw in Chapter 3, but we can now observe how the startup is not merely what it indicates, but also the difference it makes, and the "un-marked side" it pushes off.

[60] The fact that successful startup entrepreneurs often move on to become investors attests to this. For example, many of the people associated the so-called "PayPal Mafia" have since become technology investors, and the "traitorous eight" (or "Fairchild eight") not only founded but also funded many of the first Silicon Valley tech firms. The newest trend seems to be startups funding other startups, thus taking a role of venture capitalist sometimes even before they have successfully monetized their own product (CB Insights 2015a).

Figure 22: Startup as a difference: a simplification of the semantics



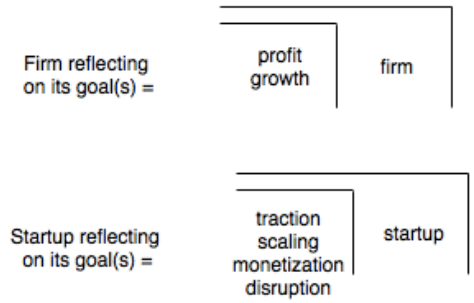
We can now consider more closely why a startup keeps cultural distance to firms while simultaneously appearing as a celebration of entrepreneurship in other respects. First of all, a startup, as an organization embedded in startup semantics, differs from a firm in how it articulates its goals. The individual's goals can be expressed by him alone, but on the level of social systems we can observe what concepts appear as goals in themselves, or see how certain concepts support certain goals. Here, we should remember that, according to Luhmann's theory,

> Goals arise when a system, remembering the past, anticipates a future which the system does not want to accept. (...) the system is then the other, unmarked side of its goals. In other words, when one pursues goals, one must be able to distinguish them from the system which pursues them. (Luhmann 1997, 367.)

As we have seen, traction, scaling up, monetization and disruption can all be observed as startup goals, and as such they compete with the goal of "making a profit", sometimes even losing sight of it. The other startup concepts we have observed may not be goals as such, but they are intertwined with how these goals are articulated, as should be clear by now.

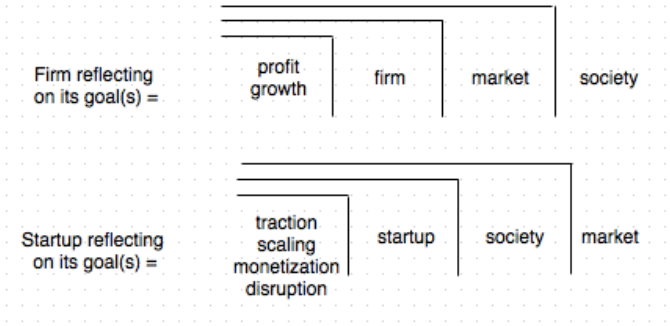
To an extent, the goal semantics were visible in the actantial model (Chapter 3) in the form of the three different axes – the axis of desire, the axis of power, and the axis of knowledge – where the startup was after (desire) disruption, but had to win the battle (power) against "liability of newness" before reaching atonement (transmission) either with users or private investors. We observed that these axes defined the general framework inside which actions were meaningful in the sense of connecting to the correct "motives" that were to explain the said actions. Now, in the current chapter, we have observed the background of concepts that supports this idea of startup agency, as well as the motives that are attached to it. What is added here, is that we now see beyond actions and motives, into the systemic "oscillation traps" where the scripts for agency emerge. In figure 23 we see how goals are differentiated in relation to startups, that appear as the meaningful environment for these goals that, paradoxically, also make startup entrepreneurship meaningful.

Figure 23: Firm and startup – the difference in goal-setting



We can now remind ourselves that oscillating between the two sided of a distinction calls for an environment where the oscillation can appear meaningful, and thus find a temporal stability. For a firm – and we are here building a toy model[61] of a firm – it would be the market, i.e. the firm's observation of customers and competition as important forces. For a startup, this can also be relevant, but an abundance of concepts has appeared to bring deeper a much more complex environment that we call "society", i.e. the combination of all communicative possibilities that rest on past communications and the situations at hand. In figure 24, we have added environments of society and market in different order to these equations. A firm in its ideal-typical form is after profit and growth, and has to reflect itself in a market. Here, society is constantly irritating this oscillation through topics such as "corporate social responsibility" and "reputation management" (e.g. Keys & al. 2013) – in other words, society appears through what the firm has left out as externalities and what comes to haunt it.

Figure 24: The order of contextual reflection



What we see now, looking at the new way of conceptualizing goals, is that the overall constellation of the form has changed along with the semantics. The structural coupling between economy and organization (i.e. firm in a market) does not define the identity of the startup in the same way as it defined the identity of a firm in its ideal-typical form. What defines the startup is rather the structural coupling between the technology and society as it

[61] It has to be accepted that, when building toy models, we are operating on the level of metaphysics. As Paul (2012, 27) writes, the "contribution of the metaphysician here would be to highlight the interest of the empirical question by discussing it, to provide hypothetical models that could in principle inform the investigations of scientists, and, perhaps most importantly from a philosophical point of view, provide ways of understanding the world that outrun what science has managed to accomplish thus far. This last task includes the job of providing toy models of parts of the world that science has neglected, but also includes the job of tying the models to our everyday understanding and experience of the world." There is an interesting parallel here to how startups operate as metaphysicians and "toy-modelers" of the economy.

is governed by the figure of the entrepreneur. The startup is incorporated into economy with the semantics of valuation, i.e. with monetization and business models.

With the startup semantics, patterns of action and meaning can be disrupted by inserting technology into them (usually in the form of software). Of course, this does not rule out the fact that many entrepreneurs are after financial gains, but the semantics seem to guide one gently towards non-economic definitions. One has to "talk the talk and walk the walk", if one wants to secure investments, convince journalists or find users or customers. So here we see the following: whereas a firm is observed, and mostly observes itself, in an environment it calls "the market", a startup observes itself in an environment that we will call simply "society", but understanding this in our theoretical terms as sum of all communications (not as "people" or as "nation").

These distinctions are generalizations based on our observations of startup semantics. They serve to give an impression of how startup entrepreneurship differentiates as a new observer-culture, an observer-position that connects system logics in a smooth way, although creating own paradoxes on the way. Through this structural coupling – enabled by startup culture – operationally closed systems can react to each-others irritations as information. The same communication appears as meaningful simultaneously for many systems, although there are each system reacts with its own operations. Remembering Chapter 2, we should keep in mind that in relation to operationally closed systems, "one cannot speak of overlaps" but has to account for an "observer, who is in a position to synthesize multiplicity and unite the dissimilar" (Luhmann 2013b, 193). From an operational point of view the systems remain separate, although they can develop structural couplings that help them to transform irritations coming from each other into information.

For Luhmann, semantics often follow differentiation forms, as new concepts emerge to create better forms for sense-making, as explained in Chapter 2 and Chapter 5. Following this idea, we should investigate more closely what, if any, system references are made in startup semantics, and what kind of perception of the environment does it promote. It is an observer position that finds new connections, and by doing so opens new meanings and possibilities in society. Chapter 5 will go deeper into this by building a sociological model of startup entrepreneurship, and Chapter 6 will consider why this model has proven so functional in our current society that it has reached the status of popular semantic.

CHAPTER 5: STARTUP AS A COMPLEX FORM OF COMMUNICATION

> What is it in the territory that gets onto the map?" We know the territory does not get onto the map. That is the central point about which we here are all agreed. Now, if the territory were uniform, nothing would get onto the map except its boundaries, which are the points at which it ceases to be uniform against some larger matrix. What gets onto the map, in fact, is the difference, be it a difference in altitude, a difference in vegetation, a difference in population structure, difference in surface, or whatever. Differences are the things that get onto a map.
> - Gregory Bateson (2000, 457)

In this chapter, the results of chapters 3 and 4 are used as data for building a model of the observer-culture of startup entrepreneurship. The aim of the model is to describe how different social systems affect – and are incorporated in – the meaning formation that we have observed in startup narratives (Chapter 3) as well as in the conceptual reservoir of startup culture (Chapter 4). Whereas narratives give us an action oriented perspective on things – most convenient for the actors involved – we now observe startup culture specifically as an "observer-culture", i.e. as a complex form of communication that pulls in various contexts without collapsing under their complexity. We want to find the constellation of environmental irritations that calls for this observer-culture to make sense of the various contextual irritations by seeking out and/or constructing standard stories.

We will begin by further elaborating on notion of "form" that was briefly introduced in chapters 2 and 4. Now, instead of focusing on concepts and counter-concepts, we will observe how forms operate on a more general level of social systems. After this introduction, we will present Dirk Baecker's (2006) ideas on how to model social systems maintaining themselves in their environments. Then, we will go through Baecker's (2006) own "form of the firm" model. This leads us to reflect on the two previous chapters and how the model could be restructured for observing startup entrepreneurship.

Whereas the two earlier chapters offered analysis of data, this chapter takes on the task of creating a synthesis of the pieces – the semantic categories – we have been able to slice in our analysis. We will proceed more or less deductively, and look primarily for consistency and coherence inside our model. It is as if we were building a computer model that would be able to produce startup stories as random walks, but that does not have to resemble anything in the real world (see Introduction for more on philosophy on modeling). Our demand for the model is that it should produce – as a kind of thought experiment – similar end results compared to startup culture, even if the model does not look like startup culture. The map is not the territory – it merely displays the most crucial differences that we have to know when navigating the territory.

Thus, the end result of this chapter will be a model of startup entrepreneurship observed as a collection of contexts that draw it to different directions without collapsing the unity of the self-description. We will also see how this model compares to the model of a firm, and consider the niche that this culture uses to sustain this mode of self-reflection. The semantics of Chapter 4 are of great importance here, as they will designate the tension points, and thus the order of the model.

BACKGROUND OF THE MODEL: RE-ENTRY OF THE FORM INTO ITSELF

The basic component of our model is "form"[62]. In Chapter 2, we referred to the notion of form while discussing meaning as the basic concept of sociology. In Chapter 4, we observed how we can use it as a tool for observing how concepts imply counter-concepts, and how a concept hides this distinction by appearing as a unity rather than difference. In our model, we will use the notion of form both in a more general sense, and in a more complex sense, compared to Chapter 4. Now, our aim is to trace a more complex form that combines the different startup semantics, binding them together as a sequence of contexts being incorporated as operations. Emulating Baecker's presentation (2006, 122-126), I will briefly go through the basic idea of form, as well as the logic of re-entry, so the reader is able to see their use-value for modeling startup entrepreneurship.

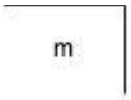
Before we can observe a "form", we have to encounter a simple indication. Something is pointed out. Following Spencer-Brown (2011, 1), we will call this indication the marked space (m).

Figure 25: Indication



But, in order for this marked space to appear, a distinction has to have taken place. The one who does the indicating also draws a distinction between what is indicated and something else. The distinction, however, is invisible to the one indicating something. This is due to the fact that the distinction is the operation of indication. We might depict the distinction itself by drawing a boundary around what is indicated.

Figure 26: Indication observed as a simultaneous drawing of a boundary

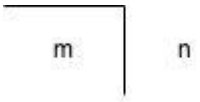


This, however, only raises more questions: if there is a distinction that enables the indication to come into being as the marked side of the distinction, there has to be a side that is "not marked" (n). We have to consider this unmarked side if we want to observe what is the form that enables the indication to appear the way it does.

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[62] Spencer-Brown's (2011) Laws of Form is a famous example of "boundary math", i.e. an attempt to incorporate "point of view" into mathematical notation (Bricken). Instead of numbers, we now have single operation, the distinction, that has two laws: the law of calling, and the law of crossing. If we take brackets to be identical to the mark of the distinction, the law of calling can be depicted as ()() = () and the law of crossing as (()) = <void>. The "is equal to" mark should be observed as "can be confused with". The law of calling thus states that any form repeated can be observed simply as the form. We can observe this as condensation of meaning or as redundancy in communicative situations. If we want to see it cognitive terms, we might speak of the ability to "collapse multiplicity" (Bricken 1994). The law of crossing states that any form indicated and then crossed (the indication turning to other things) can be observed as the absence of form. If we want to see "crossing" in cognitive terms, to aid our understanding, we might speak of an point of view collapsing, as in reaching "enlightenment" or discarding a contradicting mental model (Bricken 1994). The emerging empty space should not be seen as a zero, but as an invitation for other distinctions. Thus, crossing is creative, because "contradiction of reference accompanies an expansion of awareness, and an expansion of reference accompanies a contradiction of awareness. If what was done through awareness is to be done by rule, forms of reference must grow (that is to say, divide) to accommodate rules" (Spencer-Brown 2011, 9) The notion of re-entry (ibid.) builds on the law of crossing – it states that there are forms that are able to oscillate between their inside and outside, thus solving their contradiction with the simple trick of adding time. This is where we speak of self-organizing systems. We will simply use the notion of re-entry as a way of tool that lets us observe startup semantics in relation to different social systems. See Appendix 3 for more on Spencer-Brown's calculus of indications, and on how it could be used in sociology.

Figure 27: Indication implying a boundary towards an unmarked outside



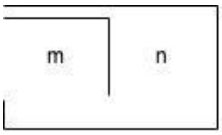
Now we have the basic idea of "form". But how is this very abstract idea powerful for observing meaning formation? On the surface, it seems that this notion of form forces us to turn observations into simple binary logic. But this is not the case. The form has three values, and four if the whole form is observed as one value. As Baecker (2014b, 24) writes,

> The notion of form describes the four values of one operation being performed: (1) a marked state indicated, (2) an unmarked state from which the indication is initially implicitly distinguished, (3) the distinction being currently drawn separating the marked state from the unmarked state, also initially referring implicitly to an observer drawing it, and (4) the space brought forward by that operation while in turn being presumed by the operation.

Of the four values, the first two are easy to understand. For example, if a newspaper observes something as news, then something else is observed as "not news", i.e. as not containing sufficiently new information (see Luhmann 2000). The third and fourth values, however, are more difficult to grasp. What does it mean that the distinction itself is the third value? In short, it means that the observer making the distinction is always in the blind spot of her distinction, at least until she repositions herself and reflects on the distinction with yet another distinction. The newspaper operates, and does not question its constant search for new information on current topics. Observing the foundational distinction would not help it in being operative. We can try to observe the position between values, but we can never reach a privileged position where no blind spots are formed – in different positions, different blind spots are needed if one wants to stay operative. Of course, one can always engage in "second-order observation" and observe how forms are used. When we proceed in this way – i.e. when we attempt to observe simultaneously the inside and the outside of the distinction, and see what operation draws this distinction – then we are in the "fourth value" of the operation. For the newspaper this would mean reflecting on how the distinction between old and new information is made, and how it might be changed, e.g. by finding fresh angles to old topics, or by deciding that some conflict is not going anywhere and does not constitute new information for the target audience.

Now, let us clarify the meaning of "observation" in relation to "form". Observation is not something that is reduced to thinking or sensing. Instead, it can be defined more broadly as "operating with distinctions". We may say that any system that is able to re-enter its distinction into itself is, by definition, able to self-reflect. A self-reflecting system has "double closure", i.e. it is able to "calculate its own calculation" (Baecker 2006). With this, it gains complexity and new constraints at the same time as it has to interpret its own outputs as inputs. There is always a unique confusion about what is attributable to the environment and what to the system itself. The system is hard to predict, and it takes creative steps in maintaining its "homeostasis", i.e. its identity in a constant flow of events. What has been described here is the re-entry of the form into itself. It can be depicted in the following way.

Figure 28: Re-entry of the form into itself



For Aristotelian logics, a distinction that re-enters itself is observed as posing a paradox and thus as something unreal. There is the fear that "ex contradictione quodlibet" i.e. that from a contradiction, anything follows (Baecker 2012, see also Kauffman 2003)[63]. At the same time, for self-referential systems themselves (e.g. minds, social systems, organisms, a flock of birds), the re-entry and the ability to live with its paradoxical nature is what makes them self-referential in the first place. Outside sociology, there are many ways of describing such systems: they can be called "non-trivial machines" (Heinz Von Foerster), "tangled hierarchies" or "strange loops" (Douglas Hofstadter), or observed as systems building on many-valued or "fuzzy logic" (Bart Kosko). The concept of tangled hierarchy offers a good visual image of the re-entry: think of a M.C. Escher drawing, such as the hand emerging from paper and drawing itself into being, or a staircase going up along a structure, but paradoxically reaching the base of the structure. One is stuck in a loop. Ouroboros, the snake eating its own tail, is a paradigmatic example of a tangled hierarchy.

In re-entry we have a distinction entering itself, thus creating "self-produced indeterminacy" (Luhmann 1997), making the system unpredictable even for itself. It is thus a simple illustration of a complex, self-referential system. It suggests that a "self-produced indeterminacy" acts as the pulsating heart of any self-organizing system – with oscillation, a system is able to circumvent paradoxes that would paralyze traditional way of doing mathematical logics. Here, however, we must forget the previously suggested images of never-ending, looping stairs, because the self-referentiality of a self-organizing system actually accomplishes something: as a system enters the distinction between itself and its constructed environment into itself, it is able to oscillate between self-reference and other-reference. The "identity" that develops is a result of the oscillation between the outside and inside, between other-reference and self-reference (Luhmann 2006).

Social systems as self-organizing systems are hard to grasp. How is communication able to close operationally when we know that it is clearly "people" who speak? In Chapter 2 we observed why communication should not be observed as transmission of information, but instead as an operation that forms a self-organizing system once initiated. As we noted, there are three selections of which two are done by the "sender" and one by the "receiver": selection of information, selection of utterance by the "sender", and the selection of understanding by the "receiver" by trying to separate the information out of the utterance (see Luhmann 1992). What we call "communication" is the creative understanding that draws a new distinction between information and utterance. This is not just a psychological phenomenon, but also on a more general one. Communication begins when some possible meanings are selected and expressed, but the loop self-regenerates when a response reflects on what was just said, but complicating things with further added meanings (e.g. with a concerned look,

[63] See also Günther (1973) who takes the view that "contextures" are areas of separate logic, each operating with a bivalent Aristotelian logic. Günther (1973) makes a much more complex case, but my summary is as follows: As the bivalent logics of contextures are strictly "either-or"-logics, they cannot include the "excluded third" of both options appearing simultaneously viable (e.g. statement being true AND false). The world, however, is not bivalent, so this processing failure – often called a "paradox" – is resolved through movement between different contextual logics, i.e. through "poly-contexturality". Günther's ideas were foundational to Luhmann's thinking.

with an added descriptive detail, with a mysterious silence, etc.). In communicative situations, understanding is the attempt to extract information by referring to some semantics, but this usually renews the loop of communication.

We can simplify this by thinking of two people talking. When I speak, you will have to construct a new version of what I just said, attempting to see what my utterance implied. Further possibilities for meaning are opened with each communication. This amounts to a constant "surplus of meaning", as we observed in Chapter 2. The search for “latencies” is thus inherent in all communication – and not just in sociology – as observers are always observing observers. But these latencies are often implicitly agreed upon, so that attention can focus on some things while bracketing out other things. As suggested earlier, sociology has to accept this recursive nature of communications, and take it seriously despite the autological, or even paradoxical, implications that ensue.

What we now have is an emphasis on “repeating operations” instead of “structures”. In this framework, structures reflect "temporary redundancy tendencies of operations, with enslaving effects upon certain operative sequences" (Clam 2000, 73). This means that the system can be seen as a "transtemporally stable whirlpool, a form maintained in actuality through a constant bend of its individual operative components into a global structure" (Clam 2000, 73; we will return to the analogy of whirlpool in Chapter 7). The father of cybernetics, Norbert Wiener, had a similar idea much earlier – he observed that, in order to model an organism, we should observe it as a message that sustains itself against the invasive noise of the environment.

> Organism is opposed to chaos, to disintegration, to death, as message is to noise. To describe an organism, we do not try to specify each molecule in it, and catalogue it bit by bit, but rather to answer certain questions about it which reveal a pattern; a pattern that is more significant and less probable as the organism becomes, so to speak, more fully an organism. (Wiener 1967, 129.)

Modeling Observer-Cultures as Complex Forms of Communication

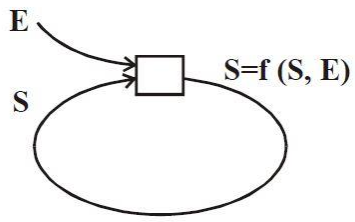
As we just observed, the re-entry of a form into itself can be observed as a situation in which a system takes its own distinctions as meaningful – thus outputs of a system are transformed into inputs, which causes a margin of error to expand in the ways that the system interprets things. In short, this means increased complexity. Dirk Baecker has developed a way of modeling these processes of meaning formation. Baecker’s ideas about this modeling technique first emerged in an article titled “The Form of the Firm” (Baecker 2006)[64]. In this article, Baecker shows how one can draw a “communicative model” that specifies the sequence of re-entries that a system has to make while oscillating between different contexts or "meaning horizons" to use a term we used earlier. In the article, he observed the firm as an organization that has to be able to observe highly different communications as information, even though they all irritate each other as events appear differently through different social systems (what is payment in economy might be corruption in politics). But somehow the

[64] My observations are almost solely focused on this early version of the model, as it outlines the use of the model in a very detailed way (i.e. Baecker 2006). Later, Baecker later started using the concept of “category object”, or “catject”, in order to emphasize how different categories (as meaning contexts) play into the formation of a specific communication (especially in his website www.catjects.com). The concept of catject is an iteration on Harrison White’s concept of “catnet“, which is short for “category network”. Catnets emphasize White’s point that cultures operate as networks of meaning (White 2007). White (2007, 2008, 2010) refers to “switchings” between “network domains” that are constantly made in social life. The basic idea is very much the same for both Baecker and White, but the concept of network is central for White, and the concept of system for Baecker. The concept of catject does not yet appear in the Form of the Firm article observed in this chapter, so we will use the notion of form. Note that White (2008, 1-19) also refers to Luhmann, if mostly just to the idea that double contingency being the cause of cultural formation.

communications are able to form a "polyphonic organization" (Andersen 2003) that functions. This is not an easy process. As the system finds resonance with different communications, the self-description of the system becomes more arbitrary and more constrained at the same time (see above Wiener quote). The model is not a model of the organization as it appears to the actors, but a model of the process of oscillation between contexts that gives rise to communication about firms.

Early in the article, Baecker reminds that the relationship between a system and its environment is one of "perturbed recursion". This means that the environment can only appear as changes in the systems own operations, not as some input coming from outside. The perturbations of its own operations causes the system to form new information that accommodates the perturbation as a relevant irritation, i.e. as information. As Figure 29 displays, the system is in a loop observing perturbations in its operations, and the environment irritates this loop to take further forms. The equation "S = f(S,E)" summarizes the general idea that a system is the function of separating itself from its environment, i.e. this separation takes place through the construction of information, information being the "difference which makes a difference" (Bateson 2000, 459)[65].

Figure 29: Perturbed recursion in a self-organizing system (from Baecker 2006)



Baecker (2006, 121) describes perturbed recursion in the following way:

> Here we have a recursive loop of operations reproducing the system and a constant and unforeseeable inflow of environmental events. The system can only reproduce by taking both into account. And it can only reproduce by deciding, on the basis of its very reproduction, which environmental events to take into account when and how this should be done. That is why systems theory is insistent on distinguishing the self-referential closure of the system from its other-referential opening. A system that is unable to distinguish between itself (self-reference) and anything else (other-reference) is bound to lose itself in the entropy of the environment. In fact, such a system is impossible, since its very existence

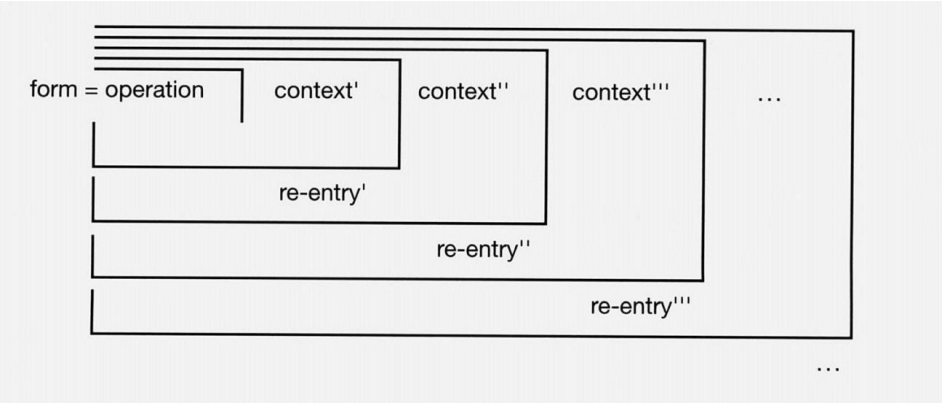
[65] The equation that Baecker outlines displays an interesting similarity with the more famous "Lewin's equation" developed by the psychologist Kurt Lewin (see 1939, 878). Both can be seen as "heuristic formulas" rather than actual equations, and both aim to show how the behavior of a system should not be analyzed separately from its environment. For Lewin, of course, the system of interest was the person, and the environment thus the psychological environment of the person. In short, Lewin's equation states that Behavior is the function of Person and Environment, i.e. B = f(P, E). It shifts the focus to the momentary situation in understanding a persons behavior, rather than relying entirely on the past experiences of the person. This is the purpose of our study also, as we are showing how the phenomenon can be analyzed both as a narrative, and as a combination of special contextual tensions. Lewin, however, remains a distant figure to our study at hand, as his focus was on the psychological side of things, and we are bracketing out the psychology of the entrepreneur. Still, as there are similarities in form, Lewin's ideas could be seen to support the more general systems theoretical ideas that are at stake in Dirk Baecker's model. In this study, we will not try to find out whether this is the case.

depends on its ability to distinguish itself from its environment, to set up an appropriate boundary, and to watch that boundary with respect to all kinds of events crossing it.

As we observed in Chapter 2 while discussing meaning formation in social systems, identity can be seen as a "monitoring device with which to relate a constantly changing world back to some structure that gives it shape" (Baecker 2006, 121; for somewhat parallel ideas, see White 2008, 1-19). It is a form that enables the system to take environmental irritations as information. The context is thus translated into operations of the system, i.e. re-embedded into the systems recursive loop of operations (ibid.). What appears as other-reference has to be formed in self-reference, thus causing further references to open up. This is the notion behind double closure (see Foerster 2003) and the theory of autopoiesis (see Maturana & Varela 1980): to any observer operating in the world, the world appears only as perturbed recursion, i.e. as irritation turned into information by the observer's own operations.

But things get interesting if we consider what happens when we take seriously the temporal nature of systems, i.e. that systems are not structures, but operations following operations, constantly taking cues off each other, thus keeping uncertainty simultaneously at check while also keeping it alive. The oscillation between self-reference and other-reference can be observed as oscillation between various different contexts that constantly redefine self-reference and other-reference. Baecker presents the model shown in Figure 30.

Figure 30: The model for introducing new contexts as new indeterminacies (Baecker 2006)



In Figure 30, we are "picturing operations in contexts, these contexts being operations that themselves call on further contexts" (ibid., 125). In the model, each variable introduces further indeterminacies (context') that the system is able to accommodate through its operations (re-entry'). It should be noted that this is a dynamical model instead of a static one, i.e. this model depicts how a complex form works over time[66]. But it is not causal or chronological as a sequence diagram would be – the variables exist and are active simultaneously, but whoever observes through this form oscillates back and forth between variables. In the systems flow of operations, new irritations appear as meaningful experiences that are then turned to meaningful actions (Luhmann 1995, 84; 2010, 6-7). This is what "re-entry" means in our model – it is the restless dance of the self-observing system as it constantly recreates its boundary on top of previous boundaries. As Baecker puts it,

[66] For a similar model, developed from Gregory Bateson's ideas, and for understanding learning-environments, see Bredo (1989).

> A system is not a mechanical device to ensure closure and to control everything inside it. Rather, a system is a highly precarious 'dance' of ensuring a distinction between the system and its environment, which is the only way of ensuring the system reproduces itself. The notion of a system gives up the idea of ordering the world causally by attributing causes and effects to its different phenomena. (Baecker 2001.)

Again, one should remember that adding new distinctions has the function of stabilizing previous oscillations. Imagine a situation where you are thinking or doing something (thus drawing distinctions), and you cannot proceed because of some contingency ("things could go either way!"). Now, you have to take a step back to draw another distinction that allows you to bypass the original paradox, i.e. you bring in some context that naturalizes your previous distinction, makes it stable. You might say you solved it, but you actually just needed a different distinction to turn your attention away from the contradiction. The paradoxes or contradictions are not resolved, but your observer-culture – in this personalized case: your identity including its neuroses – works to keep them at a safe distance, or in the "blind spot" of observation.

A more practical question is, how do we define the variables in the model? If we want to do empirical social science, we should have some data to explain why the first indication is central. We should also have sufficient data to observe what contexts are re-entered into the form after the first indication is made. For our study, this data was presented mostly in Chapter 4, and for some parts in Chapter 3. With this data, the model let's us simulate the systemic bacground that plays its part on the formation of the narratives and semantics of startup entrepreneurship. We do this by bracketing out the level of actors and their motives, and instead focusing on a different question: what constellation of contexts – and our special interest being on social systems – would enable startup entrepreneurship to appear as highly meaningful and patterned action instead of diffusing into fragmented events. This is a creative undertaking, but one also based on our analysis of semantics and narratives. The process is guided by Luhmann's theory of social systems (2012, 2013) and Baecker's (2006) model, and these are important in order to reduce the amount of variables so we can make a model.

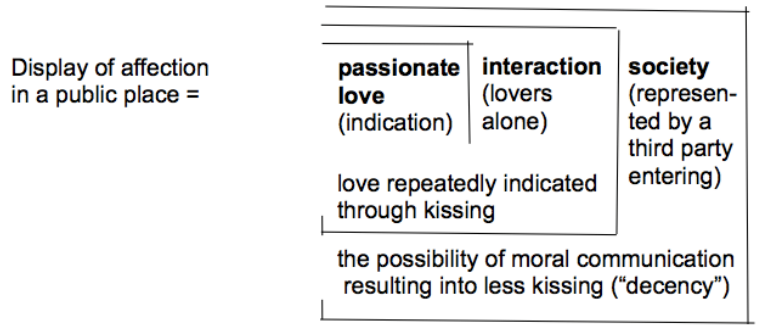
In relation to popular startup narratives, we will be challenging the "appearance of purposefulness" that these stories paint. We should remember Darwin's idea of evolution where residual patterns – i.e. features or forms of life that have managed to survive – tend to assume an appearance of purposefulness for the outside observers, whereas in reality, purpose is only transitory in nature (see Wiener 1967, 54.). By transitory we mean that there are always latent functions that may become more important than the current, manifest purpose. Thus, behind the observed purposefulness, there is an "unpurposeful random mechanism which seeks for its own purpose through a process of learning" (ibid). Wiener is here referring to Ross Ashby's ideas on what it would take for a machine to be able to genuinely learn. Both Darwin's idea and Ashby's formulation imply that the lack of a primary and essential purpose is what creates the appearance of purposefulness,

> "(…) in Ashby's machine, as in Darwin's nature, we have the appearance of purposefulness in a system which is not purposefully constructed simply because purposefulness is in its very nature transitory. Of course, in the long run, the great trivial purpose of maximum entropy will appear to be the most enduring of all. But in the intermediate stages an organism or a society of organisms will tend to dally longer in those modes of activity in which the different parts work together, according to a more or less meaningful pattern." (Wiener 1967, 54.)

The meaningful pattern can be observed through re-entries, i.e. through the semantics that display how a specific side of the system's environment is made operational. As an example, let us imagine two lovers kissing in an elevator when a stranger enters the elevator, creating a shift in the structure of expectations (Figure 31). The lovers are in an elevator together, thus forming an interaction system that only includes the two of them. The kissing and fondling that ensues can be observed as passionate love being indicated in the context of the interaction[67]. The lovers do not observe the distinction itself, but only what is indicated: the passion and the meaning horizon that it opens for them. We can refer to the re-entry of love and interaction, in this case, simply as "passion" or "passionate kissing". Suddenly, the interaction of our lovers is irritated as a stranger enters the elevator. The problem is that he is now included in the interaction system (simply by being present). But he does not want to be included – nor does the couple want to include him – in the intimacy of passionate kissing.

Now, if the kissing goes on, the intimacy of the situation places high demands for the "civil inattention" (Goffman) of the stranger, and high demands of the lovers willingness to expose their intimacy and possibly irritate other people. This is where expectation of expectations come in, as both the lovers and the stranger reflect (consciously or unconsciously) on generalized patterns of acting in similar situations, and what might be expected of them. Here, society has perturbed the original system, and what was observed as "passionate kissing" suddenly has to incorporate communication of "decency"[68]. This communication happens by toning down the kissing, maybe transferring the passion to just holding hands. "Decency" is the mark that society has entered the form as a possible environment, and irritated the system to observe itself yet through another semantic. It has nothing to with the fact that the specific individual stepped in the elevator, and everything to do with the fact that the actions were opened to a wider horizon of expectations besides intimacy between the lovers. Thus there was a shift to a more general level – the passionate kissing was suddenly communication to be interpreted by a generalized third party, and the interaction system started to take cues as to how to incorporate "more society" – i.e. more communicative possibilities – in their kissing.

Figure 31: Toy model for the form of lovers kissing in a public elevator



[67]

[68] Three things should be mentioned here: (1) The contextual change is also observed by the lovers as psychic systems, but as their meaning horizons concerning "passionate love" and "decency" have been formed in society, we can bracket their cognitive processes out and focus on contexts being incorporated as operations; (2) also, the lovers might not reflect on their behavior as a matter of "decency", but instead can react habitually to this "re-entry" – or "switching" (White) or "keying" (Goffman); (3) in our small example, the re-entries have been invented by me, the second-order observer. In our startup model, the re-entries are taken derived from the first-order semantics we observed in Chapter 4.

In this way, the interaction system becomes self-reflecting and self-regulating in order to fit the "expectations that are expected" of the stranger. He appears as a double contingency, and triggers a generalized expectation that is incorporated in the communications, and thus changes the context of the situation. How exactly this form develops further, and whether the kissing stops, would be an empirical question to tackle. Different cultures and age groups would probably react to the situation in different ways. More often than not, possibly, we might see that the kissing is toned down in order to convey at least some decency. But if the third party leaves the elevator, then the environment of society can again be disregarded, thus moving the oscillation back to the distinction between the systems of love and interaction.

As we saw, what was originally observed as passionate kissing (love indicated through interaction), became a question of decency (indication of love in a public space) as a stranger transformed the context from a private to a public one. This example might be banal and debatable, but it explains how the evolving context is constantly re-entered into a form, thus making self-reference reach more and more complex patterns. Complexity is reduced with complexity (see Luhmann 1995, 26). The model reveals how a specific "unity of difference" is constructed, and thus how a complexity is bypassed. In this case it was the unity of a situation where a couple was kissing in a public elevator and intruded by a third person, thus causing oscillation and irritation between love, interaction and society – all of which can be considered systems in Luhmann's terms. If the empirical case would show how the couple sustains the passion, then we would find an answer to whether the form is resilient, or whether it is a knot that suffocates itself, causing a turn to other communications.

We should take this trivial example carefully, as it displays how situations develop, whether they happen in interactions, in the decision-chains of organizations or in the inter-systemic irritations of society. This development is usually turned into stories, but we are trying to turn it into a pattern that explains why stories are so much needed, and how they relate to the emergence of small cultures. As we suggested in Chapter 2, we are at trying to look into how certainty is built into repeating situations of basal uncertainty, and how a more or less fixed reality tunnel often emerges so that this is possible. As Luhmann wirtes,

> Beginning is easy. Strangers begin by reciprocally signaling each other indications of the most important behavioral foundations: the definition of the situation, social status, intentions. This initiates a system history that includes as well as reconstructs the problem of contingency. As a result, the system increasingly is occupied with arguments about self-created reality: with handling facts and expectations that the system itself has helped to create and that also determine greater or lesser behavioral scope than the indeterminate beginning. Double-contingency is then no longer given in its original, circular indeterminacy. Its self-reference has been de-tautologized. (Luhmann 1995, 131-132.)

By saying that self-reference has been "de-tautologized", Luhmann means that as attributions are made reciprocally in a situation – often drawing from previous patterns and standard stories – the roles and expectations for actors start taking form. Each new irritation has to be incorporated to the previous ones, sometimes giving birth to new and surprising sense-making. In our small toy model, there was not a sign of any new sense-making, but in case of startup semantics we fortunately have real observations that will let us construct a more empirically guided model. But first, we will consider Baecker's (2006) form of the firm in order to have a clear staring for our model.

Firm as a Complex Form of Communication

In building the communicative model of the firm, Baecker attempted to venture beyond the simple observation that "firms" operate in "markets", while everything else is bundled together to form a residual category of "externalities":

> The problem we want to be able to address is that of putting organisation and management back into their social, including cultural, context. We take this task to be both a theoretical and a practical one. (Baecker 2006, 119.)

In order to build a model that depicts a complex form, one needs to begin by making the first distinction. Baecker states that this is the most arbitrary one: depending on the observer's position, one could always begin with other distinctions. The general way of observing firms is the distinction firm/market. Baecker, however, decides to go with the distinction "product/technology" as the first distinction. He defends this by noting that the firm always has to return to its product (or service) in its communications, especially when it is describing its purpose. Also, the primary question for any firm is, are we able to make this product? Or, should we change it in some ways? Technology refers here to the procedure of separating the product from a set of materials, skills and other possibilities.

In order to make sense out of the oscillation between product and technology – how to make the product, and make it repeatedly – the firm takes on a specific perspective on actions that build up to the product. This is where the semantics of "work" become important, operationalizing the oscillation between the product and the means to produce it. Work is done by members of the organization and with regard to decisions made by the organization. It thus brings in the context "organization", and constrains the initial oscillation with the distinction of technology/organization. The organization observes and re-arranges the primary oscillation as "work". As the firm observes itself as organization, it makes decisions about the product and technology and arranges work to fit those decisions.

The firm as an organization has to be able to draw a boundary between itself and its environment. For a firm, as a specific kind of organization, the main tool for this self-reflection is the notion of "market" (Boldyrev 2013). The oscillation between the organization (as a system of decisions) and economy (as a system of payments) is observed as a unity with the help of the semantics of "business". In this semantics, the organizations decisions, and its "work", have to resonate as payments in order to be considered valid. Here, the firm comes to observe itself as a unit, i.e. a firm, and here it starts to apply programming in the sense of observing the effects of its operations and thus controlling its own operations. This is where the form reaches "double closure", a point where it is not only able to operate (to distinguish a product in a repeated manner), but also able to regulate its operations (Baecker 2006, 132). The form has now reached some complexity:

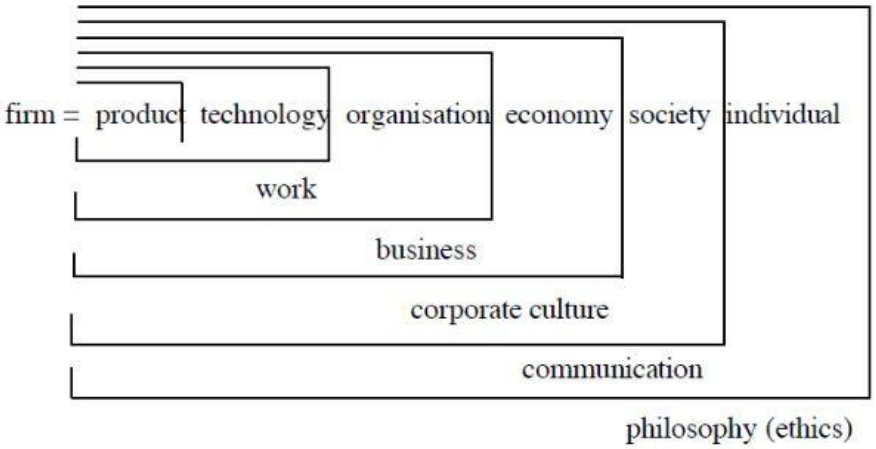
> Business means that by now the product of the firm is determined four times: (i) as the product a firm is able to identify; (ii) as the product a firm has (or, in some respects, lacks) the technology to bring forth; (iii) as the product for which an organization is able to define the work processes involved in its making; and (iv) as the product possibly to be marketed to the society's economy. (Baecker 2006, 132.)

The semantic form of “business” reduces complexity by referring to the question of “what is the business we are in” when trying to solve what product to make and how. However, as should be clear by now, this is not always possible, especially if the startup centers around a radically new product, service or business model. In these cases, observing markets has the risk of focusing too much on what is actual, and not enough on what is also possible, but not implied in the way that the markets are arranged. The problem is that anything might transform into a market sooner or later. This is a point that we will return to later, when discussing startups again. Another problem is that the “business” of the firm might irritate, and be irritated by, other systems in society. As has been clear for the past decades, corporate scandals and corporate social responsibility have become serious topics for corporate management. Baecker (ibid. 133-134) suggests that “corporate culture” marks the re-entry of society into the form of the firm: it is in corporate culture that a firm “compares itself to different social contexts (…) and identifies itself with respect to that comparison; that is, by distinction.” The firm cannot observe itself just as a firm in a market, but has to come to view itself also as a firm in society. Here, it has to come into grips with different environments offered by society, whether they are represented by other organizations, interactions or the various function systems of society besides economy.

The last distinction Baecker (ibid. 134-135) makes is the distinction between society and individual. Individuals are the environment of society, and there would be no communications without them. At the same time, however, individuals cannot appear in their full complexity in social systems. If this would happen, it would overtax social situations. Instead, individuals are entered into social systems in their reduced versions, as “persons”, who are taken into account in relation to the system at hand. The larger a firm becomes, the more it has to reduce the complexity of individuals, observing them, for example, as human resources, employees or customers. There is, of course, an attempt to bring back individuals by praising people as the “most valuable asset” of the company. More and more, firms are pressured to take individuals into account in a more holistic manner. This is also important point regarding startups, as we will later see.

With the variables of product, technology, organization, economy, society and individual, and re-entries of work, business and corporate culture, Baecker is able to construct the model depicted in Figure 32.

Figure 32: Form of the firm according to Dirk Baecker (2006)



The model makes clear how the firm can be observed as "a state of information that has to accommodate with all kinds of other information entertained by society" (ibid. 127). As Baecker (2006, 151) writes, the model is an attempt to avoid the common "oscillation between the assumption of rationality on the one hand and the deconstruction of rationality" (for an example of this divide, see Chapter 1 and its discussing about the CEO celebrity phenomenon). In the form model, we can observe on a general level how rationality is formed and layered, and how the firm is still able to observe itself as a unity. This unity can be seen as the basis of a firms identity, even if the firms self-description takes another route and paints a more linear narrative that is driven by actors and their motives (on motives, see beginning of Chapter 3 and Luhmann 1996).

Firm and Startup: Initial Reflections on the Differences in Between the Two Forms

It has been obvious fact from the beginning that a startup is not a firm in any traditional sense. But we should now formalize this with the help of our model.

Product

In Chapter 3, we saw how the startup narratives began with a product idea and resulted in the entrepreneur withdrawing into a garage, a dorm room or a similar safe space to create a product prototype based on the idea. The product idea was the initial push for the firm. To be fair, startup stories seem very explicit about equating the product with the firm, instead identifying with some more abstract notion such as the brand or the market position. This is further enforced by the fact that the startup and its product usually use the same name. It is important to note that, for a startup, the product appears in the early stages in the form of a "product hypothesis", i.e. it is not a version of an existing product category, but a speculation with a hypothetical product or product category.

Technology

Technology is also very central to scalable startups, so the first distinction of the form of the firm seems to hold. As we saw with narratives and the startup canon, there is often a strong idea about how some technology can, not only improve a product category, but also also disrupt the way this product category/market/industry is arranged. There are many similarities with the earlier "hacker culture", especially in the way that technology is observed as a liberating force. This is the disruptive side of technology. But besides the fact that technology enables new kinds of products to emerge, there is also another thing that it enables: scaling. A large part of the startup stories we have considered presented us with solutions in the form of digital platforms that the startup can sell access to over and over again. Access to digital service is not a limited resource, so scaling up the business can happen without having to build a new platform every time. This is the scalability of digital technology. Due to these two – the disruptive and scalable nature of modern technology – we might say that the distinction between product and technology is even more explicit in startups than in established firms. The main difference is that product appears mostly as a "product hypothesis" and technology often implies "scaling" and "disruption".

Organization

In Baecker's model of the firm, organization appears as the "work" that emerges when we try to observe a unity in the distinction between product and technology. Work is characterized by the constant changes that are

needed in the way that the product is built and offered. This arrangement, however, is not always in line with startup stories where the narrative proceeds through something resembling work, but not quite as the "work" appearing in organization. The founders spend some time testing the idea and toying around with it before forming a company. And when the company is formed, it can operate without revenue or investments, focusing on developing its product with entrepreneurial passion as its primary fuel. For the early days, tinkering alone – or together with co-founders – in garages and dorm rooms will suffice. Thus, instead of organization we actually see the individual entrepreneur or the co-founders together as a team enclosed in some location, where pressure to do business is minimized, giving full attention to developing the solution. As suggested in Chapter 4, the investors put great emphasis on observing the founder or the startup team, seeing whether they are truly passionate about their idea. Thus, when the product and technology is re-entered into itself in startup stories, it is done mostly with the help of other semantics than the semantics of "work". We will get back to this later.

Economy

Economy, is not as clear cut variable with startups as it is in Baecker firm. In the Baecker firm, economy is the environment that the firm is most sensitive to (it marks the "double closure" at the center of the model). Thus, in Baecker model, economy appears as the environment of the organization, forming the double closure of the firm, i.e. its ability to not only act as a unit, but also to observe itself as a unity. Startups, too, are able to return to the question of "what is the business we are in", when trying to solve what product to make and how. However, as should be clear by now, this is not always feasible, especially if the startup centers around a radically new product, service or business model. In these cases, observing markets has the downside of focusing what is actual, and not what is potential. The problem is that anything might transform into a market sooner or later.

First of all, we see that although a product might be tested in the market in a very early phase, seeking revenue from it is often delayed in order to be sure about the market potential, or to gain more momentum before finding a revenue model or seeking funding. The term "monetization" is in common use among startups – they seek popularity before seeking profits. We should also note that there is constant distancing going on here: semantics such as traction, scaling and pivot (see Chapter 4) described processes that are often a preparation for being a business and, following this, not business. Thus, it is not clear if economy appears in a similar or different way than in Baecker model.

Society

After the distinction between the firm and economy is established, the Baecker's model brings in "society", the collection of all other social systems that act as the firm's communicative environment. This means politics, law, mass media, interactions and all other systems causing irritations to the business, some of which will have to be turned into continuing communications. In Baecker firm, corporate culture was the negotiation of the relationship between the firms business practices and society. In startup semantics, society seems to appear as more observed environment – not just as potential markets, but as constraints to be bypassed with technology. now reachable through the mass media of internet.

Individual

Lastly, the form of the firm includes the "individual" as a context. In established firms, this appears in many forms, most notably in the form of employees who have very personal needs and goals, not always aligned with

the goals of the organization. The company has to take these into account as an important environment, but one that is often addressed only when it is too late. In startups, the "individual" seems to resonate more. This is understandable since in the early days of a startup there is not much else than the individual (or a group of individuals) starting the company, and even the customers appear as imaginary customers.

Reconsidering the re-entries in order to understand the dissonance between startups and firms

As we have seen so far, the environments appear in different ways compared to Baecker's form of the firm. Considering what we learned earlier in this chapter, this means that they are "conditioned" in differently. A startup communicates with economy in a different way compared to a firm – a somewhat obvious fact at this point. A question arises about whether we should re-name the re-entries, and whether we should change the order in which they appear in the model. This would naturally affect the order of the environments also.

Looking at the re-entries in Baecker's model, we could consider making minor corrections to the re-entries presented in the form of the firm. In other words, we would simply consider what "work", "business" and "corporate culture" mean for a startup. But this would lead us to operate with a priori conceptualizations, and not allow for variation. We would simply fill the word with another meaning, and not allow enough empirical complexity to enter the redefinition of the semantic. For this reason, we have proceeded – in Chapter 4 – by creating new conceptual bundles or "semantic categories". The concepts in these categories share some conditioning effect in reference to one, or many, of the social systems that are included as contexts in the model.

In order to begin arranging the form of the startup properly, we must consider some changes in the form model. It should be noted that these are "hacks" of the form model, and do not present an attempt to rewrite Baecker's (2006) general idea of the form model, nor his form of the firm. Rather, the effort goes into developing this modeling technique further so that it is ready to be used with observational data such as the semantic categories we formed in Chapter 4. The first hack is about opening the model to qualitative data by considering what the re-entries actually are in Baecker's original model. The second hack is about offering an explanation on why the model has six variables, and how we can make sense out of this rather complex structure by focusing on three "oscillators" formed by these six variables.

Hacking the Baecker model, Part 1: Uncovering re-entries through semantic categories

There is one major difference between my approach and that of Baecker's (2006) original model: whereas Baecker did not refer to the notion of "semantics" when discussing re-entries, I will do so explicitly. The question is, of course, whether I am radically altering the model while doing so. My answer is no, I am not. To my understanding, most of the re-entries Baecker offered for the firm can be seen as semantics, especially "work", "business" and "corporate culture". It is clear that Baecker's intention was to show how contexts take an operationalized form in communication, but we can observe the re-entry though semantics, as the model focuses on layered self-descriptions that make self-reference able to operate in more complex situations. The re-entries could be observed through operations, but the benefit of observing semantics is that we get to observe

how the system explains to itself – though self-descriptions – why it is becoming operative in a certain way, and then naturalizes this way of being operative.

The relationship between systems and semantics was well understood by Luhmann, although he did not formalize it in a model. As Pires (2013) writes,

> Luhmann was attentive to the fact that semantic evolution of social systems is always noticed in specific terminology, texts and discourses and formulates its shifting trends confronting the evolutionary variability of the systemic borders, structural and loose couplings and the emergence of particular communicative forms of the functionally differentiated systems of modern Society. In the social evolution of the systemic borders some meaning effects are used as certification criteria of modal changes, especially those connected to the formation of internal environments of partial systems.

What could be criticized in my approach, however, is the notion of semantics I am using. Luhmann's own semantic analyses traced semantic developments during hundreds, often during thousands of years. Here, my understanding of semantics is more indebted to Stäheli's (1997) and Andersen's (2011) writings. According to this approach, semantics can be highly cultivated or everyday semantics (Andersen 2011), serious or popular (Stäheli 1997). As Andersen (2011, 262-264) notes, we can place concepts in a sliding scale regarding to how institutionlized they are, but his does not validate them as semantics. What is of more importance is that they appear in clusters:

> We talk about semantics when not only individual concepts but a reservoir of concepts have been created, which are available to communication and which together construct a meaning space of possibilities that includes generalised expectations on the temporal, social and factual dimension.

Furthermore,

> We could say, for example, that sustainability as an empty concept has been turned into sustainability semantics once we see not only individual concepts associated with the sustainability concept but an entire reservoir, which makes it possible to communicate from the perspective of sustainability about a large number of themes in a symbolic way in all meaning dimensions.

We have seen – in the previous chapter – how startup culture is not a collection of empty concepts but a collection of semantics that all have a mutually supported counter-concepts. Now we will see what these semantics can be seen to re-arrange the social systemic contexts in society. In other words, we will interpret the semantics in terms of how they enable repeating environmental irritations to be taken as information. This is an important step inside this study, as combining semantic analysis and form modeling is one of the main ambitions of this research.

Besides systems, other environmental factors – such as fields and discourses – can of course affect the situations, but we will here keep at the level of systems. Systems are here seen as primary because of their resilience compared to discourses or fields – they are self-regenerating loops of communication, that have proven to be powerful in processing the double contingency of social situations. Thus systems tend to "flood" any "potholes" of communication, securing continuation. Fields and discourses and semantics, on the other

hand, are what take form and fixate after some systemic balance is found, and tend to evaporate as the systems lose their ability to create information out of each others irritations.

We will now make a small adjustment to the insights presented in Chapter 2: As sudden events open up new contingency and uncertainty, they are countered first and foremost by already operative social systems, but now making them form new combinations of communicative operations, e.g. new situational hybrids of payments, legal acts, political acts, etc.[69] Cultural transformations would thus be, at least partly, responses to the new constellation of operative logics or – being loyal to our chosen metaphor – responses to the confusion formed by the opposing currents that cannot be accounted for simultaneously, but have to be "pulled in" with semantics. Thus, culture seems to have some correlation with the mutual irritations of social systems, as logics are fitted together into a complex form, or dissolves into the opposing currents of function systems.

Having observed how the semantic categories fit between function systems, we might further postulate that an observer-culture – as a complex form of communication – appears as a collage of boundaries that simultaneously "separate and connect" (Luhmann 1995, 29). The semantics condition the way that this is done. As Luhmann (1995, 20) writes, "semantics govern what causalities are distributed to the system and what to the environment", and further: "a complex of "productive causes" can come together as a result of evolution (or subsequently, as a result of planning) and, once together, be in a position to assemble appropriate environmental causes". In other words, narratives are affected by the space that semantics have been able to carve in relation to systems. When a group of semantics starts to appear in unison – and as the surrounding social systems find new synchronicities and fresh couplings – a new pattern for "standard stories" is ready to take form. These standard stories offer new recipes for meaningful actions – i.e. recipes for actions that are able to resonate for both social and psychic systems.

The model does not explain why a culture has emerged, but it explains why it endures in society in the midst of various uncertainties. We might say that a culture endures, and is able to conserve its identity, if it is able to harness the energy of the opposing currents of various operative logics that are at play in society. A culture thus "packages" – via re-entry through semantics – the differing logics so that we can speak of a "unity" instead of difference, and thus reduce the complexity of the world in order to make prescriptions for action. The following model of the startup thus displays the specific "requisite variety"[70] (Ashby 1958) that the startup observer-culture has developed – i.e. the cultures ability to address various systemic logics without losing the sense of unity in self-descriptions. This requisite variety keeps the observer-culture of startup entrepreneurship operative in a situation, where new kind of wormholes are needed to connect different logics of communication. It is an answer to the question that we posed in the introduction: why is startup entrepreneurship able to support itself as a differentiated observer-culture in society, as one could very well observer it simply as entrepreneurial action with some technological and financial "flavoring"? Where is the specific need for its conceptual toolkit located?

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[69] For a discussion of function systems and their logics, see Roth & Schütz (2015).

[70] Ashby's Law of Requisite Variety has been stated in many forms. Basically, it suggests that only variety can destroy variety, and thus enable a system to maintain dynamic stability. This simple insight is valuable when we want to understand why some form of differentiation, and thus increase in complexity, emerged in a system. In simple terms, as systems increase the array of actions available to control situations, they increase the variety of perturbations that they are able to compensate. Of course, while gaining variety, systems can become too complex for themselves, thus having to respond to their own perturbations also.

If we make this hack to Baecker's model, then we are able to trace re-entries that an observer-culture makes by looking at the changes in the surrounding semantics. With this "hack" in place, we now have a new definition of what the form model is and what it does (even though this iteration might not do justice to Dirk Baecker's original ideas):

> *The form model – in the context of the present study – is a second-order observation that constructs a map of an observer-culture and, as such, tells us two things: (1) the conditioning and constraints for inclusion that the new observer-culture has for various communicative contexts and their operative logics, and (2) the emerging worldview that this observer-culture entails as it re-arranges meaning environments by offering new "wormholes" – new structural couplings – between them.*

Hacking the Baecker model, Part 2: The Three Oscillators of an Observer-Culture

Another reason why Baecker's (2006) model is not easy to approach is that the positioning of variables on the model seems somewhat arbitrary. In other words, it is not always clear why something comes first and why something is seen as a more distant environment inside the model. However, when he addresses the notion of "double closure" of the form (see 2006, 132), then we see that the positioning of the variable in the form model matters a great deal. In the center of the model, where the double closure takes place, the form can not only operate, but also elevate itself to reflect the first distinction inside a second distinction. For the firm, this double closure emerged when the firm was able to oscillate between organization and economy, thus reflecting on the first distinction from this elevated position.

> Business means that by now the product of the firm is determined four times: (i) as the product a firm is able to identify; (ii) as the product a firm has (or, in some respects, lacks) the technology to bring forth; (iii) as the product for which an organization is able to define the work processes involved in its making; and (iv) as the product possibly to be marketed to the society's economy. (Baecker 2006, 132.)

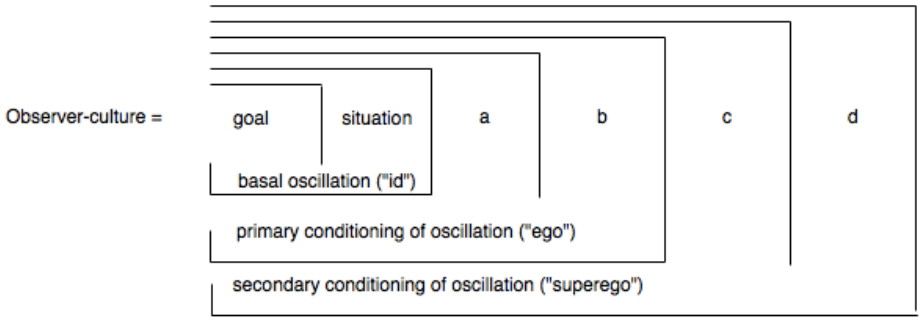
Double closure is the level where the firm is able to operate in a reflective manner compared to the distinction of product and technology which does not include self-description as a firm. The firm observes itself as an entity. The double closure is the level on which a self-observing system regulates its operations (Baecker 2006, 132). A firm prefers to view itself as a firm operating in a market. However, Baecker is keen on setting at least six variables, thus going past the initial oscillation and the following double closure of the form. Here I think he arrives at an idea that has interesting parallels to Freud's ideas on the three layers of the mind. The model containing six variables can actually be observed as the interplay of six distinctions, and the two distinctions between them. If this is so, then an observer-culture would have a reflective structure somewhat similar to the id, ego and super-ego that Freud considered to be the three parts of the mind, or more specifically, three parts of the "psychic apparatus" (Brenner 1974, chapter 3). Much like the ego mediates between the id and superego, the level of double closure seems to mediate between the more impulsive basal oscillation and the constraints that come from the outside. This is not to say that cultures are "exactly like minds" – they are not. Rather, we

might suspect that Freud discovered something more general than a theory about the complexities produced by the human mind.[71] He was, perhaps, an accidental systems theorist.

In Freud's model, the id was the seat of psychic energy (Hall 1979, 39-40). In our form model, the first distinction is a kind of "social energy" as it is the basal oscillation that energizes the model. The ego, on the other hand, has no energy of its own, but has to draw its energy from the ID. It is thus a layer of reflection positioned above the id that enables more complex reflection and identification, thus helping goal-seeking behavior (ibid. 41-46). The ego "monopolizes the store of psychic energy" and can use it for other things than satisfaction of instincts (ibid. 44). The super-ego then represents the knowledge about rewards and punishments, and is thus more restricting and less enabling compared to the ego (ibid. 46-49). Superego can act as a useful guide – especially in situations where one benefits from altruistic behavior – but also as an immobilizing straightjacket that suppresses the energy of the id. To summarize this in a simple way, we might say that the ego is constantly forming in between these two forces, the basal instincts of the id and the knowledge about punishments and rewards that we call superego.

With observer-cultures, it seems, we can see a similar tension: the communicated goal-seeking behavior appears as a basal oscillation that produces the energy of the observer-culture. The "energy" of this oscillation is then reflected inside other distinctions. For the firm, the first reflective distinction was the distinction between organization and economy – here it reflected itself as a unity (firm) against what it was able to conceptualize as its environment (market). The further-most reflective distinction, which can be seen resembling the superego, was the distinction between society and individual, where the firm was forced to reflect on what lies beyond the abstractions of organizations and markets, i.e. constantly evolving semantics and communicative forms (society) and even the human beings (individuals) producing this uncertainty. This level of reflection could irritate the conceptualization as a firm in the market, but it can also be seen as a key to success, especially in a world where content marketing and the ability to leverage detailed cultural insights can offer a clear competitive advantage. If we hack Baecker's approach this way, then we can focus on the interplay of these three distinctions as depicted in Figure 33.

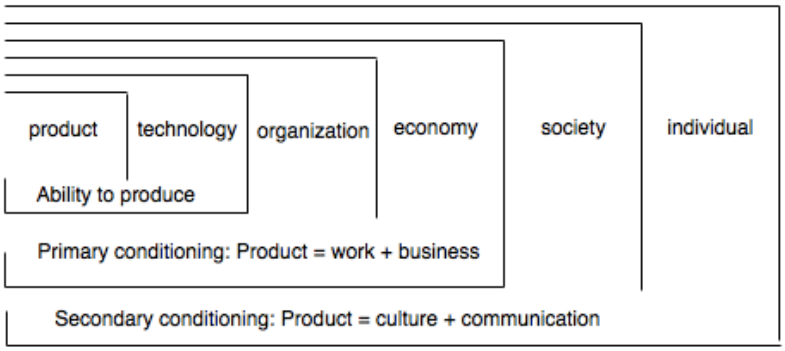
Figure 33: Dynamics of observer-culture seen as similar to Freud's idea of the dynamics of personality



[71] Although the theories of Freud might not be very popular at the moment, he was the first to address the complexity of the human mind, and to address the fact that the mind does not reflect everything it does, but rather operates mostly beyond its own understanding.

For the firm, the basal restlessness of finding the skills/tools/materials to produce the product is elevated through reflecting it against taking a position in a specific market (oscillation between a and b), and finally through reflecting it against uncertainty of cultural shifts and the individuals that can never be known (oscillation between c and d). It is in the oscillation between a and b that a traditional firm processes its self-description – i.e. through reflecting itself in a market. However, a more holistic understanding of this identity demands that we look how it takes place in between the basal restlessness of the firm and the constraining secondary conditioning of this oscillation.

Figure 34: Form of the firm represented as oscillation and two levels of reflection



Now, we can say with increased confidence what the positioning of some environment means. Thus, this second hack of the Baecker-moidel leads, again, to a slight redefinition of the model. As a result, we have a view on how the model can be observed as the interplay of three oscillators. Following the definition we gave with the previous hack, we now have the following guideline for reading the model:

> *The form model makes visible the dynamic between three oscillators – the basal oscillation of simple goal-seeking in the left side of the model, the reflective oscillation on the right side of the model, and the operative oscillation on the middle of the model. The operative oscillation is what we call the preferred level of self-description of the observer-culture. The basal and the reflective oscillation are primary in the sense that together they create a double bind for the operative mindset, and thus largely define its form.*

Unity/Difference: The Complex Form of Startup

Now it is finally time to construct our model of the startup observer-culture. We have all the different pieces we need: the semantic categories, the form of the firm model to guide our own construction, and our insights on how to proceed with this specific case.

Scalable technology as the context for a new product hypothesis: from uncertainty to ambiguity

As Baecker writes, his model is a constructivist model. This means that the first distinction we draw is arbitrary, but we "try to become less arbitrary as we proceed" (Baecker 2006, 127). We could begin our inquiries with many other distinctions, but what is decisive is that we have decided to compare startups with Baecker's form of

the firm. Thus, we take the distinctions suggested by him and consider their worth for our model before suggesting alternative distinctions or ways of arranging them.

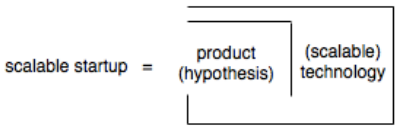
The first distinction in the form of the firm is product/technology, and it seems to hold up well. The startup narratives center around the product finding its final form. These stories are more about how the product came into being (see Chapter 3 and Chapter 4). There are minor changes, however. For example, the product is often a "product hypothesis", or a product without a clear revenue model, and with expectation that it will be heavily iterated on before it finds its final, possibly disruptive, form. It a possible product that has to go through "initiations" of different contexts before it becomes a real product that produces revenue.

The technology, also, has slightly different connotation when it comes to startup stories. For Baecker (2006, 129), technology was observed in the broad sense as "both the technical and social procedures that are available to make the product". With regard to startups, technology can also be observed in the literal sense of the word, i.e. as technical tools, because the scalable startup phenomenon has emerged with information revolution. However, and this is important, the technology is what enables the scalability of the product. This could happen in many forms, but usually scalability is about web based services or products that save production costs (see Chapter 4).

The oscillation between (scalable) technology and product (hypothesis) presents itself as the uncertainty that is returned to in almost every instance. This uncertainty is due to the product being a product hypothesis, and not yet connecting with the potential market it is after. The scalability that comes with the technology, on the other hand, keeps the stakes high, and is thus able to irritate speculation on product hypotheses.

As we already stated in Chapter 1, the specific "startup uncertainty" is there because the product lacks stable reference points in economy and society. There are no users; or if there are users, there is no market; and if there is market, then maybe there is no way to monetize the product. But, as we have seen in Chapters 3 and 4, the entrepreneur does not observe it as uncertainty, nor do the investors. There is, however, a constant sense that things could be done otherwise, and that a product could easily conquer the world through technology.

Figure 35: The product/technology distinction and the initial ambiguity



Individual (or "Interaction") as a context for product/technology oscillation: "passion", "intuition", and the playful startup spaces

As I noted, the first distinction – product/technology – holds fairly well in the case of startups. It is only slightly altered by the fact that the product is, at the beginning, a hypothesis, and by the technology implying scalability. This merely makes the startup a more future oriented and more theoretical firm. What is not so obvious, on the other hand, is that instead of the organization, the individual appears as the context when the first distinction is observed. This is visible in many different ways.

One indicator of this is that the work-efforts that the startup entrepreneur refers to rarely fit the semantics organized work that dominates established firms. Instead, the "working" here appears either as playful or obsessive action, often seen as something that should not be too much governed[72]. Whereas the traditional semantics of “work” leaves “leisure”, “play” or "slavery" as its unmarked side, the work of a startup blends these together, thus confusing the difference made by the traditional semantics of work. The entrepreneur appears as a slave to his own idea, but also depicted as playful and leisurely character (Chapter 4). As we observed in Chapter 4, the work/play re-entering itself in the startup semantics can be depicted as "playful membership" (Andersen and Pors 2014). It is a conceptual space where work is mistaken for play and play for work. This is not exclusive to startups, of course, but very explicit in them. In startup semantics, this should not be confused with the notion of “creative work”, although there is creativity involved. The problem solving that happens in “programming” and “coding” might be seen as a form of creativity, but technology is given too large role as an actor. It is as if the entrepreneur is repeatedly asking a question of his product and/or technology: "what problem are you here to solve?"

The concept of time, and its sociological implications, are of essence here (see Elchardus 1988; Luhmann 1976). Time is always system-specific time, created by the rhythm of the systems opearational flow. We might say that unified chronological time is a simplifying construct, while on the outside this construction we have a world of “entangled flows” (Hernes 2007, 85) of different systems. For example, the time of economy is not the time of politics, which causes irritation to both systems as politics often lags behind economic operations and observes them through its own operations. To overcome the lag, politics has attempted either to slow economy down through regulations, or by synchronizing itself with economic operations by becoming more “neo-liberal” and thus giving economy more space in political decision making (e.g. Bob Jessop speaks of capitalism challenging the "time sovereignty" of political decision making, see Jessop 2015, 207-209).

In the culture of startup entrepreneurship, we see a similar love-hate-relationship with economy, but with a different response. The startup has to either attune itself to the timeframe of economy, or “quarantine” itself from outside irritations, especially the ones that enforce a strong coding. This is why organization and economy are included in a more careful manner, and after considerations. They are strong forms of fixing contingency (instead of keeping it open) – the organization with decisions, the economy by observing payments as the positive side. In startup observer-culture, we have the intuitions and passions of the entrepreneur reflected on society through the semantics of resonance. But before this connection can be made, the uncertainty of forming a product hypothesis and taking it forward has to be secured. This is done though startup-spaces (garages, dorm rooms, accelerators, startup mansions, etc.) that separate the entrepreneur (individual) or the startup team (interaction) from outside pressures. In startup heterotopias, and in the conceptual setting they enable, a mindset of open contingency prevails – i.e. things could be otherwise, and one can always turn the idea around.

Thus, semantics of retreat form the first nesting for the basal oscillation. What seems important in this nesting, is that no organizational time nor economic time enters the early startup. In other words, the time flow of an early startup is not measured in decisions acting on decisions, nor in payments connecting to payments. Instead, it is dominated by the time of the individual(s) retreating to work on a problem, and, after that, taken over by

[72] There are various examples of this in Chapter 4, but the most striking ones are the attempts to erase middle-management (Google) or hierarchy (Valve) from the firm, as if to substract the organization from the organization.

the time of mass media, as the internet resonates in unpredictable ways with the emerging product. Decisions and economic considerations appear as possibilities, but not as time-frames that govern the action and sense-making of the entrepreneur.

The concept of heterotopia (see Chapter 4, Semantics of Retreat) fits together with our findings about the retreat episodes in startup stories and the institutions that have formed around startup culture. The entrepreneur cocoons into a space outside the business world, or in the case of the forest coder, outside civilization. For the observers, the entrepreneur is at the same time full of promise, but also full of confusion. It is not clear if he is forerunner, or simply missing the point. It is unclear what to make of the startup until it gains resonance in some other system, thus causing further irritations in other social systems.

We might say that heterotopias present us with a "nowhere" only in a very specific sense: they are designated as cultural residual categories where complexity can be left as complexity without simplifying formulas appearing. In this way, heterotopias are parallel with "communication bans"[73] that resolved complexity simply by avoiding the topic or blocking further contributions to the topic. But in heterotopias, one might say, the communication ban was bound to a specific time and place, and then lifted.

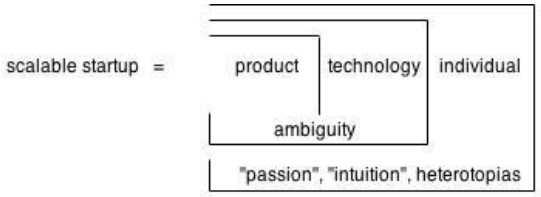
Heterotopias are connected to time, i.e. that outside the everyday observation of chronological time, there is a world of “entangled flows” (Hernes 2007, 85) where different operations connect in different speeds. Indeed, one of the principles of heterotopias is, according to Foucault, that they are often linked to “slices in time”. They open up into “heterochronies”, different conceptions of time. Thus, a heterotopia “begins to function at full capacity when men arrive at a sort of absolute break with their traditional time” (Foucault 1986). A startup is easily destroyed by economy, where payments have to give birth to payments. And vice versa, economy is easily disturbed by startups, that might attract payments without connecting with further payments. The heterotopia enables a hygienic distance, keeping chronological time out, keeping discouragement at its minimum. Startup stories naturalize this later on, and – as we saw in Chapter 3 – the pattern in which one tells such story is highly formalized and repeatable (in reference to this, see discussion on Lévi-Strauss in Chapter 2).

As we saw in Chapter 2, an individual presents too much complexity for social systems and other individuals, and thus need to be categorized. Most of this categorizing results from our involvement in social systems, where individuals take the form of "persons" (or "roles", when we want to be specific) in regard to the social systems themselves. This way, complexity presented by individuals can be processed without mulling over their different qualities. In his model, Baecker took this as a matter of philosophy, of reconciling the relationship between the firm and various individuals, but in startup stories we have an attempt to use the complexity of the individual as an opening of new possibilities. And at the beginning of the startup narrative, the potentiality is located in the complexity of the entrepreneur – often in the semantics of eccentricity, intuition and passion (see Chapter 4). In these semantics, and in the "nowhere place" of heterotopias, there is more room for the complexity, when individual human being is observed as a reference point. More can be checked off as fitting some invisible rationality of the individual, contained in his hidden thoughts. For the startup organization this enables a flow of perturbations even in the absence of any feedback from customers.

[73] For a short discussion of “communication bans” as solutions to complexity, see Luhmann’s Theory of Society, volume 1 (2012, 138-150), and the sub-chapter on ”Morality and the Secrets of Religion” in Theory of Society, volume 1.

I will here follow Baecker and keep individual as one environment in the model, although I do not completely agree with his decision to insert something besides social systems into his model. We could bypass Baecker's decision to incorporate individual into his model and replace the individual with a social system of interaction. This is plausible in our model of the startup, as it is through the playful nature of the startup spaces, and due to the happy accidents that they provide, that the product/technology-distinction is allowed to oscillate in a freely. That is, free of wider resonance among communications (society) which would saturate it too early with either decision communications (organization) or competition and profit communications (economy), thus narrowing the focus with systemic logics. This could be expressed in another way, i.e. through Luhmann's conceptualization of "trust". If confidence in more established systems is weak – as is with startup entrepreneurship – then one needs to fall back on "trusting", which always includes the risk of having your trust betrayed. Trust is a decision (see Jalava 2006), and thus always includes considering a risk, something that simple confidence does not include. This risk can be alleviated by building up familiarity between the participants. As we have seen, this is something that the various startup spaces seem to do quite well – they do not "organize" so much, but rather "familiarize" the participants with each other and with technology.

Figure 36: Individual (or interaction) as an operational context for stabilizing product/technology-oscillation



What is gained by this form in which the individual is brought in through the semantics of passion, intuition, and the heterotopias? At least we can see that the uncertainty of the product/technology -oscillation is stabilized by attributing everything primarily to the individual and/or to the startup team, and supporting this attribution with the common regalia suchs as the startup spaces that remind one of the canonical startup stories – a sense of continuation is offered in relation to other examples. It seems clear to me that the narrative form, the semantics and the heterotopias point to programmatic solutions for transforming the initial uncertainty into "ambiguity".

> "Ambiguity is not the same as uncertainty. Ambiguity can be looked at as "having not quite made sense yet." The "not quite" and the "yet" are important, since they indicate a hoped-for future state when the ambiguity will be abolished and sense will have been made. Common sense will yet prevail. By contrast, uncertainty is the lack of willingness to act. Ambiguity can lead to uncertainty, but you always have the choice of acting. When you act, you act as if you were certain. This "as if you were certain" posture underlies all purposeful action and affects potential actions. " (Lissack and Roos, 1999.)

Ambiguity is reached by offloading the uncertainties into the black box of the individual, who – according to this form of communication – might know something through his "intuition", or might force his dreams to become reality through sheer "passion". Thus, the product/technology-distinction becomes one that can sustain more uncertainty, mostly thanks to the hero-figure of the prophetic entrepreneur. The distinction of technology and individual – and the emerging unity of this difference – make actionable something that does not yet have connectivity in society. Everything that cannot be processed in the current social systems can now be attributed to the complexity hidden in the black box of the individual. Here, in the episodes and semantics centering on the

entrepreneur, we see glimpses of passion, intuition, and of the individuals ability to "dwell" in technology. In these semantics, and in the individual appearing as a context for technology, we have a positive "ambiguity" about the product as a viable solution to a problem. Furthermore, we have seen how the entrepreneur observes current markets and/or technologies as "contingent" – as something that could be otherwise – thus translating uncertainties into mere ambiguities.

According to Luhmann, the increased role of the individual as an explaining factor in modern society is simply its ability to stand for unknownness of the future. The heroic and popular individual expresses originality but, while doing so, exposes himself to people who are under pressure to copy ever new "individuality patterns" (Luhmann 2013, 265). Furthermore, in the modern functionally differentiated society where temporalities are fragmented between function systems, the individual is needed to fill out the inconsistencies between the systems and their different temporalizations. Successes and failures can be attributed to individuals, thus enabling the social systems to operate without excessive self-referentiality. As Luhmann writes,

> Among the hardly ever stressed but probably most important reasons why the modern age favours the individual is that individuals are conceived of as persons, and in this form they can symbolise the unknownness of the future. One can know persons – but one cannot know how they will act. (Ibid.)

And as temporalities are fragmented between functional systems in modern society, there is an "intensified disconnection between past and future" that society has to solve. The intensified inspection of persons and their motives, often reflected on in narratives, is what enables society to make sense out of the conflicting temporalities of the functional systems (see Luhmann 2013, 265). The inherent vice of this sense-making is that as the temporal and social dimensions find semantic solutions through narratives, persons and motives, the functional dimension is seldom considered. The functional dimensions, or fact dimensions as it is often called, is what interests us, because it is the dimension where we get to observe how meanings are differentiated in the most basal sense, i.e. how they function in relation to other meanings.

Considering the individual as a more central context for the startup enables us to see why startup entrepreneurship appears to have a strong sub-culture and is often accompanied with a very distinctive lifestyle (see Chapter 4). Also, the retreat of the entrepreneur into heterotopias is now observed as oscillation in technology/individual divide, where possibilities are opened, but where nothing has to yet connect to any logic outside this divide. The startup heterotopias are spaces where this can happen, and where this can be accelerated without distractions. How does ambiguity turn into something of relevance? This is where society starts to haunt the startup.

Society as a context for technology/individual oscillation: "traction", "disruption" and the overflow of contingency

Society – referring to the complexity of present communications – appears very early in the form of the startup. We saw that the product, often being a product hypothesis, caused problems for addressing it technologically. The production was of the product was endless prototypes, and individual was there to absorb the complexity of the situation. What can not be rationalized away, has to be observed through intuition, passion and identity of the entrepreneur. But this is a dangerous pattern if the product development becomes a personal project that is never tested with potential users or customers. The entrepreneur might be fooled into developing his product in

silence for too long – this often leads to long development time that ends when the product is shipped, but there is no response. Startup methodologies and guidebooks go to great lengths to help entrepreneurs avoid this autistic mentality in product development. Conceptual tools such as “build-measure-learn” -cycle, “minimum viable product”, and “continuous deployment” address this problem well (see Chapter 4 and Ries 2011).

The more general “fail fast, fail often” mantra, and the whole culture of failure, is also connected to the different modes of observing startup through individual and through society. The individual entrepreneur should also seek “feedback” or “validation” from possible users or customers. Here, the word market might be used, but it appears simply to observe possible demand for the product. The focus is on people expressing interest for the product. When this interest is found, it is observed as “traction”, i.e. as the product being able to connect through communications, if not yet in the form of payments. Why not simply talk about “interest for the product”? As we observed in Chapter 3, the semantics of traction appear as the entrepreneur brings his idea into contact with larger society, but outside the normal economic indicators of “sales” or “revenue”. It is a more gentle indicator, telling the entrepreneur and the investors that there might be something there. The unspecified nature of traction suggested that it is the equivalent of “intuition” but for social systems. When traction is implied, there is something there, and the startup should continue in the same direction.

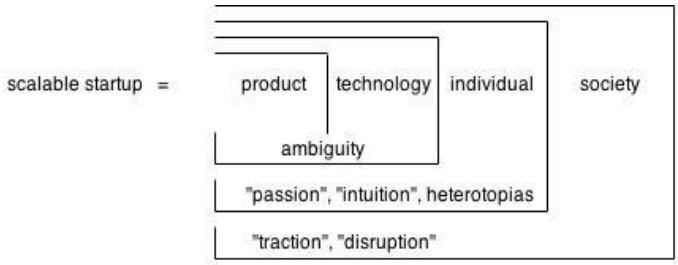
Another semantic for re-entering society into the form, but expressing more about the ideology that goes with the form, is that of "disruption". Of the startup semantics discussed in Chapter 4, disruption was also, in addition to traction and scaling, observed to imply society. The fact that disruption is often articulated as the disruption of some market does not change this. On the surface, disruption always suggests changing the way some product category or market segment operates, e.g. how people consume some service or product. Often this change takes the form of an expensive or difficult form of acting or communicating becoming widely accessible through a technology offered by a startup. But as we observed in Chapter 4, the change is not merely a change of market, but implies a transformation of society through technology, thus switching the flow of communications (in Luhmann’s sense of the word) in one way or another.

The notions of "traction" translates the experiences, intuitions and innovations of the individual entrepreneur to a wider society. “Disruption” plays a slightly different role as concept: it observes the individual/society distinction the distinction between the customer, or citizen, and the society – or between interactions and wider society – and the startup as the necessary reconfiguration of this relationship. In Luhmannian terms, we can speak of transformation of the "structural coupling" between individuals and society, and leaving it as a secondary question as to how these mutations in communications are able to resonate in the economy. It is of course clear that not all startups are "communications startups" such as social media startups, but this does not change the fact that they are seeking to find new shortcuts for doing things with technology. It is because of this that society is re-entered as a solution to the previous individual/technology distinction and the oscillation trap it entails.

Traction, scaling and disruption are thus semantics that re-enter society into the form of the startup. The problem we see here is that many things can be interpreted as traction, as scaling or as disruption. This is where the organization becomes a necessity as there is increasing pressure to make decisions about what is scalable and what is simply personal experience that should be cut out. The team of individuals has to be more than just

a team, and start referring to decision that cut off what does not resonate as "traction", or that does not suggest some kind of "disruption", whether understood in the loose or strict meaning of the word. We now move on to consider how, and through what semantics, the "organization" as a context is re-entered to the form of the startup.

Figure 37: Society as an operational context for stabilizing technology/individual-oscillation



Organization as a context for individual/society oscillation: "pivot", "scaling" and startup methodologies

The semantics of experimentation enable the startup to operate in a mode where it can eternally turn its idea around. This is best crystallized in the concept of pivot. There are various kinds of pivots (see Ries 2011, 149-178), but they all refer to decisions about changing some core idea of the startup, i.e. what it is and what it does (Twitter and PayPal were mentioned in Chapter 4). It is not just a doing something differently than was previously decided, but radically changing some aspect of the business whether it is the market the firm operates in, the product it offers, or the customer segment it decides to go after. At the same time, however, it is advised that a pivot should not be an impulsive jump from one vision to another. The whole point of pivot is that the startup stays grounded in what it has learned so far. The concept of "validated learning" and the build-measure-learn cycle that we already mentioned are important components here.

Our semantic analysis of pivots, as well as the "fail fast, fail often" mantra, led us to observe how these semantics contain a paradox – they enable the startup to trivialize past decisions without simultaneously creating an identity crisis for the startup. The startup is allowed to redefine itself in a more fluid way. It does this by trivializing its past decisions and decision premises in favor of securing future decisions. In this way, pivots can be observed as the re-entry of organization (as a context) into the form of the startup.

The actual event of a startup pivot can be difficult for investors, who had previously invested in the startup thinking that the plan was clear and just waiting to be implemented. However, the pivot as a semantic naturalizes this oscillation between what has been observed in society (as a new kind of "traction" perhaps) and how the startup observes itself as an organization that is built as a difference derived from this observation (the "startup" as decisions that are reactive in relation to society). In this way, the startup is able to override what has been decided or promised investors, and the investors can observe this changing of course as making sense. The semantics of pivot provides a formula for sense-making that not only explains action, but also guides action.

Another semantic that operates on the level of organization, and that has a special place in startup culture, is "scaling". The semantics of "scaling" is a continuation of the concept of traction – whereas traction is the sign of resonance, scaling is the methodical attempt to increase this resonance. It suggests that traction can be

methodically grown, and grown in exponential fashion while the organizational infrastructure stays “lean” (this is partly where the “lean” in Lean Startup comes from).

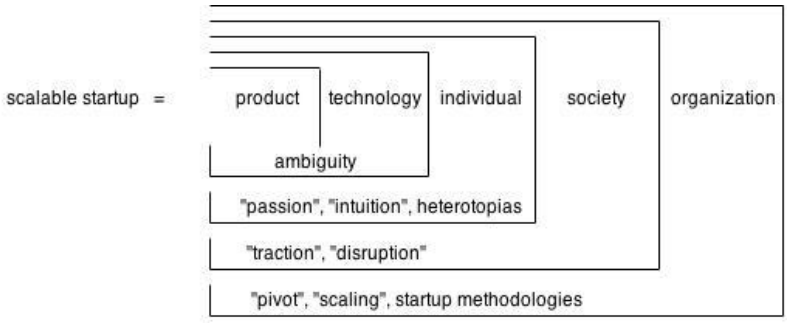
Scaling is sometimes referred to in economic terms, especially if the startup already has a revenue model and a customer base. These enable it to scale the revenue while scaling the traction. Often, however, it is scaling ahead of revenues, as was the case with Facebook, for example. In situations like these, there are economic considerations in the form of imagining the value of the market that is captured, even though the market is not captured through economic operations, but merely through communications (through "users", not "customers").

In Chapter 4, we observed the notion of "premature scaling" as an example of why we should understand scaling as something to be considered as growing. "Premature scaling" means that the product development is still in such early stages that scaling would only bring moderate growth and then possibly stagnate the growth of the startup (see Marmer 2011). Growth itself is not the issue here, but rather the tendency to allocate too much resources to growing. A good definition for premature scaling is thus

> spending money beyond the essentials on growing the business (e.g., hiring sales personnel, expensive marketing, perfecting the product, leasing offices, etc.) before nailing the product/market fit. (Furr 2011)

There are many indicators for knowing when to scale up, and the above "nailing the product/market fit" is one such indicator. But, again, the product/market fit is to be understood in a more general way, i.e. as a product/user fit that leaves considerations about the revenue model for later.

Figure 38: Organization as an operational context for stabilizing individual/society-oscillation



Economy as a context for society/organization oscillation: “monetization”, “pitching” and the startup as the self-fulfilling fantasy of venture financing

Observations that emphasize the startup as an organization, and refer to the product as a product of an organization, bring about questions of continuity and accountability. How can the product be made in a continuous fashion while resources are scarce? Economy is the obvious answer for this and it starts intruding the form of the startup. The operations have to continue, while the organization follows traction and attempts to scale it up, pivoting where needed. Overcoming scarcity through economy can take various forms, and this is obvious with startups. But in startup semantics, this economy appears rarely simply through “sales”. Rather, it takes more complex semantics of “funding”, “valuation” and “monetization”. With these, the startup appears as

an object of economic action – a second-order communication of economy instead being communications of the first-order, i.e. payments.

The most telling of these concepts is “monetization”. When this concept is dominating the communications, we have taken a step back from simple notion of “traction”, and have begun to condition it from the perspective of economy. Traction is then re-considered from the perspective of payments and business opportunities. Monetization can mean a variety of things, but often it is used in the sense of implementing a revenue model on top of the startup’s operations, selling the company, or making an initial public offering (IPO) in the stock market. What is striking in monetization is that these very different things appear condensed in one concept, and a concept that is widely used in startup circles. It is often mentioned in same situations as “exit”, a word that is more revealing. Exit refers to the way the entrepreneur will leave his company and make money out of it. The questions “How do you plan to monetize?” and “What’s your exit strategy?” are often interchangeable.

The concept of monetization is as opaque as many of the other startup semantics we have covered. As such, it leaves a room for potential meanings, i.e. monetization can refer to many different ways of “getting paid” such as securing funding, finding a revenue stream or doing an initial public offering. The term is more inclusive than exclusive, and startups are able to make widely different decisions on how to make money, or whether to worry about it at all, while being able to share a cultural space with other startups. The exact form of monetization does not define the startup, nor does the lack of any actual monetization. This is parallel to the way that a firm does not define itself by reflecting on society (here taken as the totality of communications), but models its identity in a more controlled manner, in relation to economy and “the market”.

These semantics help re-enter economy into the form, but they enter it in a distanced way, as if seeing the startup as a product entering the economy, not as the producer of the product. It is not too far fetched to say that the startup commodifies itself as a scalable startup, and it sells this image to venture capitalists. The actual scalable startup is not sold, because it is, often at this point, still a vision more than reality.

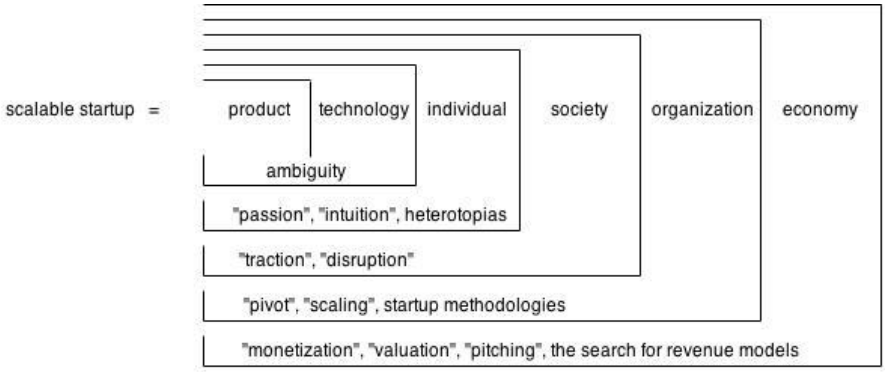
This does not mean that economy does not matter for startups. It does. The funding and monetization are often important lifesavers and incentives for startups. Even if there is revenue, there is rarely enough. Money is needed, especially in their early days or when attempting to scale up. And, on the other hand, the personal motives of the entrepreneur can always center more on wealth creation rather than on building a great product or creating an entrepreneurial empire (Schumpeter).

Of course, culture – or sociology for that matter – cannot tell us much about the inner life of persons. Thus, for a single entrepreneur, economic prospects of his company can matter a great deal more than the actual disruptive possibilities. So what does it mean that economy is reflected from some distance, as if avoiding the self-reflection done through market? With startup semantics, it seems that we have a sub-culture that has its identity carved out on another level, and then fed into more economic reflection. This is contrary to the form of the firm, where the organization-economy-distinction was in the center. A firm aiming for a steady linear growth will build its organizational self-description around the firm/market distinction, thus forming an identity in a clear reference to the system of economy. For a startup this would be precarious, and the identity centers around the entrepreneur (individual) attempting to find traction (society) for his idea.

Thus, there is a clear switch in the way that firms and startups organize systemic environments. We will consider the implications of this contextual switch-up in the next chapter. The most notable thing, however, seems to be the fact that startup observer-culture achieves its double closure in a more general way compared to the firm, and builds its relationship with economy afterwards, when economy can be brought in as second-order observations that focus on the resonance that the startup has created. Thus, the formation of the self-reflective identity on the level of society precedes the structural coupling with economy, quite contrary to the form of the firm -model.

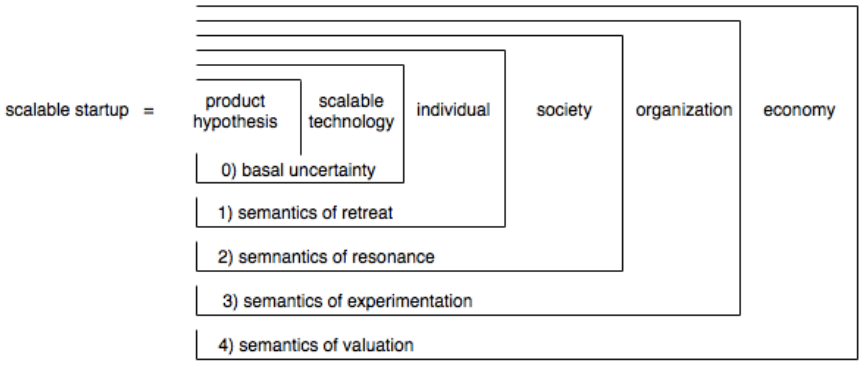
As was observed in Chapter 4, monetization marks the startup's end of the road as a startup. It starts encountering problems that it did not have previously, and it has to "grow up" as a company. As we saw, this does not happen easily. We have seen how the startup firms rebel against managing themselves and would rather emulate the semi-anarchic and playful state of a startup in their established form. This has produced interesting and often comical results, where the bottom line seems to be that a startup cannot bring its identity into its established form. Rather, the form of the startup then switches to something resembling Baecker's form of the firm, where the burning questions are "what market we are in" and "how can we keep the market". The organization/economy distinction is made central, and society and individual become externalities. As this happens – as the form of the firm emerges in an established startup – the search for communicative possibilities (semantics of resonance) is replaced by the search for payments (business), and the culture cannot sustain a relationship to the open complexity that was faced when the firm was a startup.

Figure 39: Economy as an operational context for stabilizing society/organization-oscillation



Now, if we use the names of the semantical categories, then the model looks like the one in Figure 40. The observer-culture of startup entrepreneurship creates a blind spot with regard to current market competition in order to tap into the possibilities that have not yet been monetized. Economy is observed as something culturally distant – i.e. it appears on the far right of the model – while in reality it influences almost every detail in startup culture. The self-description happens in the oscillation between the individual (her intuition and deduction) and the society (finding a connection with actual communications).

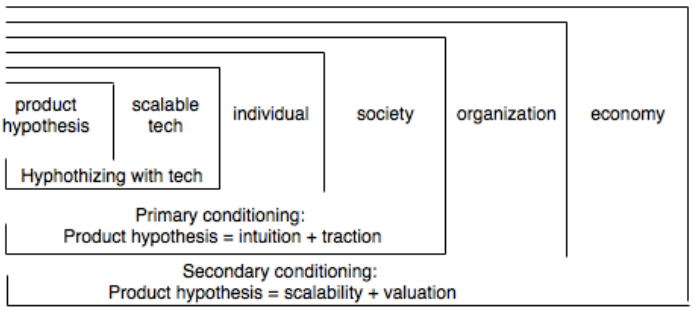
Figure 40: Form of the Startup (semantic categories observed as re-entries)



This is what we have been looking for, i.e. the startup as a complex form of communication, revealing the contextual complexity that it is able to process. This model presents us with a simplified copy of the cultural algorithm that governs which operational logics are included in communications and how this is achieved in a way that enables maximum entropy in information (and thus increased spread of communicative energy), without the form spinning off into chaos. The resulting form, as we should expect of any cultural form, is complex and non-linear. It supports itself in a volatile environment of systems, creating information in a novel way. As Baecker (1994, 4-5) writes, "Intelligence consists in inferring states of knowledge from states of ignorance."

Again, we can represent this in a simplified form in order to clarify how it operates as a self-reflecting observer-culture. Constructing this simplified and Freud-inspired model is easy – as we saw earlier, first we consider the basal oscillation as the id, then we consider the double closure as the ego, and finally the last two variables as the superego of the observer-culture. Following through with the form of the startup, we get the following model: (1) the restless action of extracting product hypotheses from scalable technology is the basal oscillation and the energy source of the culture; (2) the observer-cultural identity emerges in the way the entrepreneur tests his intuitions against society; and (3) the major problems and possibilities become visible when the startup seeks acceptance from "economy". With this simplification of the form model, we can better consider how and why this observer-culture identifies itself the way it does.

Figure 41: Form of the startup represented with emphasis on oscillation and two levels of reflection



Does the form end here? That depends on the observer. Baecker, in his form of firm model, added philosophy (or ethics) as the final re-entry. This was probably because philosophy commonly observes the distinction of society and individuals. While I think that "philosophy" is one way of approaching things from another perspecive, I would suggest that we rather use the idea of "functional analysis", but seen in the "contingency theoretical" framework of Luhmann (Luhmann 1995, 53-58 & 299; Kangas 2014; see also Chapter 2). The next chapter will take the observer position of this yet unmarked environment, and tries to answer what functions startup culture and semantics might perform for society and various social systems in it. Startup methodologies and startup narratives know what their concepts are good for, but from our perspective they are also good for other things – always available for exaptation as conceptual tools. Thus, some usefulness of this conceptual shift may have remained latent, and we now have a better understanding of what this latent use-value in society might be. But we are also looking for functional equivalents with a broader perspective in mind: how does startup entrepreneurship compare with what we observed about the symbolic role of leadership and the fictionalized expectations in economy?

Some reflections on the Form model

What we have witnessed so far – while using the Baecker model to make sense of startup culture – is how the semantics designate re-entries of distinctions into themselves, forming a vortex of context. Every semantic category was able to both mark a boundary and overcome it. The semantics tie together loose ends, and fill gaps and build more security into communications in an uncertain situation. Luhmann chose to use the concept of "program" when he referred to systemic procedures that were constantly discussed and adjusted to better serve the codes of the operationally closed function systems. But as we wish to observe how systems are entangled in semantics, the concept of program asks for system-specificity that we cannot grant for it. The concept of observer-culture – emphasizing the culture as a network of distinctions (see Chapter 2) – enables us to see these patterns of meaning as more than just "programs" of sub-systems. This is a matter of perspective more than an ontological stance towards the issue at hand – an observer-culture overlaps with various programs, appropriating their conceptualizations, and deals with the polycontextuality that these programs present[74]. But for the time being, we will keep distance to the concept of "program" simply because it begs the question of which system we are referring to, whereas our model is "polyphonic", i.e. incorporating many systemic irritations. With the concept of observer-culture we do not need to consider yet its functionality in relation to any one system, but we can see how legitimacy is enabled even though systems irritate each other.

Note that the wormholes – i.e. the semantics composing the form – are not necessarily structural couplings – they connect the systems by connecting them with the form itself, and not by connecting them directly with each other. In Chapter 1, we observed how the celebrity CEO acted as a structural coupling between mass media and economy, producing information out of noise for both systems. We called this a structural coupling, because we could reconstruct this according to various previous studies. Our own research, however, focuses on a complex form where the semantics point out couplings between the form and each system taken in by the form, but not between the specific systems. We thus restrict the use of structural coupling, taking the semantics as

[74] There is a resemblance here with the concept of "bricolage" – as used by Levi-Strauss – which means the recombination of existing meanings into new ones. Especially if we follow Derrida (1980) on his idea that bricolage is much more common than just a feature of mythical thought: "If one calls *bricolage* the necessity of borrowing one's concept from the text of a heritage which is more or less coherent or ruined, it must be said that every discourse is *bricoleur.*"

weak indicators of possible structural couplings underneath. The semantics, for a cultural form such as startup entrepreneurship, are more of a way of conditioning the activation of different system references inside the form, and these conditionings might connect with underlying structural couplings, whereby the systems have built in mechanism for being perturbed by other systems in their environment. Thus, the notion of structural coupling should be taken with some reservations in the context of this study.[75]

The Form model and the Actantial Model

How does this form model relate to the actantial model? The actantial model, as we saw, is a model of "active forces", describing the world through actors/actants performing actions, and the struggle that these actors face as their rationalizations clash with other rationalizations. The form model, on the other hand, is a model of "active contexts", describing the world as colliding meaning environments that set obstacles to sense-making, causing new systems of sense-making to emerge through variation, selection and retention. Both are meaningful relationship with reality, but form model has the benefit of being further from conventional sense-making, thus enabling new possibilities, new solutions to arise. As we will see in Chapter 7, the model might be well suited for consulting for this specific reason (see Nicolai & Seidl (2010) for the difference of conceptually relevant and instrumentally relevant information). It gives a break from considering acting forces, and guides attention to conditioning that surrounds these forces. As we will see, it can be used on different levels of abstraction (e.g. we can operate with frames instead of social systems although, if we are not able to replace the theoretical core successfully, the model will become a somewhat weaker heuristic due to theoretical atrophy).

Considering the differences between the actantial perspective and the social systemic perspective brings us back to our discussion of leadership in Chapter 1. There, we saw how various management and organizational studies had already traced symbolic leadership of CEOs. Most of these studies considered the inflated figure of the business leader to function as a symbol of control, more important as a performative figure than as an operative leader. In studies observing celebrity CEOs, the context was often either the stock market or the organization itself; for our study, the context has been manifold. This polycontextuality, visualized in the form of the startup model, raises questions about whether our model somehow illuminates the symbolic functions of the business leader. The next subchapter will focus on this, as it creates a model that could explain the rise of the startup hero as a question of some latent contextual complexity.

The form model abstracts our subject matter to a level of contexts that are not visible in the narratives. In stories, the contexts are muddled together into a unity, or a "unity of difference" as Luhmann would say. However, we can now reflect on how the actantial model "fits" the form model, i.e. how the pattern of actions and actants (actantial model) can be observed through the pattern of meaning contexts (form model). The form model – as a map of cultural complexity – reveals what contextual constellation is constructed in order to naturalize the pattern of actions. When the observer-culture is up and running, it offers the conceptual filters

[75] Following Stäheli (2013), we have already decided to analyze one "popular semantic" even though Luhmann restricted his semantic analyses to more ground-braking conceptual shifts that had taken hundreds of years to develop. However, whereas semantic analysis lends itself to observing even small transformations of meaning horizons, structural coupling is a concept that begs for a deeper analysis of the two systems concerned, and there is no subcategory of "popular structural couplings". The form of startup entrepreneurship might condition irritations for the time being, but it is nowhere near as deep-rooted and institutionalized as "constitution", which is the structural coupling channeling the irritations between politics and legal system, or "property", which is the most basal structural coupling of the legal systems and economy, took centuries to develop (see Luhmann 1991). Structural couplings will be incorporated in Chapter 6, the substantive conclusion of the study. In Chapter 6, when considering the changes in the relationships of various social systems, we will refer to tight and loose couplings between systems.

through which the "random walks" of startup ventures can be set side by side and made sense of as something similar, and discussed as startup-successes or startup-failures. This is where the "standard stories" get their pattern – and vice versa, the standard stories strengthen the observer-culture behind them.

Remembering the actantial model and its three axes, we can now consider how do these two perspectives to startup entrepreneurship – one following the actants and one the social systemic context – support or challenge each other. Of these two options, the latter seems to be the case: the models do not fit together. We cannot find a good match between the three axes and the three environments. The three axes are more direct causalities – thus they do not exist in our form model.

The reason for this should be clear: the narrative is a shortcut and flattens the contextual complexity in order to gain a more operative perspective on things. The strength of the narrative is precisely this flattening of complexity. The form model, on the other hand, brings out the complexity but loses one level of "complexity reduction" as it goes beyond the perspective of the startup entrepreneur. The narrative offers the recipe for successful startup entrepreneurship, but the form model deconstructs the standard stories for the sake of seeing what is behind them. It opens up a perspective to the observer-culture as a distinction-logical construct that performs the function of ensuring a steady flow of communications in uncertain situations.

Contextualizing the Contextual Model: Considering the "Niche" Behind the Culture

Since Chapter 1, not much consideration has been given to symbolic leadership. How does the startup entrepreneur – as a popularized, charismatic figure – relate to the form model we just built? And how do charismatic figures, in general, relate to the emergence of an observer-culture?

In Chapter 3, we formed a model of the basic narrative pattern of startup success stories, and saw how the entrepreneur acts with and against certain forces in his environment. We took this as a "standard story" (Tilly), where "vocabulary of motives" (Mills) was formed and distributed to different actors. But here, symbolic leadership was not considered. In Chapter 4 and 5, we started to notice how the individual – as a somewhat gnostic figure who arrives at knowledge by becoming more of "not-knowing" – was emphasized in startup semantics, and we read this as taking the individual closer to the core of the form of the startup -model. But the question remains, what should we make of this celebrity startup entrepreneur – is he also to be seen as a "symbol for control" that has emerged to fill the gaps where systemic control is impossible even with the help of semantics?

As we can see if we compare the two models – the actantial and the form model – the "gaps" between systems are filled with the figure of the startup entrepreneur, even as startup semantics have emerged to support the form. It is to be expected that as this form matures, the hero-figures will be fading into the background more and more, as has happened to celebrity CEOs who are now viewed with increasing suspicion (see the studies in Chapter 1 as an example of this). For a moment, let's return to the theme of charismatic figures as a common social phenomenon.

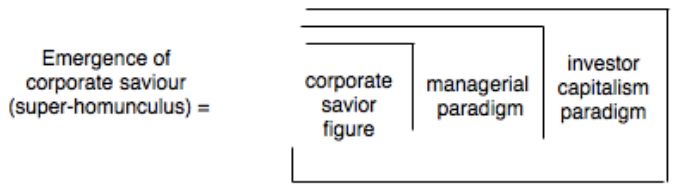
The Similarity of the Societal Niche Behind Startup and Celebrity CEO Phenomena

In our form of the startup, we observed how the individual stabilizes the restlessness between a product hypothesis and scalable technology by locating it inside the black box of "individual". This appears in various ways: through the heterotopia that disconnects from organizational and functional logics, and through the passion, intuition, eccentricity and personal experience that are accentuated in communications, and that give a promise of something that could be "scaled up" with technology.

Let us consider again the figure of the celebrity CEO that emerged during 70s and 80s, as this was the reference point we decided to take in Chapter 1. First, there was the recession that began during the late 70s, and which largely ended the so-called "postwar of prosperity". This, together with the rising industrialization of Asian countries, affected many industries in the western world. As profits plummeted, the stock plummeted, and companies started losing investors. This is when private equity firms came in and started buying the stock of faltering corporations in order to gain control over them. If this was achieved, the CEOs were often replaced with CEOs who had a track-record in saving companies. A certain kind of figure started to resonate, and this figure was different from the CEO as a manager. As we saw in Chapter 1, the celebrity CEO appeared as a "corporate savior" coming from the outside of the company, and one who was "willing to spill blood". He was a leader, and not to be confused with managers[76]. The CEO as a leader was, in this way, partly the result of increasing investor power in large corporations.

If we conceptualize the emergence of corporate savior figure as a re-entry, then we get the form depicted in Figure 42. First, there was the managerial observer-culture that kept investors out of boardrooms (see Useem 1996, Mizruchi 2013). After the recession of the 70s, private equity firms began observing faltering corporations, demanding that managers were to be more clearly in the service of major shareholders. In this tension between managerial observer-culture and the observer-culture of investor capitalism, the corporate savior figure differentiated as a form that was able to resonate in both observer-cultures – the private equity and the managerial. Thus what Khurana calls the "*search for a corporate savior"* (see Khurana's 2002) had a fitting contextual complexity to gain momentum in.

Figure 42: Corporate savior differentiated from managerial observer-culture and supported by investor capitalism



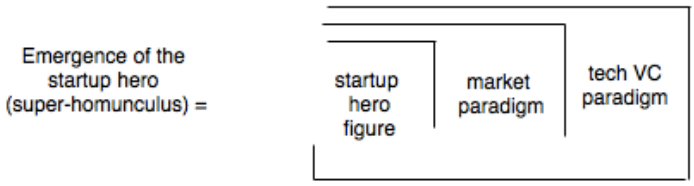
[76] In management science, there is a long tradition in discussing the difference between leaders and managers, or "growth CEOs" and "change CEOs", and considering the traits and benefits of each. These are, again, instrumental discussions, and as such rarely interested in the context that has produced the difference – the focus is on how the CEO should act in each role.

The cultural movement around startup entrepreneurship, on the other hand, has popularized a way of talking about the creation of hypothetical products.

Furthermore, it has imported the venture capitalist perspective into entrepreneurship, creating a hybrid language that is takes language of finance and appropriates it for entrepreneurial use. In this observer-culture, the valuation of a company is based on its ability to shake or brake expectations about what the market should be. Behind this we can find similar tension as with the earlier celebrity CEO phenomenon. We have seen how the venture capitalist observer-culture appeared after the Second World War, and how it infected the entrepreneurial circles of Silicon Valley with the restlessness of the finance (see chapters 1 and 4). The cultural contagion route of this restlessness was similar to the one that we saw in the case of investor capitalism as it created the breeding ground for the figure of the corporate savior. The result of this contagion has been the startup observer-culture, in which futures are anticipated, enacted and marketed to people and to venture capitalists.

Thus, we can model the contextual niche of startup observer-culture in the way presented in Figure 43[77]. The observer-culture around market competition was too occupied with incremental innovation for high-stakes venture financing, so an alternative was needed. The startup hero emerged as making a difference – in the form of disruption – to the observer-culture of market competition, and thus took the role of this enabling outsider for venture capitalism. With this figure, the venture capitalist observer-culture is able to operate away from the observer-culture that prevails when one takes part in market competition. With this distance, several things become possible: the rewards are high, the ideas are more disruptive as they do not need to compete right away, and the rewards are not diluted by a large number of shareholders or because of the difficulties in creating a monopoly in an already crowded market. With startup movement, the tech venture capital firms can constantly attempt to override competition with disruptive ventures. The symbiosis between the financial world and the figures of startup founder and corporate savior – and the way that this symbiosis overrides the status quo – presents similarities whether we are talking about the startup movement or the search for corporate savior (see Chapter 1 or Ferrary & Granovetter 2009 and Saxenian 1996).

Figure 43: Tech VC observer-culture enabling the differentiation of startup hero (and culture) from the semantics of 1st order market competition



It is important to note that these two toy models do not suggest a "paradigm shift" (Kuhn 1970) between the observer-cultures. Rather, we have the charismatic hero figure emerging as a result of the tension between two

[77] The concept of niche is here considered simply as the "natural habitat" for a given observer-culture. It could be described in many ways, but we will here create a very general interpretation. Furthermore, we could always ask in which ways has the culture constructed the niche it inhabits, while the niche has created the culture. In evolutionary biology the concept of niche construction can be summarized as organism-driven environmental modification. For more on the concept of "niche construction", see Odling-Smee & al. 2003.

observer-cultures, replacing their difference with its own difference. It is the figure of the startup entrepreneur – perceived as the focal point of this cultural movement – that is able to bypass the underlying contextual dissonance. He is a token for the startup semantics. This is done more through performative side of startup entrepreneurship as much as innovations are enabled by the operational side of startup entrepreneurship.

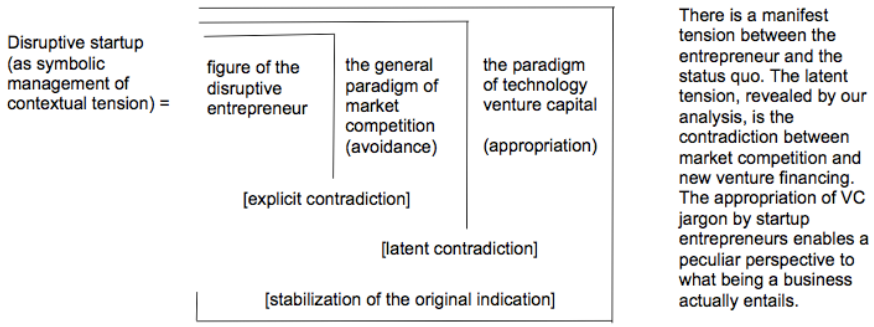
Why does the "super-homunculus" emerge to solve these contextual problems? As Luhmann suggests, social systems describe themselves as actions systems. A social system, if it is to prevail, has to avoid confusing tautologies – i.e. of communications describing communications. One way to avoid tautology is to aggressively designate agency in order to refer to something outside the communications themselves. Thus the heroic figures – super-homuncului who are praised for their exemplary patterns of action – emerge as unifying symbols when observer-cultures irritate each other, and they bypass this irritation by re-arranging structural couplings between social systems.

This is parallel to the way that royal progress, where the emperor was to travel his lands, offered a reminder that the center and periphery were indeed connected, that different segments and strata of society could be seen as a unity[78]. The modern version of royal progress is also about traversing through different lands, and claiming them as one's realm. As we have seen, this can be observed through the very general concept of reduction of uncertainty. During this study, we have traced this reduction of uncertainty on two levels: first in relation to how a basal oscillation resonates with different social systems that come to contact with startup entrepreneurship, and then in relation to how the startup super-homunculus emerges between two observer positions, offering a new one that can resonate with both.

Note that, in Figure 44 (basically repeating the earlier figure), the form can be observed as two contradictions. The first of these, the distinction between the startup hero and market framework, can be observed as a more explicit contradiction as it is expressed in the narrative and semantics. The contradiction between the observer-cultures of venture capital and market competition is left latent, and is something we have come to observe as relevant while studying startup semantics and while creating the model of the startup. The form as a whole – seen as a self-reproducing form that re-enters its distinction into itself – stabilizes itself though the conceptual reservoir that emulates the second-order perspective of venture capital, allowing the coupling with economy to form on a more reflective and distant level.

[78] There is an interesting parallel to this idea, as "carrying out of new combinations" is what Schumpeter (in his early writings) stated to be the function of the entrepreneur (see Johansson 2010, 126). Looking back at our research, we can see a difference between two kinds of combinatory power that the entrepreneur holds. There is (1) the ability to produce combinations in the form of products (the combinatory power that would interest Schumpeter), and (2) the ability to connect with semantics, and thus combine – as a symbol of control and as a charismatic figure – disparaging social systems into what appears to be a unified and righteous worldview (the combinatory power that is of interest to us in this study). The reason I have not dwelled much on Schumpeter's writings on entrepreneurship, is that he often elevates the entrepreneur as an exceptional individual while downplaying the contextual factors. For more on Schumpeter's entrepreneur, see Carlin 1999.

Figure 44: The resolution of a contextual tension through the figure of disruptive entrepreneur



The startup observer-culture – that we outlined in the complex form of the startup – is one way among many of producing a sense of unity in a polyphonic, manifold society. In this case, the unity is achieved by reconstructing it with the specific startup semantics, and combining these to condition the movement between contextual logics. This way of thinking is offered for anyone who is ready to become a "native" of this culture, and take its word for fact. For example, the form of the startup is the way that a unity of polyphonic society is constructed inside startup culture, for the use of all who decide to become – or simply find themselves becoming – "natives" of this culture.

Now, it seems that the oscillation between the semantic categories could be observed as a parallel to the "royal progress" that a ruler had to make in order to symbolically reclaim all the provinces in his realm. Furthermore, each concept (no matter how it is communicated) in these categories could be seen to reflect one detail of the "regalia" that accentuates the essence of startup entrepreneurship. Besides the "progress" and "regalia", the character of the entrepreneur is also a reflection of the startup observer-culture. Thus, there is the "plausible identity" created by the semantics – an identity that enables new forms of risky economic action to take place, making disruptive ideas seem plausible for both the entrepreneur and for the venture capitalist.

Following Stäheli (2013) we can see heroic business narratives – of startup entrepreneurs or of hired CEOs – as "popular noise" that opens up new inclusions into economy, but also to various other systems. In the startup form model, entrepreneurial action can position itself outside markets, if not outside economy. Stäheli's concept of the "popular" is a close relative to the idea of the figure of "super-homunculus" we presented earlier – the latter being an exemplary and often also boundary pushing figure that opens new possibilities for inclusion. The difference, again, is that in earlier societies it was the inclusion into some strata or segment of society, and in functionally differentiated society it is often inclusion into some function system.

CHAPTER 6: THE (CONTINGENT) FUNCTIONS OF STARTUP OBSERVER-CULTURE

> *On the one hand, functional analysis can clarify "latent" structures and functions – that is, it can deal with relations that are not visible to the object system and perhaps cannot be made visible because the latency itself has a function. On the other hand, functional analysis shifts what is known and trusted – namely, "manifest" functions (goals) and structures – into the context of other possibilities. That exposes them to comparison and treats them as contingent, without consideration for whether the object system itself is capable of comprehending such a reorganization or not.*
> - Niklas Luhmann (1995, 56.)

In this chapter, we will look deeper into the functions performed by the communicative form of the startup and the semantics that hold it together. We will proceed by considering what possibilities are opened for specific social systems by startup semantics. For individuals, startup culture obviously enables a new form of sense making and belonging, but what about social systems? Our model for the form of the startup will offer us guidance here, but we will have to draw our own conclusions by reflecting what is changed in relation to the systems that we are interested in, i.e. organization, economy and society. It is the job of the sociologist to locate the latent functions of the communicative forms that appear in society, to read beyond the denotative and instrumental functions that communications have (see Chapter 2 for short discussion on "contingency theoretical functionalism").

So, as we are looking for latent functions in relation to social systems, we have to specify the observing systems in order to see what further possibilities are opened up for them due to startup semantics. The three systems that we are interested in here are (1) the startup organization, (2) the system of economy, and (3) the society as the sum total of all communications. It is reasonable to expect that, in order to sustain itself, the form of the startup has to cater to all of these, and by performing a function for one, it performing a function to others too. To an extent, these possible functions that the semantic categories performed were already implied when we were doing semantic analysis and form analysis. There, clusters of concepts were observed to operate in relation to different social systems, offering "conditioning" for the irritated system/environment relations.

We will consider three observer positions in relation to our form of the startup – and in relation to the semantics that enable this form to operate – and try to see how the observer positions, and their respective "meaning horizons", are modified by the form.[79] The form of the startup as such does not represent any of these, but is a form of communication that enables something from the perspective of each. If it would not, then it would not operate as a popular semantic.

If we take society to be the sum of all communication taking place in society, then considering the function of the form of the startup in relation to society might seem like a daunting task. But here, we are interested mostly about whether startup observer-culture somehow increases or guides communicative possibilities in society. It is a vague question that has to be answered through considering a functional equivalent, i.e. through analogy. Furthermore, as we begin by considering how the observer-culture functions in relation to organization and

[79] As suggested in Chapter 2, observer refers to anything that "operates with distinctions", thus being a more general concept than "perception"

economy, we can gain some initial insight on how this observer-culture functions in relation to society – this is because semantic changes in social systems are always also sematic changes in society.

Problem/Solution: The Observer-Culture as a Solution for (Possible) Problems

Now, we try to draw conclusions about what is the "difference that makes a difference" in terms of the form as a whole. In order to do that, we will have to make the latent or potential functions of this cultural form visible. Furthermore, we will have to differentiate the possible functions it has in relation to different systems. With each latent function, we will venture further into considering what functional equivalents this form has possibly replaced, or what functional equivalents could we find elsewhere in society.

What is enabled by this – i.e. by the comparison of functions for different observers – is that we gain a more theoretical perspective on the issue and, what is even more important, we avoid designating the observer-culture with a singular and unchangeable function. Reserving a singular function to any feature – be it biological, psychic or social feature – would dismiss the idea of functions being by definition emergent and contingent (see Chapter 2, and Kangas 2014 and Erizi 2011). Thus, the result will not aim at being the final explanation of the subject matter – we have to be careful not to designate any essential functions to forms. As all forms are constantly evolving – by turning new disturbances into opportunities by the virtue of conditioning – it should be clear that the functions they perform change along time, i.e. they can be "re-occupied" (Blumenberg) or "subrogated" (Weber). A family (if we approach it as a collection of semantics that enable a form) does not perform the exact same functions as it did medieval times.

In the first part of this chapter I will consider the functions of startup semantics from the perspective of organization. First, we will have to remind ourselves of how startup semantics enable a culture of decision making where contingency is not only fixed by decisions, but where contingency can also be reintroduced in positive ways. We also look at how the "individual", i.e. the figure of the startup entrepreneur, plays into this and is made into a focal point of startup communications, acting as a container of uncertainty, both in positive and negative connotation.

In part two of this chapter we will consider the functions performed from the perspective of economy, I try to form clear arguments about what is enabled by the startup semantics in the system of economy. What does it mean that startups prefer to incorporate economy through the concepts of monetization, revenue models and pitching, and that they often express goals that are more related to more general transformation of society. We see how the concept of competition switches from competition between firms to competition between entrepreneurs and markets. We will ask, could economy use other means to deal with these challenges solved by the form of startup entrepreneurship?

In part three of this chapter we will consider what would be the functional equivalent of startup observer-culture in society, i.e. what would perform similar, if not identical, functions in relation to society – society here being the sum total of all communications. this is the level where we have to formulate a more theoretical, and thus much more hypothetical, answer. We will observe how more topics are able to enter society as communications – with the help of startup form – and reflect on the conflicting nature of these communications. We will consider the disruptive nature of the startup observer-culture, not just in relation to

the obvious context of markets and industries, but also in relation to social institutions outside economy.[80] Here, we arrive at the functional equivalence between startup and a social movement that forms around contradiction, and paints a present or future dystopia that should be avoided by society. But startups do the opposite, they also cling on contradictions (of supply and demand), but prefer to speak the language of utopia. Still, both are about bringing possibilities into the system, the social movement for politics, and startup for economy. Social movements can be criticized for turning worries and fears into strong political demands, and startups for turning intuitions and passions into big investments, but even when they are channeling uncertainty into the systems, they seem to produce actual operations that are, in some cases, able to boost autopoiesis for a long time.

The more traditional term "latent function" will be used simply because it is more readily understood. It is to be read as a synonym of "contingent function" (see Kangas 2014) as both refer to the form functioning in some way that is not the manifest function for current observer, but that nevertheless is performed through the particular form. As noted before (Chapter 2), evolution of social forms is similar to evolution of biological features in that it is often exaptation (Gould & Vrba 1982) rather than adaptation – i.e. a feature that is "non-adapted, but available for useful cooptation" in descendant forms, thus: a feature developed for one purpose that begins to serve some other function. In social evolution, we might think of a concept developing a further connotation or a story used to describe a set of events developing a more performative function alongside its denotative one (see Chapter 1). This might be somewhat random – there is nothing deterministic in this – but if a form sustains itself, then we can ask what environmental formation supports it.

In the following, we will dissect the contingent functions of the form of the startup, remembering that it is one observer-culture among many others. With each system reference – organization, economy and society – we will go through the changes that this communicative form is able to produce in meaning dimensions. As we discussed in Chapter 2, these three dimensions can be observed in relation to meanings or in relation to culture. When observing culture, meaning dimensions can be seen in the following way:

a) The factual dimension of culture regulates, "how to speak of which things, which themes to avoid, and how to change themes depending on the social context one is in" (Baecker 1997, 11)
b) The temporal dimension of culture regulates the connecting of before and after in a given context (ibid.)
c) In the social dimension of meaning, culture provides answers to the question of what people can expect from each other in situations (ibid.)

Organizational Perspective: Organizational Identity as an Iterative Process

Following Luhmann, we define organizations as "decision machines" (Nassehi 2005), as social systems that self-organize around the communication of, and about, decisions. Multiple function systems can be coupled in an organization, and the problem of their dissonance can be bypassed by simply keeping them apart. The common way of achieving this in a large organization is by having different departments for different operations – this makes it is clear which communicative code is primary and which are secondary in a given situation. But even so,

[80] It should be noted that the products of startups, the social media revolution that is connected to them, is left out of the picture. They have even more dramatic effects on society, but we are now focusing on the context that produces them. The startup observer-culture is what is at stake in this study, not the technological revolution and its consequences.

top management has to often confront the differing views of these departments. But all in all, an organization can make decisions, and use different rationalizations to make these decisions un-problematic, and then move on to make further decisions.

Along with semantics that are often in themselves enough to turn into uncertainty into information, the organizations ability to chain together decisions is another important way in which contingency is reduced in society. When something has been decided in an organization, further decisions have to take that decision as a premise for further decisions. The number of questions that can be raised is thus limited, leaving more room to focus and act inside the rationalizations that have been set so far[81]. Management methodologies are a way of deciding beforehand what are the relevant decisions and relevant decision premises, knowing what needs to be kept open and what should be locked in place.

It is mostly past decisions that affect how events are decided upon, but there is also an unplanned flux of further decision premises that enter into the equation. These can be labelled as "culture", and here we can talk about "organizational culture" or "undecided decision premises" that steer the organization in its decision making (see Nassehi 2005). It is, peculiarly, the undecided decision premises that are given more reign in startup semantics, as the relationship to decisions is highly iterative. As an organization, a startup is constantly churning through decisions but, as we saw, its self-description rarely happens on the level of the organization. Instead, startups self-descriptions resonate more with society (in the form of limitless communicative possibilities), and individuals (often in the form of individuality, passion and intuition of the entrepreneur, but also in the esoteric principles concerning what goes on inside individual minds, e.g. "people do not know what they want").

As a startup distances its self-description from the organizational level, it is able to create what could be called "decision buffers". This means that (1) decisions can be waited out, and (2) decisions already made can be easily dismissed without creating a paradox in self-descriptions. This is beneficial, as a paradoxical self-description would eventually lead to a disintegration of the startup identity, and would stilt action.

Understanding it this way, we can see how big companies that are chasing innovations might get it wrong sometimes. They attempt to switch from one set of decision to another set of decisions, maybe spicing this change up with semantics of design and innovation, whereas the startup semantics also create buffers that constrain the way that different logics are included in decision-making. When these buffers are in place, the startup can let its attention wander until something "clicks". The buffers for decisions, and especially for economic decisions, are observable in all meaning dimensions. We can find them from the distinct temporalities, identities and themes that are to be found from the semantics of startup entrepreneurship. So, how can we read the decision buffers operating in each of the three meaning dimensions? What are the new openings in each meaning dimension that the semantics are able to produce and maintain?

Temporal dimension and organization: the eternal pivot and the non-linear temporality

[81] This is presumably one reason why consulting has emerged as an industry: organizations sometimes need to back up from their rationalizations, and reopen the complexity of their environment. Consulting enables this to happen smoothly, without dropping too much or too little of the gained decision premises. A consultant is not chained to the situational rationalizations that a company faces, but can consider different rationalizations of the given situation, searching for a hidden problem from unlikely places, reflecting on other companies problems.

Thesis 1: With startup semantics – and with the whole cultural movement connected with these semantics – startups are able to build a more fluid identity, one that does not suffer if the entrepreneur decides to radically change the company or its product. Inconsistencies in the past and present (or future) purpose of the startup are observed with pride.

Business plans are mostly replaced with business models, thus making the economic side of entrepreneurship something to be modeled on-the-go, not something that the whole concept is resting upon. This creates time outside business considerations, and enables a more cyclical temporality, where end points are not fixed. This is in contrast with the way a business plan would fix them, giving clear marks as to when the plan has failed or succeeded.

To explicate this more, we need to remind ourselves of the "before and after" that startup semantics offer: depending on its present state, a startup can observe itself as before or after traction, before or after scaling and before or after monetization. However, after monetization, the connection with the true startup identity brakes down, as the startup now starts to form a more "tight coupling" with economy (see the later subchapter concerning economy). This is where the startup has to let its form disintegrate, and take on something resembling the form of the firm. As a result, the organization/economy-distinction becomes the central distinction, and responsible for the "double closure" (see Baecker 2006) of the form, whereas individual/society will turn around and move to a shallower position in the form (see the forms in Chapter 5). Society will now be fed into the system through attempts to condition the now more complex organizational culture and through the pressure for considering issues of social responsibility. The individual will be fed into the system through ethics and morality, not as an intuition about some possible improvements, but now as philosophical questions that are suddenly too opaque and irritating when set up against the functioning simplification that is the startups technology.

Secondly, the relaxed attitude towards startup failures, and especially the concept of pivot, enable a temporal horizon where everything can be observed as a new beginning by the organizations. Together these have some resemblances with the semantics of the "forgiving God" in Christianity. With both semantics, instances of exclusion can be turned into inclusion, thus allowing the system – economy or religion – to generate more communications than before. In a sense, "pivot" is to a startup as "confession" is to a Catholic – it is an admission of past failure opening up to further possibilities of connecting with scarcity, as confession is a confession of sin resulting in a newfound connection with God (scarcity and God here being the "contingency formulae" of economy and religion, see Luhmann 2013b, 105-107).

So, in addition to before/after schema of traction, scaling and monetization, the startup can easily do a more foundational change in its self-reference without "losing its center". But this comes at the cost of tying the "center" more tightly to the individual. The temporal dimension is transformed in the sense that it is now up to the individual to decide if she is done with her startup. The traction is an indicator, but with pivot new tractions can be sought after. No market can be taken seriously as a true indicator of an ideas validity – if we are operating with startup semantics – as the market is probably wrong anyway.

Social dimension and organization: individual (or "play" or "interaction") as a randomizing function between technology and society

Thesis 2: In the form of the startup, the individual appears between technology and society. But here he is not only a figure who has "combinatory power" (Schumpeter 2000) in society, but also a randomizing function that the organization can tap into, thus overcoming the tyranny of past decision, opening the door to contingency whenever necessary. The Schumpeterian entrepreneur is now more a more legitimate and common figure than ever.

As we observed in the semantics of retreat as well as with the semantics of contingency, there is disassociation with the typical semantics of organizations and economy. At the same time, there is no denying that startup can be studied simply as new ventures, if one wants to bypass observing the cultural side of things. It is obvious from the startup narratives that the "we" of startup entrepreneurs consists of startup entrepreneurs locked away in garage-like creative spaces, dressed in hoodies and reflecting primarily on their disrupting technologies and only secondly on market domination. But who is the "them"? The businesses are all first-order observers of the market, who put efforts into excelling in the game of market competition (innovation, growth), whereas startups focus on changing the game (disruptive innovation, scalability).

Also, we saw how the startup spaces – while taking distance to "organizing" – familiarize entrepreneurs with each other and with technology, thus creating a good basis for "trust" (for comparison of confidence, familiarity and trust, see Jalava 2006, 27-32 and 117-119). This is useful, because "confidence" – as more stable and uncomplicated form of trusting – is not warranted for most entrepreneurs because of the uncertainty that all startups have to face. The creation of "familiarity" and "trust" are thus important – especially for those entrepreneurs who do not have a built-in "reality-distortion field", i.e. the ability to create and maintain "false confidence" – something that Steve Jobs was famous for.

Following this, there is one difference between general business semantics and startup semantics: market cannot prove the entrepreneur wrong; only he can prove himself wrong by failing to gain traction, and not being successful with "pivoting". The social dimension causes problems for the individual, as success is now tied to the individual and/or the co-founders. But society, on the other hand, benefits from the constant influx of new, meaningful combinations that this produces. As a token of uncertainty, the individual or his team can absorb an almost endless oscillation between product hypothesis and technology, whereas a firm has to separate such oscillation from its core, calling it "R&D" or "skunkworks".

Factual dimension and organization: revenue decisions bypassed by resonance decisions

Thesis 3: As the economic content of the concept of "entrepreneurship" is slightly diluted with startup semantics, the cultural content of entrepreneurship – i.e. the entrepreneur as an observer of meanings and their ability to spread – reigns stronger and more explicit. Decisions about the nature of resonance (or "traction") have a veto-right over decisions on how to make money.

In the factual dimension of organization, we are talking about the shift in topics of discussion from market-based to resonance-based. The individual and the society are reflected against each other much more than the organization and the economy. The startup organization revolves around topics such as "iterating", "pitching the idea", "gaining traction", "scaling up", "pivoting" and "disrupting industries". The search for a "revenue model" and "monetization" is naturally of high importance also, but these represent a weaker theme in the sense of often being later "add-ons" to semantics, and often resulting – more or less – in cognitive dissonance for the

entrepreneur (the fear of monetizing "too soon" being an obvious example of this, but the various examples of founders reacting with paranoia to monetization efforts attests to this too).

Our model of the startup depicted economy as being in the "shallow end" of the model. One way to read this is that the structural coupling between economy and startup is a somewhat "loose coupling", thus creating more isolation, leaving more room for variation, and creating a more robust base for self-description for the startup. As Luhmann writes,

> The thesis that stability, contrary to what the old type of systems theory had assumed, is based precisely on the interruption of connections, on loose coupling, and on the non-proliferation of effects is in turn compatible with the thesis of the omnipresence of conflicts and possibilities for conflict, and of society's dependence on the most diverse possibilities of holding such conflicts in check (Luhmann 2013c, 252.)

Figure 45: Functions of startup culture from the perspective of organization

Temporal dimension	Social dimension	Factual dimension
Resilient organizational identity by relating to potentialities and possible future identities rather than past or present identity.	Legitimation of rebellion against the status quo of a market or industry, and thus less risk of being hindered by the liability of newness.	Observing economy as a something that can be retrospectively attached to ideas, but that is always secondary to "traction" and "scaling".
Thanks to the observer-culture, the organization of a startup is more able to reflect on itself as a unity, and to re-create its identity while being in constant flux, especially if it needs to pivot or scale its operations fast.		

Economic Perspective: Overcoming the "Liability of Newness" Problem of Startups

The changes in the three meaning dimensions of organization offer us a good starting point for considering how the form of startup entrepreneurship affects the system of economy. We already saw that a more "loose coupling" between startups and economy was being articulated, challenging the "tight coupling" that is more common between a business and its market. If we consider economy, it is important to focus on how the inclusion into economic operations are catalyzed by the form.

There have been similar openings of inclusion in the past. For example, Stäheli (2013) observes how the figure of the "speculator" emerged in between 1870 and 1930s in the United States. His approach leans on Luhmann's sociology, and especially the idea that semantics emerge to incorporate something new into a social system –

more people, more topics and more events. With this in mind, Stäheli (ibid. 8) chooses to consider the semantics of speculation through how it offers a new "figure of inclusion", a new way of constructing an actor as an "universalistic fiction" in relation to economy. This means that a popular figure – when the pattern of his figure is a repeating one – presents a new pattern of communications that is able to resonate in economy.

At the center of the semantics of speculation stands the figure of the speculator who is able to distance himself from the "hysterical" behavior of the market, and to capitalize on his gained perspective on this hysterical behavior. As Stäheli notes, speculation is slowly transformed into a form of entertainment, something that offers "thrills" (ibid. 240). When this is the case, speculation starts to gain a position as one among many accepted and established ways of taking part in economy. As we noted with startup entrepreneurship, it is also able to offer thrills. The thrill is especially easy to see in pitch events, where alternate futures are opened up one after another, but also in startup stories where the intuition and passion seem to trump everything else, as in the story of the forest coder that we began our investigations with.

The figure of the speculator is, of course, somewhat similar to the figure of the startup entrepreneur. But, as should also be clear by now, startup entrepreneurs are a highly differentiated breed of speculators operating among what we might see as more "traditional" speculators, i.e. investors speculating with the future value of companies and their stocks. Whereas investors take a second order position in relation to entrepreneurs, it is now clear that startup entrepreneurs – with their semantics – take a third-order position by observing investors observe entrepreneurs. Thus we have financial concepts turned into entrepreneurial concepts, and fitted on top of economically neutral concepts such as traction, scaling and disruption.

Much like the figure of the "speculator" around 1870-1930, the startup entrepreneur enables a new and unlikely inclusion into economy. The entrepreneur is offering ready-made "speculations" for investors. Venture capitalists are, of course, just one variation of the "speculator" – and a more institutionalized one – that has taken its form during the hundred years. On the entrepreneurial level, the speculation takes the form of a "product hypothesis"; on the investor level it is the startup itself that is speculated on, as its product hypothesis is reflected as possible disruption. There is an increased contingency here, as the venture capitalist is not speculating on someone trying to win the game, but rather on someone trying to reinvent the game.

Temporal dimension and economy: "present futures" auctioned as "future presents"

> *Thesis 4: The form of the startup – as an "observer-culture" (Fuchs 2000) in society – and the startup semantics supporting it, popularize the language of speculation (Stäheli 2014) for the use of technological entrepreneurship. For economy, this means that entrepreneurs are able to proactively auction off the "present futures" they have imagined.*

The obvious thing about startups is that they are risky predictions about the future. Most of these investments fail to produce return to investment. Of course, the investors make the failure acceptable by working with "portfolios", i.e. with collections of investments. This is the level where success and failure is determined, so big exceptions are allowed to trump the fact that most companies in the portfolio perform poorly. Now, with startups that are often allowed to pivot, there is a doubling of this logic – the venture capitalist has a synchronic portfolio of startups, all with different "product hypotheses", and inside this portfolio each startup is allowed to

make diachronic portfolio of further product hypotheses (by going through pivots). In this way, there is more trust between an investor and a startup, even when it is fumbling on its journey to success.

This works also for startups that operate without finance, as there is not pressure to be accepted by the market. These entrepreneurs – it would seem – are better able to trust themselves even when it is unclear if revenue or financing will materialize in the future. Thus, what happens in the temporal dimension of economy – when semantics of startup entrepreneurship are involved – is that futures are pitted against present, and from these futures, some are then imported to present. In other words, present futures (visions of future formed in present) are auctioned as future presents (as actual present moments of the future world). There is a peculiar version of a self-fulfilling prophecy here, as the wish to end present and "begin future" is ever increasing in modern society. We cannot deny that media-landscape plays into this (as suggested in Chapter 1), as does the general mechanism of the "hype-cycle" that seems to be a repeating pattern in modern society (see Fenn & Raskino 2008; interestingly, the hype cycle is very similar to startup curve, where the excitement of the entrepreneur or founding team often flattens out before the actual scaling even begins).

SOCIAL DIMENSION AND ECONOMY: THE SPECULATOR AND THE ENTREPRENEUR SEEN AS ONE AND THE SAME

> *Thesis 5: With startup semantics, economy is able to include a new breed of entrepreneurs, i.e. entrepreneurs who speculate on various problem/solution-schemas that they have reimagined through technology. As the language of speculation has penetrated from finance into entrepreneurship, the possibilities for inclusion (into economy) have increased. One can now speculate without capital, if one has technological ideas. The speculation with a solution turns automatically into an economic speculation with the startup itself as the entrepreneur, the VCs and the business media try to grasp the economic implications of the suggested solution.*

The popularity of startup culture has created new forms of inclusion into economic operations. More than ever, an entrepreneur can now be a speculator of sorts – she observes technology and suggests a problem that it could solve. Although the technology and the problem might be real, the solution is always a hypothesis. This speculation has sparked the interest of financial speculators – the venture capital firms – that are not content on simply speculating on aggregate effects of markets and financial instruments, but are seeking to profit from society transforming technologies. Of course, this is speculative side of the entrepreneur is nothing new. Throughout history, promising but risky ideas have been transformed into successful businesses, and often with the help of outside financing. However, the new breed of disruption seeking startup entrepreneurship is able to offer a distinctive, recognizable and worthy identity for this speculation. This identity is surprisingly resilient even when the venture is not successful. A startup is a hypothesis to be tested, and one can always come up with another one.

There are many factors that must have played into this, but two factors are worth mentioning here: First of all, as venture capital firms have learned to deal with failures, the ventures themselves – i.e. startups – have adapted to this adaptation, slowly appropriating the concepts of venture financing. They carry, partly, the same speculative language as the venture capitalists (note the resemblance to the circular relationship in Figure 1 of Chapter 1); The second factor has been the software explosion that has created the basis for this rethinking of problems and their solutions, i.e. what Morozov (2013) calls technological "solutionism". Technology, and especially software, is now observed as an infinite source of solutions – so infinite, actually, that often a problem

has to be invented to fit the technological solution that is offered. As startup entrepreneurship has emerged in symbiosis with venture capital firms, the question of monetization is built into it. The solutionism thus opens a massive potential for inclusion into economy, although this often happens through funding that runs out before the startup is able to turn into a healthy business. As the business media and venture capital are observing startups so keenly, we have the same danger as with CEOs becoming symbols of control instead of actually practicing control – the speculation on the startup itself can easily overpower the more practical speculation on the problem and its solution.[82]

The factual dimension and economy: Revolution to be Monetized

> *Thesis 6: With its focus on possible futures and disruptive innovations, the observer-culture of startup entrepreneurship operates as a critical self-description of economy. This is peculiar, as political utopias have largely lost their grip in society (the "end of ideology" as Fukuyama calls it), but with this observer-culture, the utopianism has found a new home in economy. This new utopianism is more closely attached to the observation of new scarcities and disruptive possibilities in different markets, but also in society.*

In our analysis of the startup semantics, and in our resulting synthesis of the form of the startup, we already observed how economic themes are distanced and compartmentalized through startup semantics. The distancing of business semantics was achieved by bringing to forefront two systems that have great openness for codification, but that also have strong structural coupling between between them. These systems were the psychic system – represented as an environment called "individual" in social systems – and society. Individual is an address for uncertainty (one can never access another persons thoughts, but only communications of thoughts), and society consists of all ongoing communications and the possibilities they open. As we saw, the semantics of resonance emerge here and differentiate startup entrepreneurship, and from the perspective of economy, there is increased sensitivity to both retreat semantics and to resonance semantics. This ability to combine the eccentricity of the individual and the wider resonance, and take it as information, is partly because startups have appropriated financial terminology, thus playing a higher-order language game compared to entrepreneurship that mostly follows existing market-conventions. With the help of startup semantics, economy is more able than before in monetizing "communicative contagions", where one service or app disseminates at a rapid pace, even when the startup or the investor has no clear idea of how to monetize the service. This boils down to utopian thinking, which is not necessarily a bad thing. At the same time, we should remember that utopian thinking in politics has a somewhat tragic history. But it is easy to see what went wrong with political utopias – they took a philosophical stance and tried to define human nature, and often went wrong. In this sense, the utopian economy and society supported by startup semantics is less utopian, as it does not look down to trivial matters, and trivial applications, but considers them as possible seeds of disruption.

Considering the relationship between the system of economy and the observer-culture of startup entrepreneurship, we might say that startup culture is not a form of "retreatism" from economy, but a rebellion inside it. For many, this has gone unnoticed, as it is observed as a form of "new venture" among all other new, high-risk ventures. But as we began reading into this culture, we saw that it takes a second-order position

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[82] The story of Theranos is one example of such situation. The blood-testing technology that the company claimed it had did not work as promised, but the founder never ceased to believe – in a true startup fashion – that the company could make it work. The company speculated on itself as a savior even when the speculation on the solution had failed.

towards regular entrepreneurial themes of competition, profit and growth. Evoking Robert Merton's famous typology of deviance – more as a heuristic than anything – we might say that its retreat is performative, as it seeks to create economy anew (see Figure 46).

Figure 46: Startup observer-culture seen as the "rebellion" in Merton's deviance typology

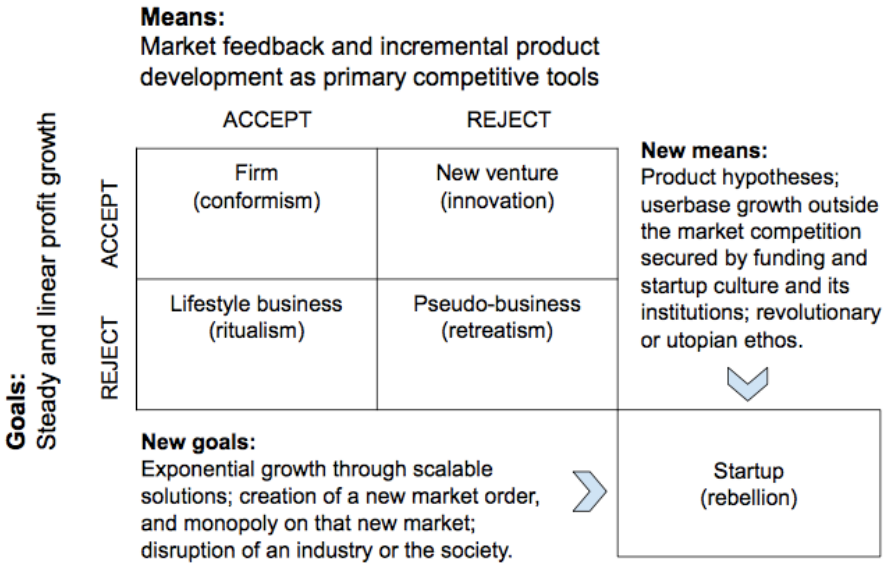


Figure 47: Functions of startup culture from the perspective of economy

Temporal dimension	Social dimension	Factual dimension
Future oriented: increased willingness to consider "present futures" as "future presents".	The entrepreneur as a speculator in relation to his product, but also in relation to the startup itself; increased inclusion into economy through the popularity of startup identity.	Critical self-observation of markets in economy; operating with utopias has rarely been so central in the culture of entrepreneurship.
Thanks to the observer-culture, the figure of the entrepreneur has merged with the figure of the speculator, thus creating a hybrid form of inclusion into economy, and making economy the popular system for presenting utopias.		

Startup Entrepreneurship in the Context of Society: Considering a Functional Equivalent

Having observed how the communicative form of the startup enables a new meaning horizon to operate in relation to decisions (organizations) and payments (economy), we now turn to the all-encompassing social system of "society". As society includes all communications, there are almost endless possibilities in which an observer-culture might affect the meaning horizons. We already got some examples of this in the form of organization and economy, both being specific system types inside society. Thus – as we try to see how this observer-cultrue affects society – it makes more sense to try and find a possible functional equivalent from some other area of society, and consider the implications. We will begin by what functions are from the perspective of society, and then move on to consider the possible functional equivalent.

For Luhmann, there is no other "function" performed *by society* than the continuation of communications, as these communications constitute society itself. And, conversely, all functions performed *for society* have to connect to this function in one way or another – if not, they are not functions of social systems, but rather "irritations". As the emphasis of this framework is on continuation of communications, then even social integration is irrelevant unless it enables better continuation of communication – sometimes this is indeed the case, but oftentimes it is "conflict systems" that are much more likely to regenerate and keep their communicative form intact.[83] We should consider the evolution of the functionality of society – i.e. differentiation – more closely, so we are able to understand how startup entrepreneurship might serve its functions.

Luhmann has traced the evolution of different "media of communication"[84], analyzing how each of them solve some problem with regard to the overall continuation of communications. For example, simple "success media" such as language arise because they enable more nuanced understanding, dissemination media such as the written word emerge to solve problems of temporal and spatial distance in spreading communications, and symbolically generalized media such as money or power emerge to solve more specific problems caused by various double contingencies between participants (in a sense creating language for scarcity, or a language for legitimacy). (For more on double contingency see Luhmann 1995, 103-136 and for communication media arising from it see Luhmann 2012, 201-202.)

With the different media of communication, problems of uncertainty are resolved temporarily. For example, scarcity can be observed and discussed separately from other topics, and as this is constantly repeated – as we get more and more fine-tuned to find scarcities around us places – we have a social system that we call economy. Similar line of differentiation has produce systems such as politics, law and science, but with different media being central for each (power, law, truth). With such differentiation of subsystems, based on the symbolically generalized media of communication, society differentiates by separating problems of communication, as these are indeed problems facing its own existence. As Luhmann (2013, 3) writes, system differentiation is thus "nothing other than recursive system formation, the application of system formation to its

[83] A functional society in this sense is is not always functional from a moral point of view. By saying that something is functional, we are not suggesting that it is ethical or that it should be supported in any way. A self-organizing system is primarily functional to its own purpose – in the case of social systems, the continuation of communications over uncertainties (see Chapter 2).
[84] Media being here plural for "medium", i.e. a mediating element.

own results". Each subsystem takes society as its environment – and not as some parent system – thus reproducing the system/environment-distinction in a new form, and creating a unique way of talking about its environment. And hence we have multiple societies – the society of economy, the society of law, the society of art – and not even inside these do we find any consensus on how society should be observed. Of course, we can observe strong historical transformations in semantics of society, thus arriving to an understanding of what the "society of society" has been during different times and places, i.e. what has been the form of self-description that society uses when it refers to itself. And from here, we can suggest new distinctions, as Luhmann does when he suggests replacing concepts of civil society and nation, with the concept of functionally differentiated world society. In his magnum opus, The Theory of Society, Luhmann (2012, 2013) spends some time considering this question.

Holding the Future for Ransom: Parallels Between Social Movements and Startups

From the viewpoint of our conceptual framework, the only "integrity" and "purpose" that society can have is the continuation of communications (see Baecker 2011). Thus, if the continuation of communications is affected in some positive way through startup semantic, we may speak of startup entrepreneurship performing a function, i.e. as addressing the problem of continuation of communications.

As we have seen earlier in this chapter, startup semantics offer new forms of inclusion into economy. Furthermore, we could safely say that it has opened up an inclusion of itself as a topic in mass media. In both cases, we can say that inclusion of communications has increased. But this is not all – we can also see that the way that startup semantics address society in similar ways as our own conceptual framework, i.e. in terms of connective possibilities (what we have described as "semantics of resonance"). This is perhaps most visible in the way that uncertain futures are made feasible by referring to them as "disruptive". The alternate realities offered by startups are often obviously different from our present understanding of reality, but for this exact reason they appear as possibilities to be tested.

Startup semantics present us with a world view in which resonance has to be found before markets can be operationalized in communications. This search for resonance (with semantics of resonance), and its fine-tuning (with semantics of experimentation) gives precedence to self-descriptions that resemble the center-periphery-differentiation of social movements. Social movements have organizations, but their basal form is to operate as a statement of a specific worry over some issue, and a periphery of protesters attaching to the said worry, thus creating resonance in mass media if not always in politics (see Luhmann 2013, 155-157). This form of "issue" and its supporting "resonance" is what startups are after, if often in a very different sense.

In this way, it is easy to see how different semantics resemble new social movements. Semantics similar to the semantics of retreat appear also in new social movements, as they locate themselves outside the established order, criticizing it without having immediate political power, partly feeding off of this powerlessness (as it creates its own heterotopia), and often reverting to un-technocratic but highly appealing language of "morality". The content is different, but the semantics could be heterotopia.

Next, we see that also the semantics of resonance have a clear resemblance in the communications of new social movements. Social movements do not trust the established order of politics in solving problems, but sees it as

important to voice concerns that are latent. The resonance for social movement is the concern of people over specific issues – a concern that has not been adequately recognized in established politics.

The semantics of experimentation, on the other hand, appear in very different form in social movements compared to startups. We see that instead of "pivoting" and "iterating", the new social movements have a communicative possibility of voicing new concerns over their older concerns. The added issues can be single cases or statistical observations, but they have to be concerns that are able to resonate.

In resemblance to the semantics of monetization, the new social movements have something we might call retrospective "politification" of issues. An issue needs to be considered lacking in legitimacy, or possibly as displaying some imbalance of power in society. This, in itself, is seen to imply that something should be done about the issue. The world offers an endless supply of these imbalances of power and legitimacy, and they are easily observed when concerns have been voiced, so social movements are often forerunners for issues, and political parties attach to these issues. This has been the case with green parties in various countries (at least Finland and Germany). This resembles the way in which a startup attempts to follow the "resonance" instead of identifying with the market forces, writing business models instead of business plans.

The differences between startups and new social movements are somewhat obvious:

- Startups are not social movements, and NSMs are not a form of entrepreneurship
- NSM does not lose its label of NSM when it becomes a more established organization, but a startup is not a startup, when it becomes a stable company with revenue and/or public listing
- NSMs place emphasis on what is right, while startup puts emphasis on what works. In this sense, NSMs are more Old-European whereas startups are more systems theoretical; alternatively this could be stated by saying that NSMs have a moralistic world view, while startups have technological world view.
- NSMs are more prone to speak in terms of dystopian images, stating that society needs corrective maneuvers; startups speak in terms of utopias, as the better society can only be opened with new technology.

What is gained by this comparison? We can now see two similar communicative patterns in modern society, startup entrepreneurship and new social movements. The communicative form of these two observation points have similarities, even though the content is very different. The single most interesting thing seems to be the way that possibilities of inclusion have increased in both politics and in economy. These are forms that not only open up the systems for inclusion, but seem to force feed inclusions, creating restlessness, excitement and bubbles in politics and in economy. Society seems eager to draw new self-descriptions from the communications of NSMs and startups. The contents of these two observer-cultures are, of course, from different worlds. NSMs offer bleaker visions, emphasizing what is wrong with the current path of society. Startups offer more optimistic visions of how things will be better. NSMs base their descriptions of future society on constantly raising critical actions through aggregating concerns. Startups base their descriptions of future society on constantly imagining disruptions that are based on aggregating interests of potential users (traction). But in both cases, the future is held for ransom – the concern needs to resonate in politics, and the traction needs to resonate in economy, or the organization withers off.

Although being very different in content, we can see how new social movements and startups perform a similar function in relation to society – both are machines producing "present futures" (but not actual "future presents", of course) that challenge the status quo. The startup prefers to offer them as promising visions for society, and the NSMs in the form of warnings for society. Furthermore, both bring culture to the center of the form, taking individuals seriously and "validating" these hopes or fears with resonance in society, startups with their "traction" and "user base", and NSMs with their large loosely coupled "members" and "demonstrations" that are able to perturbations in politics. They both have a center-periphery-differentiation in their self-description, where the entrepreneur and his hypothesis are at the center and the users/potential users are at the periphery or, alternatively, the social movement organization and its issue at the center, and the protesters at the periphery. The periphery is observed to validate the center, and the center to answer the needs (in case of startups) or concerns (in case of NSMs) of periphery (see Luhmann 2013, 154-165).

The NSMs take a detour on their way to political agendas, as they stage miniature-revolts that are amplified by media and then possibly elevated to established politics. They can even challenge the legitimacy of votes, as the protest or demonstration represents a crude vote that takes place in a louder and more desperate manner. A question then arises: are "the people" those who voted on the issue, or those who we see protesting? Is there legitimacy in the official vote or the protest? Similarly, startups offer a differing vision of scarcity compared to markets: is the real "scarcity" that which the markets are handling, or something that is yet hidden, something that can be seen in traction that a startup gets with its minimum viable product? A disruptive product is a protest against the current market order, while it also aims to become the market by resonating as payments; a NSM is a protest against politics, but only because it aims to perturb political decisions, thus becoming politics.

It is fascinating that these forms are so similar, but yet worlds apart. They differ in content, but share a similar form in relation to society. This similar form would suggest that perhaps they could converge, producing technologized and iterative NSMs or morally grounded startups. There are some hybrids, but not many. The rise of ethical startups has been noted in media, and many of the most successful startups state goals that are beyond business goals, but whether this trend is here to stay is still unclear. The ethical claims of some successful startups is often shadowed by their disdain for other ethical issues, such as issues of privacy. New social movements show even less convergence with the semantics of startups. Future studies could shed some light on whether there is a possibility and/or need for convergence of these two culturally similar forms.

Whereas NSMs have greatly affected the more general semantics in society – especially through the rise of environmentalism and human rights issues – startup entrepreneurship has produced a revolution in the way people view and value certain things. The talk about sharing economy, as well as new ways of connecting with people, are the tip of the iceberg here. But interestingly, popular discourse does not see startup entrepreneurs as revolutionaries, but as saviors of economy or as great innovators in market competition. Perhaps the revolutionary aspect gets lost because the startup entrepreneur is often a rebel without a cause – his cause is dictated by technology, and by whatever seems to work. With this lack of central ideology – where the cause is what is iterated into being – it is relatively easy to ride the popular wave of startup culture, using it for whatever means necessary. For example, startups are often mentioned by politicians, but they are reduced to technology firms that have the potential to "save the economy". This is strange as instead of saving the economy, they are more inclined to redefine and disrupt markets, as well as to cause bubbles and kill off more work-intensive industries.

From the perspective of the current study, there is a misunderstanding of what startups are – they are not just new ventures, but also a cultural movement that is after technologically mediated revolutions, and this cultural movement is a child of venture capital because it is too frail to survive on markets. As a form of speculative entrepreneurship, startups do not represent an "industry". Rather, they appear as a liberation force fighting various industries. As such, betting on startups entrails betting against various industries. This is a conundrum that economic and innovation policy has to tackle if it is to fully understand and leverage the startup movement. Of course, startup entrepreneurship can still be observed as a subgroup of business venturing, but on the cultural side it is more akin to NSMs – and this cultural side is what makes it meaningful action in the societal "niche" where it thrives in.

Figure 48: Functional equivalence between the observer-cultures of startups and protest movements

	Startup Movement	Protest Movement(s)
Self-description as an outsider	Rebellious outsiders of market forces that lack innovativeness	Rebellious outsiders of governance that lacks knowledge or moral integrity (in relation to an issue)
Critique of Establishment	Established markets and their slow incremental innovations	Established governments/corporations and their inability to act morally/sustainably
Internal center/periphery-reflection	Founders/users	Activists/supporters
Ideological core	Technological solutionism (Morozov 2013)	Sustainability (natural/humanitarian/etc.) as a moral imperative
Thematization of society	Through technological solutions and technologically mediated *utopias*	Through natural/humanitarian *disasters and dystopias*

Drawing from this comparison between the two functional equivalents, we can now offer at least some suggestions as to how the three meaning dimensions are altered in relation to society (see Figure 49).

Figure 49: Similar functions of startup culture and NSMs from the perspective of society

Temporal dimension	Social dimension	Factual dimension
Reflecting on the present situation through possible future scenarios awaiting society; distrust in the present situation.	Activists and startup-founders consider themselves as outsiders while amassing "supporters" (NSMs) or "users" (startups).	Constant flow of new topics irritating politics (in case of NSMs) and economy (in case of startups), and affecting the whole society.
NSMs and startups share a mindset in which the possible future – or simply a disdain for the present situation – is constantly summoned to question the present society. With NSMs, society becomes more observant of possible risks; with startups it becomes more observant of potentialities. In this sense they are two sides of one coin: one offers society a self-description a bundle of risks, the other as a bundle of possibilities.		

What Can we Learn From Startups?

A question that pops up every now and then is whether established companies could learn from startups. Based on the insights of my research, I think the answer is both affirmative and negative. A firm has to focus on market, or it will lose market. But it can learn to go after cultural insights in order to better detect the weak signals that might reveal new innovative opportunities. In order to do this, we might emphasis the "techno-anthropological lens" of startup observer-culture.

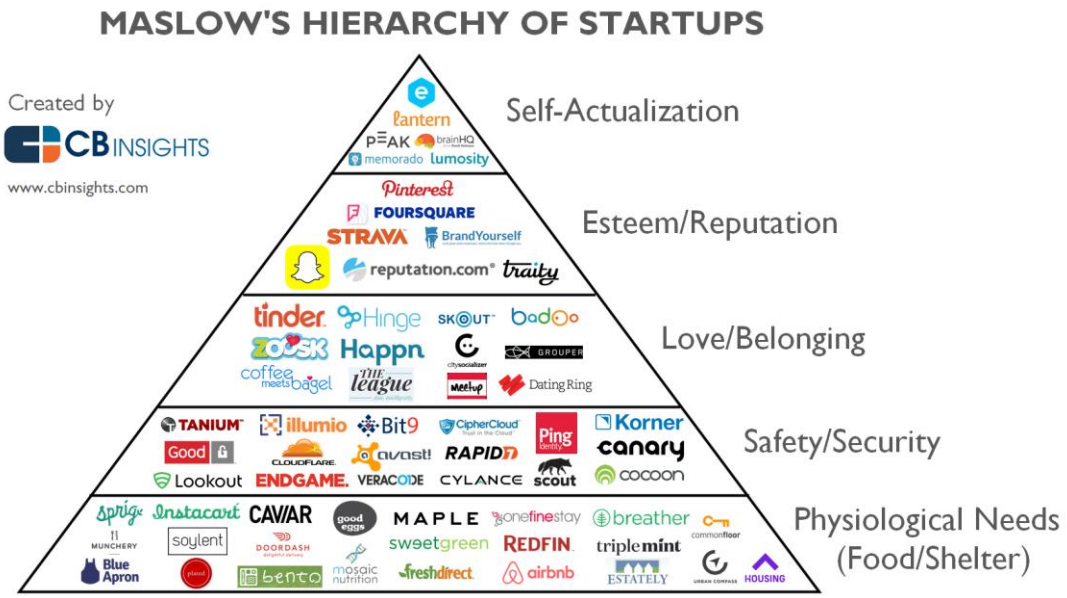
In our form model of the startup, the most notable structural change compared to the form of the firm was the switching of the individual/society-distinction into the center of the model. The switching changed the point of "double closure" of the model, thus re-defining the point of reflection. Double closure means that the initial distinction is not enclosed by just one context – which secures the oscillation inside the first distinction – but also by a second context, which enables the form (or system) to observe itself in relation to some environment while oscillating. For a firm, this obvious surface of self-observation is firm/market, mostly taking inputs from what people are currently buying. For a startup, the self-reference takes place on a deceptively universal surface of individual/society, where the utopian schemes iterated by the startups are mirrored in society – with the help of technology – and fed back to startup either as "traction" or as a failed "beta version" of the product.

But there is more to this, especially if we consider individual/society to be the double closure of the model. Perhaps it is not too far-fetched to say that startups are, without much reflecting this themselves, harnessing the cultural volatility of the modern world – anything can be meaningful, if framed the right way. An interesting exhibit about the cultural sensitivity that the startup culture breeds is the way that startups are trying to answer the top-three levels of Maslow's hierarchy of needs. In Figure 50, we see a lighthearted but illuminating graph on how some current startups could be seen on the Maslow's hierarchy (CBS Insight Newsletter 2015). Self-actualization, esteem and love – the three highest levels of Maslow's hierarchy – have traditionally been left to traditional institutions. Information technology, however, is making it easier to offer solutions for almost

anything, thus offering technological reformulations to the way that more and more intimate problems are solved, sometimes "appropriating"[85] the functions of old social institutions, sometimes leaving them as formalities with only a weak functional value.

Furthermore, by the techno-anthropological lens we do not mean that there is great "wisdom" in startup observer-culture. The point is that startup culture keeps this level of meaning – the oscillation between individual and society – closer to its core, rearranging this difference more frequently. Startups are accustomed to theorizing "what people need, even if they don't know it yet", while bracketing out the more common questions of "what people want" or "what people buy".

Figure 50: Dozens of startups arranged according to the human needs they address (CB Insights 2015b)



Looking back at Baecker's form of the firm, the model already implies why established companies often lack this lens: they have too many constraints. Seeking competitive advantage in a crowded market, established companies are often searching for this "anthropological lens", but it is added after the double closure of the form, and has to be attuned to the firm/market distinction that regulates the identity of the firm. In this way, Baecker's choice to place society behind economy in his model is fitting.

What the established companies often have to revert to, in order to gain the "anthropological lens" of their own, is question that is hard to answer. One way, perhaps, would be to go beyond market research and hire consultants to seek consumer/cultural insights, and feed them back into the firm in a form that fits the firm/market closure of the firm. This is already happening, as there is an increased interest in ethnographic methods among management consulting firms. For example, consultants have incorporated ethnographic methods such as interviews and participant observation when studying the target market and its consumers. There is an attempt to locate interesting "cultural insights" that could be fed back into the firm/market-

[85] See the discussion on functionalism at the end of Chapter 2.

distinction – either by means of re-segmentation, by redesigning the product, or by re-imagining the way that the product is marketed. But for large, established companies, completely re-inventing the product is not an option, and this is where startups are able to draw the attention of the media, the public and venture capital firms, and act on this received attention. The difference between startups and established firms is thus, according to this comparison of models, that startup culture is attuned to set anthropological considerations before market considerations, and only retrospectively consider various economic implications.

Conclusion: Five Things to Learn From the Empirical Research

What do we know better about startup entrepreneurship, now that we have reached the conclusion of our research? With regard to startup entrepreneurship, we can suggest that the following sociological insights are taken seriously into consideration:

1. Startup entrepreneurship is not just a form of entrepreneurship, but also an observer-culture, i.e. a culture that is able to offer a solid worldview and identity. It is heavily affected by the technological revolution we are experiencing, but even more so by the venture capital that is observing it.
2. Thus, as was the case with the cult of the celebrity CEOs (Chapter 1), startup culture is a paradoxical product of the very system that is observing it. This is visible in the various concepts appropriated from the world of venture capital, and perhaps even more so in the various attempts to find a self-description that is larger than "business".
3. The figure of the startup entrepreneur – again, similar to the earlier celebrity CEOs – acts as a symbol of control towards investors, even though the "control" rarely works. The startup entrepreneur also appears as a symbol of control for investors, but the control is now about a market or industry that remains a hypothesis until proven otherwise. Thus, startup entrepreneurs are captains of imagined industries.
4. With the observer-culture of startup entrepreneurship, economy is better able to operate outside the time-frame of markets. This is because startup culture naturalizes and operationalizes things that would otherwise be seen as dysfunctional, such as failures, pivots, and starting a company based on a hypothesis about a product and a market for it.
5. Startup entrepreneurship presents us with second-order form of entrepreneurial speculation, where one does not speculate in a market, but on a new problem/solution schema made possible by technology, and on the possible market order that might follow. The speculation finds yet another order of speculation as the entrepreneur deals with venture capitalists, thus speculating on itself. Moving to higher order of observation in this way means that the lower orders become riddled with blind spots.
6. Due to the distancing from the logic and pressures of current markets, and due to utilizing scalable technologies, the startup is able to secure a more general frame of reference. It is able to conceptualize the surrounding society more in terms of technological simplifications, and less in terms of mere economic transactions. The latter can always be added through "business models" and "monetization".
7. In relation to society, startup observer-culture is a functional equivalent – in form, but not in content – to new social movements. It challenges the established order of things as if it were outside society, but from a perspective of "technological solutionism" instead of "sustainability". Due to similarity in form, there is some hope that these two observer-cultures come together, as the identity they offer for actors as outsiders, revolutionaries and utopists is to some extent similar.

Chapter 7: Lessons Learned in Modeling Contextual Complexity

As part of the theoretical research question (TQ) in the Introduction, we posed a question along the following lines: Could Andersen's (2011) formulation of the semantic analytical strategy be combined with Baecker's (2006) form model, and what could this combination offer for sociology? The answer to the first part of this question has proven to be affirmative – re-entries can and should be observed interchangeably with conceptual reservoirs and the semantics they imply. As we have observed, this approach makes it possible to construct a form model that has a clear reference point in some data-set, thus making it more than just a thought provoking toy-model. With models anchored in data, it is easier for the scientific community to debate on the merits and blind spots of each model. But what does this offer for sociology, and should we start developing it further as an approach? And if the answer is yes, should we also tweak the rules that Baecker has suggested for creating form models? Tweaking the rules might be plausible since we have taken some freedoms in the way we have used the model. The current chapter takes everything that has been said before about observer-cultures, and about the model that aims to capture them, and offers a conclusion to this experiment in contextual modeling. As an end result, we should have a better analogy for the model, and a better understanding of why and how to use it in sociological research.

Observer-Culture as a Metasystem?

Considering culture as a system is problematic in the context of Luhmann's theory of social systems (see Chapter 2). For Luhmann, culture – as a continuously evolving collection of semantics – is the reflective and descriptive surface of society that performs society's memory function, i.e. "presents the present as an outcome of the past", thus "constructing identities for re-impregnating recurring events" (see Luhmann 1997b, 71). Unlike Parsons, Luhmann does not give culture a position of a distinct system – i.e. a "cultural system". For Luhmann, all social systems are meaning systems, and thus culture cannot be separated from social systems to be observed as yet another system. In this sense, culture emerges around and in between operative systems, and sometimes attached to their operations in the form of "programs" that are directed at overcoming the meaning-emptiness of codes (see Beckert 2002, 224).

There is a contradiction in the way Luhmann, in his systems theory, insists that we should not get too caught up with the reflective surface that is culture, while proceeding in his own analyses by tracing a semantic transformation and reflecting on how this transformation relates to structural transformations in society. This is the first hint that perhaps it operates as a metasystem. The second hint is this: if culture serves as the "memory function" of social systems – as Luhmann sees it – it seems plausible to see it as a metasystem that connects the differing logics in society, especially the different logics of social systems. Social systems emerge as the strong operative systems that are able to reduce the double contingency of social situations, but they cause their own problems as we have to mark the "switching" between them, e.g. small talk ends and business talk begins. Thus, when se observe culture, we observe the switching that is done when operative logics are combined – or, if we wish to talk about frames instead of systems, when there is a "keying" that changes one frame into another (Goffman).

By calling an observer-culture a metasystem I want to emphasize the fact that observer-cultures – of which startup culture is one example – function as navigation tools in society, designating good entry-points into operative systems and simultaneously conditioning the way in which these systems resonate with the overall

form. Again, calling this a social system is problematic, since an observer-culture seems to lack a clear operative core (such as a communicated "decision" for an organization), and since it does not fit Luhmann's typology of social systems. For Luhmann, there were interaction systems, organizations and society's function systems. He did, however, consider social movements as a contender for another type of social system. This is where we take our cue and start stretching his theory beyond its current limits.

As we noted in Chapter 6, Luhmann himself considered including protest movement as a contender for a fourth kind of social system, one that oscillates between an issue and an articulation of a "worry" re-entered to this issue. A protest movement is neither an interaction system nor an organization, although there are interaction systems as well as an organization operating in relation to it. Luhmann saw that organization only played a minor role in the autopoietic system of a protest movement, as membership could often be achieved by merely taking part in voicing the central concern about the issue at hand (see Luhmann 2013, 154-165). But protest movements – or social movements in general – give rise to their own organizations at least momentarily when they aggregate the culture and its communications into demonstrations or public addresses or other activities. They coordinate the acceptance of decisions, if only making very predictable decision about voicing the concern or iterating on it somehow. After a demonstration, a protest movement can again "slim down" as organization as most of the participants depart from their active membership to the extent that they wish. Because of this, they are not organizations per se, but something else. As was the case with startups, the organization is not the level where identification takes place. The identification is with "the issue" on the operative level, and with the observer-culture on the self-descriptive level (the level of double closure). Also, Luhmann describes social movements as taking the role of "society inside society", and this is what we observed startups to do as well (Chapter 6).

What is peculiar about protest movements is that they are internally differentiated between a center and a periphery. There is the strongly committed core and the followers to be mobilized (Luhmann 2013, 164). But I think that the role of this center-periphery-divide in societies deserves more attention – it is a more basal form of differentiation, where uncertainty is overcome by fixing a rational, actor-oriented center. Thus, what Luhmann considers to be a social movements internal center-periphery-differentiation could be seen as an observer-culture fixing a narrative and an accompanying cosmology in order to create a bridge over uncertainty. The uncertainty consists of residual categories of operative systems and their semantics, that continue to solve problems, but not without irritating each other while doing so.

To put it in another way, I think Luhmann reads too much into protest movements that could be seen in more general terms: protest movements are but the most visible example of this metasystem, also known as observer-culture, that reflects on itself and by reflecting on itself gains new resonance in society. And any observer-culture that emerges, differentiates primarily through center and periphery, setting a rational core against an irrational environment. This is what Geertz (1983) seems to be saying when he discusses charismatic figures and the ritual of royal progress in different cultures (see Chapter 1). Reflecting on the whirlpool as an analogy, we can see how the center is the cavity inside the whirlpool. This cavity in the center does not create the whirlpool, but emerges through the restless whirling of the mass of water. In terms of social systems in the observer-cultures environment, the restless core designates the spot where differing logics can be bypassed through the "wormhole" created by the suction of the cavity. The standard stories we tell in a specific observer-culture are ways of rationalizing the whirlpool in a linear fashion, describing it as a sequence of actions. This,

again, is not exactly wrong way of explaining what is happening, but it is oriented towards actors trying to follow recipes for action. The wormhole – as a suction through differing system logics – holds together because of the semantics that condition the responsiveness to different systemic logics – or frames – in the environment. Without the conditioning enabled by culture as a metasystem, the strong systemic logics would react into each other in more turbulent and even chaotic ways.[86] To summarize: culture as a whirlpool of meaning is not a fusion of logics, but a working synchronicity of these logics, conditioned by the observer-culture itself.

Here, the examples of royal progresses come to mind. The progress, the emperors character and the royal regalia were all to suggest a unity where there was a difference – e.g. of center and periphery, of different strata or segments of society, or difference of values. But in modern world, the problematic difference is the difference of function systems as these constantly irritate each other, and find new couplings. It is thus expected that most of the spectacular leadership stories and standard stories – and the observer-cultures they inhabit – emerge through the irritations of these system logics. This is what perhaps ignites them, but their growth is another matter. A culture starts to fill the gaps that are left in between more established systems and frames, and it can only evolve and grow through constantly reflecting on itself, and so it creates a center – a description of itself as purposeful action – which starts to resonate in symbols, concepts, stories and heroes. Through these, it protects its oscillation in the environment, thus securing its wormhole through various social systems or frames.

It should be emphasized that here are no clear limits as to what can be called an observer-culture – we can describe a group of friends or even a family as an observer-culture if we find that it draws a boundary in relation to some other observer-cultures. For example, a family fluctuates between temporary interaction systems, an organization that makes decisions and between reflection of different societal subsystems. Various different communicative operations appear in a family during one day. But the family needs a meta-language for tying together how and when it refers to decisions, when it lets meanings connect freely through interactions, and how it distributes money, power, love and other media of communication. All this is about conditioning how and when certain topics are brought in, and how the family lets a logic affect it as an observer-culture. Some families might appear more like organizations, making decisions and plans and membership rules, while others seem to endure simply through interaction systems opening and closing. In both cases, however, a pattern develops, and this pattern is the observer-culture. This pattern secures what operational systems are not securing, and is able to run for some time. It is a matter of time when any observer-culture becomes aware of its own contradictions and starts dissipating[87].

As a metasystem, and as an index to these different environments, the observer-culture is itself a model through which environments are turned into prescriptions for actions. The good regulator theorem comes to mind here,

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[86] A whirlpool with a downward suction is called a vortex. As this is simply a metaphor, I will stick with the whirlpool, as it gives a clear imagae of a pool of communicative logics synchronizing into a "whirl". Note also that the whirling motion makes the suction more orderly. In physics, this can be demonstrated by first turning a water bottle upside down, and noticing how the water struggles to get out in chaotic ways. When one joins two bottles from their necks, thus creating a hourglass with some water in it, and gives it a "whirl", a clean whirlpool vortex is created and the water runs smoothly from the upper bottle to the lower one.

[87] Here, Oswald Spengler's classic work The Decline of the West comes to mind, with it's central idea of cultural morphology and the repeating patterns in the lifecycles of cultures (for a brief overview, see Bonta 2014). In Spengler's view, cultural vitality turns into a more reflective civilization dominated by intellect, before degenerating. Spengler's idea of cyclical morphology where cultures build up into civilizations that become fragile and brake into further cultures can be seen to have some parallels with our way of using Baecker's form model. For example, for Spengler, culture was the "becoming", whereas civilization referred to what had already sedimented. The Faustian culture of the modern world, according to Spengler has its prime symbol (Ursymbol) in the limitless space. The in-between-places that startup culture celebrates could also be seen as a continuation of this theme, although we have taken them as "menstruation-huts of economy".

i.e. that "every good regulator of a system must be a model of that system" (see Conant & Ashby 1970). As every key must be a model of the lock it opens, thus every observer-culture must be a model of the environment that is irritating it, a model that conditions how incongruent logics can be observed as information.

Considering a Better Analogy for the Model: a Knot or a Whirlpool?

Having come this far, I am not satisfied with calling the whirlpool model a "form" or a "complex form" (Baecker 2006) or simply an "observer-culture" (Fuchs 2001). "Form" is too abstract, and does not convey the dynamic nature – the constant oscillation – of what is being presented. "Observer-culture", on the other hand, refers to what the model depicts, but we do not want to confuse the model with what it depicts. The model is a map that displays how an observer-culture oscillates in a specific contextual complexity while mainlining its identity as a culture. They map is not the territory, and the model simply has a homomorphism with the phenomenon it tries to capture.

So what would be a better analogy? Besides following Spencer-Brown's terminology and calling the model a form, Baecker (e.g. 2006, 120) sometimes refers to the model as depicting a "knot" that ties together a manifold world. I feel that the knot-analogy is a strong one, and will first present it before moving on to argue why we should rather talk about "whirlpools" when modeling observer-cultures. However, both analogies have their strength – they are all useful in different situations (Appendix 2 will give examples of how to use the model in different situations). To summarize what will be said, it seems to me that the whirlpool-analogy fits better the framework of basic science, as it takes complexity more seriously, and the knot-analogy is best used in clinical sociology and consulting, where simple analogies are more suitable and easier to manage.

The Model as a Knot – Problematizing small-scale contextual entanglements

The metaphor of knot has been referred to by Baecker (e.g. 2006, 120) and it is in many ways a fitting one. As he writes, the "many-fold world does not end up in states of indistinguishable entropy, but rather in states that resemble *knots*. Knots are entangled, even complex; they are caught up in themselves, yet there is still a mathematics that is able to describe their particular structure"[88]. Here, in making these knots visible, he sees the future of Luhmann's sociological project:

> Luhmann's theory of social systems may eventually be seen to have paved the way for a sociological analysis of the interdependency of independent states brought together – or, as we will say in this paper, "arranged" with respect to one another and "knotted" to each other – by operations drawing on previous operations and on possible next operations. (Baecker 2006, 111.)

My only problem with the analogy of knot is that it is static rather than dynamic. Thus it loses all sense of emergence and self-organization that Luhmann's theory is so careful to include into sociology. This is why I chose to use the analogy of whirlpool – it paints a more dynamical and self-organizing picture, whereas knot is something unmovable. Baecker himself understands perfectly clear how dynamical these knots are. This is visible, for example, in the way that he emphasizes the imperative to proceed quickly, by suggesting that we follow Ashby's ideas on operational research which tells us to "look at what happens, not at why it happens, to

[88] The mathematics Baecker is referring to is knot-theory. The implications of Spencer-Brown's (2008) operation of re-entry has been extensively discussed by the mathematician Louis Kauffman (see 1987, 2003), who has also written books about knot theory.

never collect more information than necessary for the job at hand, and not to assume that the system does not change, that is to only try to solve the problems of today" (Baecker 2013b, see also 2006). But despite this, he uses the analogy of a knot that lacks the restlessness that the model of re-entry so beautifully implies.

There is, however, a situation where the analogy of knot is especially useful. This is when we want to use the model to make sense of conflict-situations, i.e. when we begin by problematizing a phenomenon, and attempt to see if this problem is tied to a contextual entanglement instead of residing inside actors or in their relations. This is exactly how Baecker sometimes uses the model, for example when considering what combination of variables enabled the Nazi-party to gain momentum, i.e. what contextual entanglement was the natural habitat for what Baecker calls the "Hitler swarm" (see Baecker 2013). My suggestion is that the knot-analogy is used when we want to solve problems – i.e. problems that relatively simple so they can be solved – as the knot is something to be opened.[89]

The Model as a Whirlpool – Studying the contextual complexity of society

The reason that I chose the analogy of whirlpool is that a whirlpool is a decent example of a complex, self-organizing system. As an analogy, it lacks some of the simplicity and common sense of "knot", and is thus harder for the layman to understand, but at the same time it serves a better description of observer-culture gaining momentum as a self-organizing process. Let us consider for a moment how whirlpools emerge and function.

Whirlpools usually form either when opposing currents meet or when a there is a hole in the bottom of a container holding a body of water, such as in a bathtub. In the case of a bathtub, when the stopper is removed, the water begins to organize into a whirlpool as a mass of water tries to "squeeze out" of the drain. What is interesting is that the whirlpool generates its own stability on top of the underlying instability. As Hidalgo (2015 29-30) writes,

> The whirlpool is a steady state, since it is stable as s as long as there is water flowing in the system. It is also information-rich state, since whirlpools are rare configurations of water molecules that do not appear spontaneously in still water. Unlike still water, whirlpools are organised structures in which the water molecules are not going in random directions, but have a speed and trajectory that is correlated with that of the water molecules traveling next to them. The information-rich state of a whirlpool emerges naturally – it is something that we get for free in an out-of-equilibrium system. Going back to our original sentence, we can say that the whirlpool is an example of information that emerges naturally in the steady state of a physical system that is out of equilibrium.

Furthermore, it is important to understand that the surrounding water pressure keeps the whirlpool together, thus increasing its momentum. Without this pressure, it would disintegrate as the momentum of the spiraling water would send the water in different directions. In social systems – and especially in observer-cultures – we can imagine a similar mechanic of momentum kept together due to pressure, and the momentum "de-tautologized" due to opposing currents circling each other going downwards.

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[89] For an example of using the knot-analogy, see my toy-model for the game "Papers, Please" (Appendix 2), which depicts a how contextural complexity can be problematic.

The whirlpool analogy beautifully captures Luhmann's view of society as a constantly out-of-equilibrium system of communications that nevertheless regenerates steady states as communications are differentiated into various social systems (see Chapter 2). What we have considered is that besides this differentiation there is another level of system-formation, where cultural whirlpools synchronize communications of various socials systems. Nothing holds society together except its restless movement of observer-cultures, in which expectations are fixed, until these expectations fail to function and finally are replaced by emergent semantics and expectation-structures (see Baecker 2011).

Whirlpools are a great analogy when a sociologist is observing the world and having a dialogue with other sociologists. In this situation, there is a sincere wish to understand the phenomena at hand – instead of a wish to take part in policy debates and moral discussions. The analogy of whirlpool is able to bracket out questions about whether something is problematic, or whether and how new cultures should be engineered. By contrast, one has to look at the phenomenon and find logic.

SUGGESTED GUIDELINES #1: PROCEEDING FROM SEMANTIC ANALYSIS TO WHIRLPOOL MODELING

The following is my guideline for creating a whirlpool model. In most cases, it shows how to replicate the study at hand, but I will make some guidelines that I did not follow due to the research process being iterative (see Appendix 1). Following what I have learned during the process, I suggest proceeding in four steps:

a) An observation of either an explicit narrative (a standard story) or an implicit narrative (a story observed by the researcher based on some data, events or previous research) to start the inquiry.
b) Analysis and categorization of central semantics appearing around these narratives.
c) Observing the semantic categories as conditionings/constraints with reference to various social systems – or other environments affecting meanings – and constructing a whirlpool model that visualizes the order of these conditionings/constraints.
d) Constructing a hypothesis about the "niche" in society that has called for this new whirlpool to arise.

a) Setting the scene: tracing the narrative pattern and conceptual reservoir

The narrative analysis and semantic analysis are important if we want to have grounding for the model, i.e. something that can be reflected on if others want to challenge or iterate the model. The former is important so we outline a "standard story", and the latter is central to uncovering the communicative latencies in this story.

The narrative analysis can be done in a myriad of ways, taken that some pattern is discovered. The purpose is to show that there is a common "standard story", and to offer a first glimpse of the possible "popular semantic" that is at play behind it. This is to verify a repeating pattern and observe its peculiarities, so that we can enrich and/or counter with the semantic analysis. My approach was to use the actantial model, as it is one of the more used tools in narrative analysis, and bears no connection to fairy-tales (cf. Vladimir Propp) or to ancient mythologies (cf. Joseph Campbell). I also considered the three axes of desire, knowledge and power to be good heuristics for gaining a basic understanding of startup stories. But as this phase is trying to uncover a pattern, almost any technique of narrative or qualitative analysis can be used – the only requirement is that the researcher ends up with some pattern that presents the common journey in the world, and makes it clear what is the common "cosmology" in these stories.

The semantic analysis, on the other hand, is best done following Andersen (2011) and his outline of "semantic analytical strategy". I suggest following his steps, as this in direct connection to Luhmann, whose theory strongly resonates in the whirlpool model. This analytical strategy basically traces a conceptual reservoir, divides it into categories if needed, and looks at the unmarked side of the concepts that are often repeated in the communications (see Chapter 4 and Andersen 2011 for further information). The data in both cases could come from various sources, with one (a) if we want to study culture, then we should include central texts and/or narratives; (b) if we want to study a phenomenon that is not "popular", then we should collect the narratives and conceptualizations "on location" or from specific documents.

b) The narrative condensed into a simple form

In the end of Chapter 4, we also did some modeling on how a startup indicates a goal for itself, and how this differs from a firm reflecting on profit as its goal. Startup culture, we suggested, kept the concept of profit hidden and focused on traction, scaling and disruption – all suggesting wider resonance than economic, albeit the culture saw everything as potentially economic. This was the first indication that the relationship to economy was "buffered". It also gave us a clue about how the startup culture secured a mode where the firm was after disruptive ideas, traction and scaling – avoiding first order observation of economy – and would then take a second order view on itself, speculating economically on its resonance in society.

The purpose of this stage is to draw a simple picture based on our reading of the standard stories, and thus to give us initial insights on whether there could be something interesting behind them. The form that we presented was one where goal-setting was observed, but we could simply observe the basic form of the narrative as a form[90]. Our choice to use actantial model was simply to use a more common way of ordering narratives in order to focus on the stories themselves (for creating a narrative form instead of a goal-form, see the example of Romeo and Juliet in Appendix 2).

c) Constructing the whirlpool model of an observer-culture

Next, the researcher should begin to consider how the categories bring in different systemic environments and in what order. In our model of the startup (Chapter 5), we rearranged Baecker's (2004) form of the firm -model, so there was a clear point of comparison. This was, admittedly, not the most fruitful approach, but it was more controlled way of proceeding, and enabled us to build on previous research (ibid.). Contrary to this, the researcher in most cases begins without having a clear reference point in some ready-made model. This is, in many ways, a better way to start.

d) Constructing a hypothesis about the "niche" or "habitat" of the observer-culture

At the end of Chapter 5, we drew a simplified model – based on our reflections while building the whirlpool model – that depicted the societal tension that provided the "niche" where a startup culture could sustain itself. The purpose here was not to suggest how it had emerged – tracing the causal chain lays beyond our interest –

[90] Reflection of goals and reflection of action are seen to be somewhat the same thing here, as action strives towards some goal. Goal-setting does not here refer to highly calculated activity, but rather to the action reflected upon. As Hans Joas writes, goal-setting is a "result of a situation in which the actor finds himself prevented from continuing his pre-reflectively driven forms of action. In this situation, he is forced to adopt a reflective stance on his pre-reflective aspirations" (Joas & Knöbl 2009, 518). This is also true with culture – goals are stabilized when there have been perturbations in the flow of communications, i.e. when there is need for seeking new couplings, and new communicative possibilities. See chapters 2 and 3 for further perspective on this.

but merely to form a hypothesis about the systemic tension that the observer-culture seems to feed from as a parasite. This hypothesis was supported by our research and partly by some previous studies that reflected on the importance of venture capital networks in giving birth to startup culture. The tension was between the framework of market competition and the framework of venture capitalism – both could be seen as observer-cultures although very broad ones.[91] It is easy to see how a culture differentiates itself form some other cultural background, but not as clear how it is supported by some tension that this background already has. Thus, startups display defiance towards market-oriented competition and its connected semantics, but this defiance would not endure for long unless the larger framework of venture capital had not have already created a culture of flanking the marketplace by speculating on other possibilities. The startup figure, and the observer-culture, feed on this tension between first order economy (market competition) and second-order economy (venture financing).

The way to uncover the niche – as the living space of the observer-culture – is to carefully observe the standard stories, semantics and the whirlpool model, and to reflect on previous studies, and to simplify the whirlpool model into a societal tension that offers an uncertainty on top of which the observer-culture and the narrative patterns have brought their meanings. This model depicts the potential double contingency that is turned into meaningful action by the culture which, paradoxically, feeds from this uncertainty.

Suggested Guidelines #2: Step-by-step Guide on Constructing a Whirlpool model

I will now present some guidelines for constructing the whirlpool model. These are not rules, but slight reformulations of Baecker's (2006) ideas that have helped me proceed while reimagining the role of semantics in his form model, thus constructing what I have called the whirlpool model. As my own research proceeded by rearranging Baecker's form of the firm –model, these steps have not been followed as such in the present study. However, each step presents something that has been learned along the way.

The first distinction

a) The modeler begins by drawing the first distinction. The first distinction is the central difference that the observer-culture always returns to, attuning new systemic logics to make the crossing. This can be considered as the motor of the form, without which the form would stagnate. We could suggest different distinctions as there are different oscillations going on simultaneously. Everything can be criticized by later observers as there is not ultimate vantage point in observing communications, or "reality" for that matter (see Chapter 2 and 5 for more on Luhmann's constructivism).
b) Furthermore, the first distinction should capture the "basal restlessness" that is constant in the standard stories (Tilly) of the culture. The first distinction does not have to be any of the semantic categories, but it should present us with a specific selection (marked side) appearing in relation to a pool of possibilities (unmarked side). For startup we observed the oscillation between "product hypothesis" (marked side) and "scalable technology" (unmarked side).

[91] The argument for calling them observer-cultures is that they also have clearly defined heroes, i.e. super-homuncului. The argument against this would be that they are highly differentiated internally, displaying many observer-cultures, and thus framework is used here primarily. However, as I have suggested, we can use the term observer-culture on many levels. Framework is merely a more careful way of saying this.

c) Thus, the first distinction is a core problem for which the agency of the cultural actor or a hero is offered as a solution. What are the goals and means most notably attributed to the actions, and what is the simplest form we can display them (e.g. startup carving out a disruptive product from scalable technology).

Adding environments after the first distinction

d) The question then follows, how is the basal restlessness stabilized by the semantics that frequent the standard stories of the observer-culture. Having observed the data, we have an understanding about the "selections" (i.e. repeating patterns) that have emerged, but the "variation" (i.e. the pool of suppressed alternatives) has to be constructed by us as observers. The model then is a scientific construct that tries to make simultaneously visible the selection, the variation of other possibilities behind it, and the stabilization that takes place through the suppression of variations.[92]

e) After the first distinction, we add the first context. Here, and easy way to proceed is to ask, what "logic" seems to affect the oscillation in most situations? The semantics mark a logic, and often a bivalent one that excludes any third values that do not fit its logic. The logic marks what we have been calling a "context". Then, we can ask what further logics come into play, and how the smooth transitions between the logics/contexts is secured. (For clarification, see Günther 1973 and Knudsen & Vogd 2015, 6.)

f) If we are doing Luhmannian systems theory, then every environment we add should be a social system of some kind. The model thus depicts systems stabilizing or irritating the basal oscillation, and each new systemic environment leaving blind spots that call in further systems to reduce uncertainties. But as the systemic logics are stacked, so too are the blind spots becoming more visible inside this complex form, causing cognitive or communicative dissonance. The resulting form is one of systems irritating systems, solving each-others residual problems, but also causing mutations in the semantics so the irritations can be perceived as perturbations.[93]

Difference between the first environments and the last environments

g) The first two environments after the basal distinction define the "double closure" of the form, as the oscillation takes place in an environment that perceives an environment for itself (in the form of the firm, double closure appeared in the distinction between organization and economy)

h) The last environment – what ever its ordinal number – should be treated as the limit of the model, while also remembering that it might just be the limit of our observation. The last environment has a dangerous quality, as it is where the form reaches "maturity", becomes reflective on such a level that it might be under pressure to change its pattern of oscillation. In the spirit of Spengler and his cultural morphology, we might say that the observer-culture has reached its "winter", becoming full, reflective and login its energetic restlessness.

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[92] Note that for Darwin, it was the environment that was responsible for the "selection" of features. In Luhmann's generalized Darwinism, the variation, selection and stabilization all take place inside the system, because the system can only use its own operations to select. The actual environment may perturb the system into selecting, but the selection follows the patterns the system is able to produce. (See Luhmann 2012, 287.)

[93] That is, if we want to follow the Luhmannian approach. Alternatively, we could conceptualize other environmental factors such as "frames" (Goffman), as long as we are able to argue for these both theoretically and empirically.

i) In theory, the form could be continued to infinity by adding new environments, as we could see many function systems, organizations or interaction situations perturbing the oscillation. However, the law of diminishing returns abides here – as we are adding further environments, they tend to get more trivial and confuse the model which is aimed at reaching as simple homomorphism as possible, only displaying the basic pattern, and the basic tension, of contextual oscillation. The model displays the "strong currents" of society (social systems) colliding and the observer-culture being the steady state that emerges to organize the out-of-equilibrium system into a unified whirlpool of systemic irritations.

Observing the model as an observer-culture's guide to its own contextual complexity

j) As we observed in Chapter 2, environments cannot be "steered" top-down by individuals or by organizations. Thus, an observer-culture emerges as consecutive steering-attempts build up new sense-making, until these steering-attempts reach a point where their performativity is more important than their direct steering-power over issues (e.g. see Chapter 1 and the Figure 1 on celebrity CEOs in investor capitalism). The observer-culture constructs a conceptual reservoir that is able to re-establish a consistent "reality tunnel" – or worldview – for the culture, thus inciting further actions and – what is more important – discouraging inaction in a situation of uncertainty.

k) Observing this model, we are interested in how different logics of communication are either brought to the foreground or distanced from the basal oscillation with the help of the semantic categories that the culture employs. In order to do this, the researcher should have prior understanding of how social systems are differentiated, and then be sensitive to how the concepts operate in clusters in his data. From this, he should be able to form ideas about how communicative logics are conditioned between specific social systems through this specific observer-culture.

l) It is important to note that for the observer-culture its environment appears as a unity. This is because a culture is a self-referential network of communications that repeatedly marks the boundary between what communications are included and what are excluded[94]. So the job of the modeler is to unpack this into the poly-contextual complexity of various systemic logics perturbing – and being perturbed by – the oscillation.

m) If clear conceptual categories have emerged during the semantic analysis, each designating some environment, the researcher should order these as seem to appear in the narratives. Even though the whirlpool model is not a chronological depiction of how things go – because all the conditionings are simultaneous in a culture – we can say that oscillation in the inner environments is what is built to the core of the culture, thus more definitive in relation to the cultural identity at offer. Narratives begin with relatively secure oscillation that becomes more turbulent as different environmental currents start entering into it.

n) The model might seem chronological, as if the inner distinctions or environments come first, but this is only partly the case. The culture solves its problem by offering a pattern of actions – and a "vocabulary of motives" (Mills 1940) – that offers an Ariadne's thread through the communicative contexts. For example, we observed how a startup is secured – by the semantics of retreat and semantics of

[94] See Chapter 2 for further reference. To summarize, I will quote Fuchs (2001, 156) as he writes: "Assume that a "culture" is a recursive network of self-observations and -distinctions from other cultures or non-cultures. Distinctions create boundaries of varying sharpness and permeability. They produce an inside and outside, separating that which belongs to a culture from that which does not belong, does not yet belong, or belongs to a different culture. Sometimes there is much movement across the frontiers, making it more difficult to separate inside from out."

resonance – from the semantics of market competition, and how this allows a startup to go through failures and "pivots" without forming explicitly paradoxical self-observations, because failures outside the market "do not count" as failures.

o) Every systemic environment after the basal distinction gives it new grounds for communicative resonance while also adding new constraints. Arbitrary action becomes more and more culturally defined, and more and more reflective. The closer the environment is to the basal oscillation, the more "naturally" it is incorporated into it as an amplification and as a constraint. The further the environment is, the more "cultured" its incorporation is – it needs more culture, as it creates more perturbation at the center.

Reading the model in three layers: the id, ego and superego of an observer-culture

p) Any whirlpool model depicting and observer-culture can be observed as the dynamic between three oscillators. These oscillators correspond to id, ego and superego in Freud's theory of personality.

q) The basal oscillation on the leftmost distinction presents the impulsive direction at the heart of a culture (id); the reflective oscillation on the far right side of the model presents environments that restrict and conflict with this pursuit (superego); and central distinction is the oscillation that has to accommodate these two forces (ego).

r) The distinction in the middle of the model (ego) is what we call the preferred level of self-description of the observer-culture. The basal and the reflective oscillation are primary in the sense that together they create a double bind for the operative mindset, and thus largely define its form.

s) Reading these, we can reflect on the various pain-points that might appear in the self-descriptions that the culture favors, and we can ask whether the identity are scar-tissue built on top of the clashing communicative logics.

t) Note that this way of reading the model only applies if we have built a whirlpool model out of an observer-culture, but is meaningless if we construct a form model of the niche where this culture sustains itself. This is because the niche – as a wider situational setting for the observer-culture – does not have self-reflection in the sense that the observer-culture does.

Constant suspicion about the model

u) The modeler should remember that "all models are wrong but some are useful" (Box 1979). Thus, she should question the model that the semantics suggest, and re-arrange the model many times so she can argue for and against each way of ordering the model. It is important to consider whether the environments could be observed in a different order, and whether this would make any difference for the culture and the stories that would emerge in this situation. As the whirlpool model is easy to flip around, it works as a tool for thinking. This constant re-arranging of the model is where the insights take place, and where sociological theorizing begins. The model is always just a model, and the true "fruit" of the model is the thinking and tinkering that happens around the model – i.e. the sociological bricolage (Lévi-Strauss) enacted over a culture's own bricolage; or sociological exaptation enacted over cultural exaptation (see Gould & Vrba 1982).

v) When the suspicions have been considered and tested with additional iterations for the model, and the modeler is ready to settle down with one of her iterations, she can start observing what the model implies, i.e. what is interesting about this specific constellation? What are the consequences of this

constellation of contextual complexity? What problems does it solve, and what problems could it possibly cause?

Suggested Guidelines #3: Use in Dialogic Organization Development

Bushe and Marshak (2015) write that, in the last 30 years "the post-modern orientation in the social sciences, and the discoveries in non-linear and complexity natural sciences, have been influential in altering ideas about change and change practices." One important result of this change has been the emergence of dialogic organization development approaches, or the "dialogic OD mindset", as Bushe and Marshak call it (ibid.). Dialogic OD differs from the more "diagnostic" approaches that define a problem, seek a solution for it, and then create a clear roadmap for implementation. The dialogic methods focus much more on taking social constructivism seriously, and thus considering how we talk about things in different situations before jumping to any further solutions about how to solve the problems. This way, more complexity can be processed early on, and haphazard solutions can be avoided. Or, in other words: changing a process or a structure without observing and modifying the language and conceptions around it first would be futile, as the culture has to be aligned with the decisions for the roadmap to work. Bushe and Marshak (2015) state that

> dialogic methods seem to be especially effective when dealing with two types of contemporary issues. One is when the prevailing ways of thinking, talking about, and addressing organizational dilemmas traps an organization and its leaders in repetitive but futile responses. The other is when facing wicked problems, paradoxical issues and adaptive challenges, where there is little agreement about what's happening and where there are no known solutions or remedies available to address the situation. Dialogic approaches work by fostering generativity to develop new possibilities rather than problem-solving, altering the prevailing narratives and stories that limit new thinking, and working with the self-organizing, emergent properties of complex systems.

Analyzing 40 approaches to organization change that are fundamentally dialogic, Bushe and Marshak (2015) list eight key premises, or fundamental beliefs, that every dialogic approach has. These fundamental beliefs are as follows:

1. Reality and relationships are socially constructed.
2. Organizations are meaning making systems.
3. Language, broadly defined, matters.
4. Creating change requires changing conversations.
5. Groups and organizations are inherently self-organizing.
6. Increase differentiation in participative inquiry and engagement before seeking coherence.
7. Transformational change is more emergent than planned.
8. Consultants are a part of the process, not apart from the process.

As should be clear after chapters 2, 4 and 5, these key premises are well aligned with our conceptual framework and with our whirlpool model of culture. For example, Luhmann provides us with a constructivist perspective that takes language and emergence seriously; that takes communication to be the central operation of any social system; and that constantly reminds us about the role of the observer in shaping what is observed. And as

we have seen with the whirlpool model, once one knows the model and its components, it is easy to rearrange it based on a dialogue.

However, in order to use the whirlpool model as a tool for dialogic OD, some things have to be reconsidered. First of all, the model has to be simplified so that it can be used without any previous knowledge of Luhmannian sociology or the model itself. Also, some terms should be simplified. I suggest the following guidelines.

1. The knot metaphor should be used instead of whirlpool so it appears in a more easily understood form, i.e. as a contextual knot that we can tie or untie.
2. The parts of the whirlpool model should be simplified, so that they are more open to discussion
    a. For example, the marked space can simply be observed as "the goal", i.e. the effect that a worker or a manager attempts to produce.
    b. The unmarked space is the "disturbance" that affects the goal. Here, we will list many things, and then see what disturbances are essential for work, and which ones have more adverse effects on the work. Common sense notions have to be dropped: something quite essential can easily create the most severe cognitive or communicative dissonance.
    c. The re-entry is appropriation of the said disturbance in a pacified/conditioned form. Appropriation is a more complex term than goal or disturbance, but is good as long as we explain what it means: that disturbances have to be incorporated in ways that translate them to something useful.
3. The explanation of the model as a whole should also be simplified in a way that lets actors easily imagine actions and narratives instead of contexts if the model feels confusing. Bringing it a bit closer to everyday sense making makes it possible to use as a dialogic tool. For example, the form of the re-entry can thus be seen as the appropriation of disturbances in the goal-oriented action (see the toy model #2 in Appendix 2). By looking at the model we get to see how a seemingly simple goal-oriented action becomes a complex form of communication, with its strengths and weaknesses.

We could create a model for every role inside the organization, or simply consider the differences between the observer-cultures of different departments, or between the observer-cultures of top managers and employees. Alternatively, we can create models for different customer segments and see how the company is aligned or misaligned with each one.

The model itself is not the end-point – it is rather a tool for facilitating conversation. There are two primary strengths that this model has when used as a tool in dialogic OD. First of all, it accelerates discussion because it provides an ordering of contexts – if the contexts would appear simply as an unordered rhizome, it would not irritate much critical responses. The second strength has been mentioned many times in earlier chapters: the model gives an alternate perspective on actor-centric perspective on things, and should be able to accomplish this even if we allow for some everyday language to enter it for the sake of a more dialogic approach in consulting.

Conclusion: Sociology as the Science of Contextual Complexity in Society

Having reached the end, I wish the reader will agree with me on four things:

1. Sociology is the science of contextual complexity in society, and there should be a way to model this complexity
2. There are always latent complexities hidden under the perceived complexities, and always another context to add, so there is no way of reaching a definitive model of any cultural phenomenon
3. Models should try to present the dynamical core of whatever is being studied, and if possible, form a hypothesis of what state of non-equilibrium is sustaining this dynamic
4. The modeling-approach has its benefits in qualitative research, but can just as easily be used as a tool in clinical sociology or dialogic organization development.

I offer these statements as a challenge to current sociology, but not as an attack against any specific tradition inside sociology. If we take sociology to be the science of contextual complexity in society, then these statements merely take sociology back to its roots, its original calling as a science. Before sociology came about, there were philosophical theories about how the "social contract" came to be[95]. These were descriptions of society as something that was brought into being through the rational choices made by the people. In these descriptions, there was the chaotic situation of the state of nature, the collective decision to make a social contract, and the complicated situation of the sovereign state. In these fictional descriptions, there was no real understanding of society as a complex, self-organizing system. For their time, these were transformative thought experiments, but they did not yet present much sociological imagination – i.e. they did not contain any hints about how society could emerge as a self-organizing system, other than through collective decisions or some general will (volonté générale) of the people.

Only when sociology arrived at the scene could social phenomena be conceptualized as having their own rules that could not be reduced to individual human beings: cultures and societies had self-organizing qualities and a "morphology" (Spengler) of their own. As society differentiates and increases its contextual complexity, the world becomes increasingly manifold, riddled with mutually irritating perspectives. In this complexity, cultures arise as observers, allowing people to attach to, and emulate, a communicatively produced web of differences. Cultures bring momentary clarity into some niche in society, where different "logics" are at odds. And as time goes by, their concepts and "standard stories" start to appear more and more as empty signals rather than as depictions of actual situations. Every culture is to be doomed to become theatrical performance and, at worst, a parody of itself.

In this cycle of birth and death of cultural forms, sociology has a mission. It should seek to understand the logic of this restless movement, and see why some particular pattern keeps repeating itself, why history keeps repeating itself in peculiar ways. Putting too much emphasis on describing the pattern itself, instead of theorizing about it, leads to social research that might be useful, but that can hardly be called sociology.

Sociology as the science of contextual complexity in society is a broad definition, and can include almost any kind of research. For example, network sociology could be seen as the study of "contextual complexity arising from a

[95] I am referring to the ideas of Thomas Hobbes, Jean-Jaques Rousseau and John Locke, all three iterating on the same thought experiment in which humans are first living in a "state of nature" and decide to form a "social contract" in order to give up absolute but dangerous freedom in exchange for the security and order provided by the sovereign state.

set of relations"; frame-analysis as the study of the details of "how switching between contexts is actually orchestrated and achieved, or not achieved, in different situations". The list could go on.

Qualitative sociology could be on the forefront of this new sociology (see appendixes 2 and 3 for more on this). But to do so, it should also take theorizing seriously. The single most crucial step in doing this, as we have seen, is to embrace the philosophy of modeling (see Introduction and Chapter 5). For sociology, this would mean turning away from over-emphasizing the single study with its data, methods and results, and focus more on building and iterating on models that can be easily tweaked by further research, copied and tinkered with by other researchers. Systems theory and model building share an interesting trait: they are not about "holism". In other words, they do not try to include every detail, as that would be stupid if not impossible. Rather, they attempt to make more intelligent reductions in order to observe complexity in a more insightful way.

Thus, perhaps the central question of our science could be summed up as "what is the context behind this context?" But as every sociologist should know, this question commits the same mistake as any first-order observer of the world – it condenses the contextual complexity into a single context. First-order observers always naturalize their context by taking the realist stance of "it is what it is"; the sociologist has to dissect this unity, thus unavoidably contradicting the culture's own self-description. Thus, the central question of sociological research would be this: "what is the contextual complexity behind this phenomenon, given that we are to observe it as sociologists?" The results of sociological research are sociological observations, i.e. something to be communicated among sociologists. As Fuchs (2001) has repeatedly pointed out, the sense-making that we produce as sociologists – whether theoretical or not – is almost always nonsense to the majority of "natives". We should not be embarrassed by this. The particle physicist does not shy away from his second-order conceptualizations even if the layman complains that he does not see the said particles. Only sociology should decide what is sociology, and what are the right concepts for inspecting contextual complexity. If we simply repeat the perspective of the actor, then we are not adding much to the everyday sense-making done by actors and journalists who are trying to make sense of social phenomena. If we are not adding sociological distinctions on top of our observations, then we are succumbing to either attacking or pandering observer-cultures and their perspectives, thus doing journalism that merely has some sociological jargon sprinkled over it.

Outside sociology, the model can be used in a more relaxed manner. As a tool for dialogic organization development, the model can be taken as a useful heuristic without too strict definition of what constitutes a relevant environment in the model and what does not. The more inclusive we want the dialogue to be, the more we have to simplify the language we use when speaking about the model. This should not stop one from using the model: the most important thing in using the whirlpool model is not how closely we can get the model to resemble reality, but how can we build a shared understanding of the contextual ordering and the confusions that emerge from different orderings colliding inside the organization. Thus, the pragmatic use of the model is not the same as its scientific use – the first one aims primarily to align differing perspectives inside an organization, and the second one puts more emphasis on explaining the complexity of our social reality. This is a matter of emphasis rather than essence, and there is always a dialogic component in science, as there is a truth-seeking component in most dialogues.

CHAPTER 8: FROM FINDINGS TO FURTHER RESEARCH

Some ideas for further research have emerged during this study. I will outline these in two parts: first (1a, 1b & 1c) in relation to the study of startup culture and entrepreneurship in general, and then (2a & 2b) in relation to the theoretical and methodological tools used.

1A) EXPLOSION OF SPECULATIVE ENTREPRENEURSHIP

The most interesting finding, and one that merits most further research, is the popularization of startup entrepreneurship, and its differentiation as a distinct cultural form. From my research, I conclude that this popularization of the startup culture can be seen to indicate a turn into speculative entrepreneurship, thus a continuation of the semantics of speculation that enable a playful inclusion into economy (Stäheli 2014). While it is true that there has always been risky ventures and entrepreneurial speculation, it is clear that the new technological possibilities and the availability of venture capital enable a entrepreneurial testing ground that now lives as a second-order economy, observing markets from the outside rather than through competition. Having concluded this in my own observations, I think that the following questions need answering:

- How does the culture of actual startups, and the experiences of founders – when observed through ethnography – actually align with the popular narratives of startup culture? Is the surface of the culture so obsessed with success stories that it is perhaps blind to the perspective of less successful startups? What are these blind spots?
- How is the observer-culture enacted in startup organizations and in various situations? In which situations is there a need for it?
- How does a startup oscillate in the whirlpool model during its life-cycle? Can we build a computational model of this oscillation? If we run cases through this model, does it reveal something interesting about the differences between successful and unsuccessful startups?

1B) FACILITATING ENTREPRENEURIAL INNOVATION

As we have noted (see Chapters 1 and 2), an observer-culture sometimes emerges to solve a problem that we did not know existed. It seems that startup culture has indeed succeeded in creating a worldview that can maintain entrepreneurial action as meaningful and legitimate in a situation of high uncertainty. There are – of course – high rewards in the startup game, but the entrepreneurs are not blind to the odds and need culture to go through the uncertainty. The paradox of innovation policy – when aimed at startups – might be the fact that it creates a lockdown too early, preventing more free-forming iteration and pivots (see Chapter 4). This should be studied, and if the results support this hypothesis, then we should take a step back and attempt to define the startup-spaces in other ways. The startup space is the "menstruation hut" of economy, i.e. a "heterotopia" of sorts (see Foucault 1986). Perhaps we should study startup-spaces as "constraints" of communication in relation to markets, or to various social systems, instead of observing them as enablers of communication between individuals and institutions, or as playful and creative spaces.

- Can we create a more fine-tuned typology of startup spaces, beyond what we have observed in this study, and see if there are clues as to how startups draw meaning from their surrounding space? How does it figure in self-observation of the startup, or in the observations about outside issues?

- Are there differences in the cultures of startups that dwell in a traditional startup-space and startups that are in offices and office-like environments?
- How can the positive effects of the typical startup-space be recreated without the actual space?

1c) Startup and the anthropological lens

With the anthropological lens, we referred to the major switch that seems to take place when we compare the startup-whirlpool with Baecker's (2006) form of the firm -model. This switch was the incorporation of individual and society into the foreground in startup culture's self-description – the cultural identity-work taking place through these – and the organization and economy brought as later vantage points in order to observe these. The implications of this are not altogether clear, although we did form some hypotheses about why this arrangement endures and is supported by the culture. I am interested in how the startup culture can incorporate – or how it can be incorporated in – its "distant neighbor" that is the observer-culture around protest movements (see Chapter 6). To my understanding, the connection of these two domains would be of great value to society, guiding startups to solve more burning problems in the world. Both seem to share a tendency to define itself as an outsider in relation to society, but the startup culture is built around iterative cycles, whereas social movements aggregate concern.

- How do startups and social movements compare – if we collect more data on the subject – in their attitude towards problems and their solutions?
- Could we study startup culture – not just singular startup firms – with methods used in the study of social movements, so that we could get comparable data about the similarities and differences of these two observer-cultures?
- Could we study social movements as observer-cultures, and build a model of their contextual complexity?
- Could we facilitate the fusion of these two modes of thinking and operating in some ways, so that we could better tackle wicked problems facing society and our planet?

2a) Whirlpool model as a research tool and as a tool in organization development

In the theoretical research question of this study I posed a very simple question: can we combine the so-called semantic analytical strategy endorsed by Niels Åkerstrom-Andersen (2011) with the form modeling approach created by Dirk Baecker (2006). This seemed plausible, as both are derived from the sociology of NIklas Luhmann. My answer to this was affirmative, although some changes had to be made, perhaps not always inside the preferred limits of Andersen, Baecker or Luhmann. I think that the step forward would be to use the model in research. I suggest taking the model as a heuristic to guide theorizing. There are some open questions here that I think need answering. Keeping in mind the famous saying that "all models are wrong but some are useful" (Box 1979), we should try to find where this model is useful and where it is useless, or even misguiding. There is no panacea – even in depicting social phenomena in terms of models – but as I have tried to argue the model holds its own in various uses. For example, the model could work as a basis for an entirely new approach in dialogic organization development (Bushe & Marshak 2015).

- What are the limits to using this model? In which situations can it offer insights, and in which situations are we perhaps misguided if using it?

- As it is a model, can we make it into a computational model, so we could run larger data sets through it? If so, what can we do with it?
    - For example, could we combine it with methods of topic modeling[96], thus creating whirlpool models out of massive textual datasets?
    - Or could we perhaps automate the construction of a whirlpool model through distributed ethnography[97], whereby people would share anecdotes and code them with their cellphones?
- How can we develop whirlpool modeling so that it becomes a legitimate approach in dialogic organization development? Is it any good for creating dialogue, or does it seem too abstract even in a simplified form?

2B) Developing a Formal Language for the Study of Contextual Complexity

In this study, we have used the notion of form and complex form, but have not considered the underlying implications of his "calculus of indications", as he called Laws of Form. If we take it to be that sociology is the science of contextual complexity, as suggested in this study, then should we develop a formal language for studying contextual complexity? The form of re-entry has been central in the present study, but we could perhaps formalize Spencer-Brown's Laws of Form even further. With some reservations, this formal language could then be used as a tool for sociological theorizing and, perhaps even more so, as a condensed way of presenting ideas and results concerning contextual complexity. In Appendix 3, I will suggest taking Spencer-Brown's (2008) Laws of Form as a starting-point in creating such a formal language.[98]

The point of having a formal language – such as molecular and structural formulas in chemistry – is that we could bring different schools of thought to discuss overlapping phenomena. Different traditions could exchange ideas though this new formal language, leaving out their own formulations that would be too rich in detail for the others to understand. Of course, this formal language would not be precise enough for all sociological research traditions, and it would have to be inspected and iterated on. Economics and demography both have mathematics in their toolkits, but in sociology it seems that too much is lost if we try to be too precise. So perhaps sociology could do with boundary logic of some kind, focusing on boundaries, blind spots and re-entries.

- What are the benefits and pitfalls of having a formal language for sociological theorizing?
- How should this language be constructed so that it brackets out trivialities, while containing everything we need to formalize contextual complexity?
- Could this language be used in clinical sociology and in management consulting? That is, could we use the formal language to solve problems of contextual complexity instead of just describing it?

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[96] Topic modeling refers to research where we program computers to do text mining in a way that lets us identify patterns in a massive corpus. The method is especially useful if we want to go through large datasets, e.g. coding ten thousand pages of discussion that takes place on various internet discussion boards.

[97] Distributed ethnography here refers to the method of gathering "micronarratives" (anecdotes) from participant observers who also code these micronarratives themselves, using some predefined heuristic. One such approach has been developed by the consultant and academic David Snowden. His company Cognitive Edge has built tools – mostly apps and programs – for doing distributed ethnography. The advantage is getting large data-sets that have some preliminary coding on them, while avoiding "gaming" and "gifting" that would take place in interview situations.

[98] Another good place to begin might be the contextural logic developed by Gotthard Günther (1973). See also Knudsen & Vogd (2015).

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APPENDIX 1: HOW THIS RESEARCH CAME ABOUT

The idea for this research came about in 2012 as I was working in a consulting firm that was specialized in reputation management. As I was regularly reading business magazines, it became apparent to me that there was a new contender among business heroes – the startup entrepreneur. He was more relaxed and laid back compared to professional CEOs of large companies, and more idealistic compared to most entrepreneurs.

My initial idea was to compare the public image of the startup entrepreneur to that of the professional CEO. Having an interest in comparative mythology, I was interested about how the "hero's journey" (Joseph Campbell) would differ in these two stories. With this idea I was lucky enough to receive a research grant from Kone Foundation and begin the actual research. Soon, I discovered that these two figures were so different to begin with that the comparison was not very interesting – the startup entrepreneur was on a different journey altogether than the professional CEO, mostly for obvious reasons. But, at the same time, the tension between the two figures seemed to be a good reference point as I was digging deeper into the startup movement.

Reading more and more startup literature, this entrepreneurial movement seemed like a worthy subject of research in itself. I started coding the data using grounded theory approach (Glaser & Strauss 1967), playing with alternative coding schemes and writing memos. During this period, I gathered data mostly from Forbes and Fortune magazines (2011-2012 at first), as I had good access to the electronic versions of these magazines. The initial analysis was done on ATLAS.ti, in which I used grounded theory to code the data, and then categorize what I had coded. What later became the semantic categories started forming during this time. I was greatly impressed especially by Barney Glaser's ideas on grounded theory, and utilized his dictum "all is data", to help me proceed in memoing and theorizing (see Glaser & Holton 2004). I added Inc., Fast Company and Entrepreneur into the data, although I stopped using ATLAS.ti and started memoing, and iterating on emergent ideas.

The conceptual categories started emerging, but I was not able to develop a theory that would explain them. After the initial analysis. I started reading extensively about startups or – as there was no extensive research on startups – about "new ventures". As I was interested in the startup entrepreneurship, it was peculiar to me that the cultural side of this entrepreneurial movement was not seen as a differentiating factor in relation to new ventures in general. Then it began to dawn on me that the greater uncertainty facing the startup entrepreneur was coupled with a unique form of sense-making – thus the idea of cultures resolving contradictions began to form. Slowly, I began seeing how this sense-making was coupled to various institutions in the startups environment, such as venture capital firms, universities and the internet.

Here, my reading took a small, but fruitful sidestep to Claude Lévi-Strauss and Clifford Geertz, whose ideas – strangely enough – led me to reflect on the sociology of Niklas Luhmann. I was familiar with Luhmann's ideas from years back, but had not considered using him in my doctoral thesis. I felt that his theoretical construction was too heavy. Besides, I wanted to proceed from the actual insights, so grounded theory had felt like a good way of proceeding. Later, however, Niels Åkerstrom-Andersen's semantic analytical strategy started to seem like a good option for further analysis, and the theory of Niklas Luhmann became more relevant.

Two transformative moments took place in 2012. First, I attended the Model Thinking MOOC arranged by Michigan University and Coursera. The important take away-from that course was the concept of "philosophy of

modeling". Then, when I re-read Baecker's Form of the Firm –article after the Model Thinking –course, something clicked. This was the second formative moment. After this, I understood some things that I had not understood before, and the whole point of building models became clear to me – it was abductive research in its simplest. The ideas on why build models gave me courage to play with the data in order to get more familiar with it, as well as courage to make necessary reductions in order to capture a different side of reality.

2013 was the year during which the analysis and writing took off, and the dissertation started to take its form. Discussions in seminars and conferences forced me to clarify my ideas, and to remove clutter. It was a straightforward year. During 2014 the mass of text emerged, and the dissertation began to take its final form. In the end of the year my father passed away, which slowed my progress for the first half of 2015. In the end of 2015 I wrote the final chapters, and early 2016 was spent mostly editing and writing an article.

APPENDIX 2: FURTHER EXAMPLES OF CONTEXTUAL MODELING

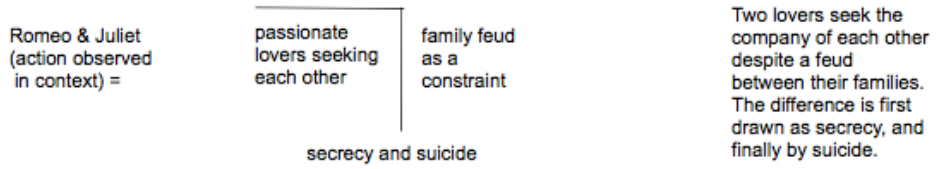
It is hard to grasp the idea behind modeling contextual complexity with the form model. Because of this, I will present two rather lighthearted examples of how the model can be used. Originally, I built these models in order to understand the process of modeling better myself. I think they are illustrative examples, even though the subject matters are sociologically trivial and imaginary. As my research proceeded by re-arranging Baecker's form of the firm –model, it might be unclear how one should proceed when there is no model to rearrange. Here we will see how one would proceed building the model based solely in empirical observations instead of iterating on an older model.

ILLUSTRATIVE TOY MODEL #1: THE CONTEXTUAL WHIRLPOOL AND NICHE OF ROMEO AND JULIET

Let us consider that we are sociologists in 16th century England and we have the story of Romeo and Juliet repeating in slight variations[99]. The standard story that repeats in this societal situation would be one about passionate love that is suppressed by a feud between the lovers' families (e.g. Montague and Capulet). Furthermore, we see that a culture of secrecy develops, and sometimes these affairs end up with suicides of the lovers who are kept apart by family feuds. Having some data on the repetitive nature of this situation, we would first observe the narrative as a simple form, then as an oscillation in contexts, and finally form a hypothesis about the focal tension that has birthed this figure of the tragic passionate lovers, layering it with meanings.

In Figure 51, we see a simplification of the narrative pattern: the actions of the lovers seeking each other is constrained by the family feud, and only secrecy and suicide – paradoxically – are able to keep the love alive by drawing the boundary despite the irritations coming from the environment.

Figure 51: Romeo and Juliet as a series of actions taking place in a unitary context

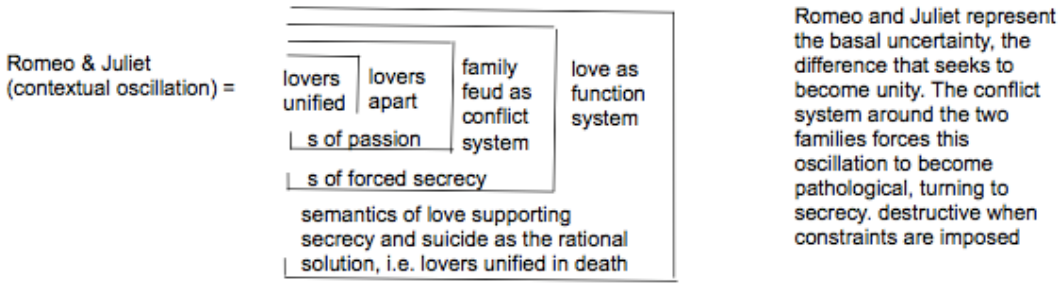


The problem with this is that it creates a unitary context. Thus, in Figure 52, we go further. Here, we formulate the basal restlessness of the standard story, and observe how this indeed resonates in the family feud. But now we have to ask, why is the love triumphant even if the lovers die? The family feud – as a conflict system attached to this form of segmentary differentiation of families – does not irritate the lovers into suicide, but the semantic of passionate love does. The lovers choose the logic of love that enables them to take each other as complete individuals instead of being mere members of their families, and thus enemies. Passionate love, as a generalized

[99] This example refers lightheartedly to Luhmann's (1998b & 2010) research on love as a medium of communication. Luhmann studied how the semantic of "passionate love" emerged after the middle ages. Passionate love became "functional" form of communciation as the differentiation of society caused a fragmentation of reference for individuals. Each system codified a person differently, so completeness had to be sought from other individuals, through intimacy and love.

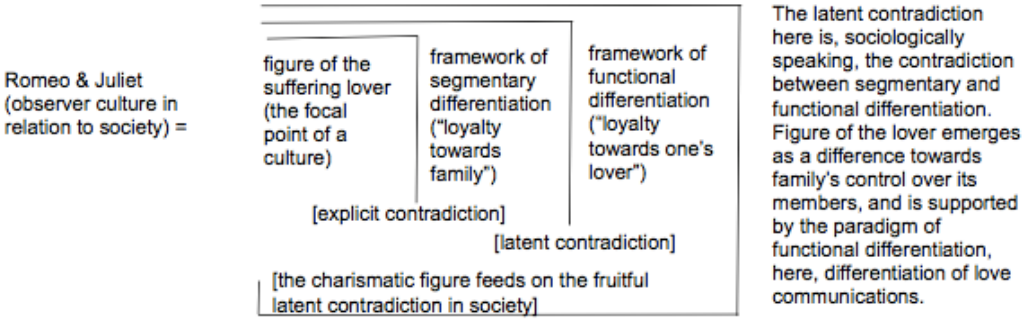
medium of communication, emerges victorious over family ties, but with tragic consequences. As a strong emerging context in society, or a "contexture" (Günther 1973), love enforces a binary logic with tertium non datur. And as there is no additional context to stabilize this oscillation, the "logic of love" finally overdrives the family feud with desperate means.

Figure 52: Simplified whirlpool model of Romeo & Juliet: Basal oscillation pulling in further contexts



In Figure 53, we move on to ask about the latent contradiction. If these narratives are repeated, then why has the figure emerged? The essentialist answer would be "because people love each other", but we are looking for a sociological answer. Thus, we have to consider – in light of the whirlpool model of Figure 53 – that the figure of passionate lover is a result of the tension between segmentary differentiation and functional differentiation. The former being the old form, where the network of family ties is the "difference that makes a difference", and the latter challenging this form. The tension of these two is what supports the figure of the passionate lover, the super-homunculus of observer-culture that frames the dissonance between segmentary differentiation and functional differentiation as a question of individuals painfully and uncompromisingly longing for each other, while family-networks attempt to keep their hold on them. In this new semantic, previously illogical form of acting now find a logic to support them, even if the logic leads to tragedy in the standard story, as it does in Romeo and Juliet. We can now say that the dissonance between figure of the passionate lover and the loyalty towards family was the explicit contradiction, but underlying it was the latent contradiction between functionally differentiated love and segmentary differentiation. This is not so much of a new model than it is a more simplified way of presenting what we already depicted in the whirlpool model.

Figure 53: Charismatic figure and its observer-culture feeding on a fruitful contradiction



This has been a toy model to fit our purposes. Furthermore, we have imagined that the story of Romeo and Juliet was a repeating standard story in 16th century England where we were sociological observers. As this is not the case – of course – we are actually giving a whimsical interpretation of Romeo and Juliet, taking just one narrative to stand for what should be standard stories and semantics supporting them. But, as a toy model, it serves us well in displaying whirlpool modeling in a more condensed form.

ILLUSTRATIVE TOY MODEL #2: THE CONTEXTUAL KNOT IN THE GAME "PAPERS, PLEASE"

As stated earlier in this chapter, if we wish to approach organizations and their challenges, then the analogy of knot is useful. Conceptualizing the contextual entanglement as a knot, we can focus better on considering problems and solutions. For example, a specific contextual knot might cause an organization to operate in a state of "neurosis" or "psychosis". By organizational neurosis I refer to repeated attempts inside the organization to manipulate situations in order to convey meaning more effectively. By organizational psychosis I refer to a loss of understanding of environment due to a vicious circle of misinterpretations, sometimes due to out-of-control neurosis.[100]

I will give an example of how a difficult contextual knot emerges and results in attempts to manipulate and in naturalization of this manipulation. The example case ends into confused state about what is the relevant environment, thus showing some features of organizational psychosis emerging. The actual example is from a videogame – the reason for this being that anyone who owns a computer can test whether the model holds in their experience, and whether it offers interesting insights. A simulation might be better for pedagogical purposes compared to a static case study, as the latter would not allow one to reflect between experience and theoretical abstraction of that experience.

As we are conceptualizing a knot, the implication is that we have problematized the whirlpool we are observing, and that we have a hunch that it might be a contextual problem. We have reasons to believe so because we see that a pattern of problematic behavior is repeating itself, even when we bring new people and new rules into the organization. The reader can consider what the problems would be, and in the end I will reflect on how the model helps us observe – and possibly correct – these problems in a more constructive manner.

The setting of the game

Papers, Please is an award winning computer game (on PC, Mac and iPad) developed by the independent developer Lucas Pope[101]. In the game, an imaginary communist country called Arstotzka has ended a 6-year war with neighboring country Kolechia and reclaimed its half of the border town, Grestin. The player plays the part of an immigration inspector whose job it is to control the flow of people entering the Arstotzkan side of Grestin from Kolechia. The player is looking at people and their documents as they attempt to cross the border. Among the of immigrants and visitors there are smugglers, spies and terrorists that the player has to spot by finding inconsistencies from the documents, from what the persons are saying. Using the protocol to make judgements about the entrants, the player must decide who can enter Arstotzka and who will be turned away or arrested.

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[100] This definition of neurosis and psychosis follows the one that was put forth by Ruesch & Bateson (1951) in their book The Social Matric of Psychiatry, but will use it here to problems of organizational culture.

[101] For a description about the game and its layers of engegement, see Cory Johnson's (2014) on Gamasutra.com. My model was partly inspired by this blog post.

Let us imagine that this game somehow presents us with actual data taken from real situations, and that we have make sense of it as sociologists. Let us consider that more and more workers are either doing their job badly, becoming corrupted or disappearing. Interviews have not given us reasons, so ethnography and participant observation is used to gather data.

The right decision

We will begin with the assumption that the player wants to make the "right decision" in each instance of the game. With games, this is usually the case, as the player is looking to “win the game”. The decision can be "right" in two ways: (1) by attuning with the players views of what is right and what is wrong, or if the player is in a more playful mood, (2) by simply attempting to "win the game" in an efficient manner. In both cases this right decision appears clear at the beginning when the rules are laid out, but will be overtaxed with new distinctions coming into being and appearing as new environmental irritations. These distinctions act as constraints, making the form less arbitrary while also more and more paradoxical as the constraints are stacked on top of each other.

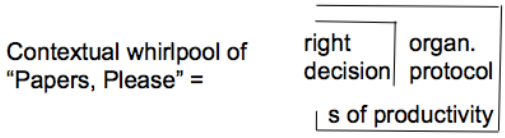
Organization as protocol

The organization and its protocol acts both as the primary setting for rules of the game, but also as the most constant irritation as the player attempts to make the right decision. There is a constantly changing protocol on who to let in and what documents to inspect, and not enough time to do the job perfectly. Here, the organization communicates decisions that constantly confuse the definition of “right decision”, and the player has to keep feeding in the decision-communications of the organization. The protocol is seriously hard to follow, and the player has to optimize between making fast decisions and between following the protocol carefully. The former bears the risk of making mistakes that would lead to salary cuts, and the latter bears the risk of not getting enough done, which also leads to salary cuts. This creates the first contextual tension in the model.

1st distinction: right decision / evolving organizational protocol

The attempt to differentiate the right decisions from the protocol and organizational time pressure is the first double bind that the player encounters. Even if there would be time to follow the protocol perfectly, the protocol seems to cause suffering. The player oscillates between what is right and what is the protocol. This oscillation leads to frustration and, if this frustration cannot be otherwise handled, to simply accepting the situation and "doing ones job well". We can call this “semantics of productivity”, where there is clarity about the inputs and outputs, and an attempt to optimize the output. On this level of oscillation, there is clarity about the world – the “right decision” appears in a singular context of protocol. Anything suggesting more complexity than this is shut away as background noise.

Figure 54: Protocol as the first loop of the knot



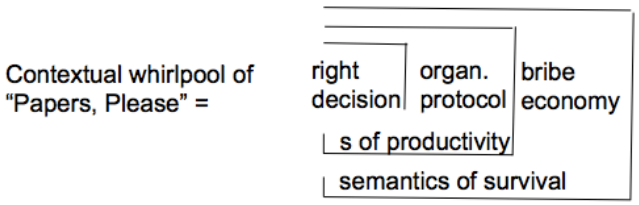
Bribe economy

Soon, the context of bribe economy starts to enforce itself on the player. Bribes are offered to him by people wanting to cross the border without all the documents, by militant revolutionaries who want help in executing their plans, and by fellow co-workers who want more people detained so they will get bigger bonuses. The player has to make decisions, and he is likely to take some bribes as his family does not have enough food and medicine. As bribes are given as gifts that carry with them the expectation of reciprocity, the player cannot always avoid taking them. Instead, he has to retrospectively decide whether to disappoint expectations of the bribers or not, as the situation changes with the protocol.

2nd distinction: organization / bribe economy

The oscillation between protocol and the values of the player has already eroded the players idea of doing the right thing, so he is likely to take one bribe or another. Sometimes he even accidentally does what the bribers want, because the protocols keep piling up and confusion arises. There is need for simplicity that the organization cannot provide, but that the bribers seem to promise. The strong reason for taking the bribe economy seriously is that the player wants to keep his in-game family alive and well. This is difficult. Even when the player does his work according to protocol, there is not enough money for heating bills and food. The player soon observes that the oscillation between the protocol and the bribe economy is quite safe, and one can quite easily navigate it even though there is constant fear of getting caught. The irritation of bribery has turned into a semantic of survival as the player explains to himself that he has to do this in order for him and his family to survive, and making the "right decision" has been complicated further.

Figure 55: Bribe economy as the second loop of the knot



The Revolutionaries

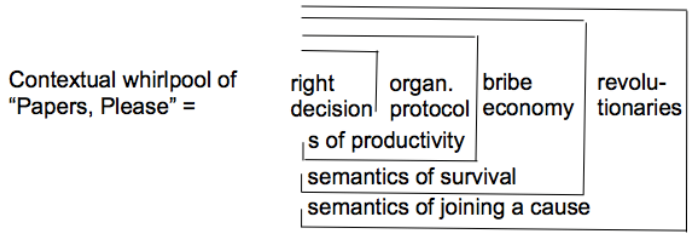
Soon, a new "irritation" appears as a revolutionary network wants the players help. The movement wants to sabotage the government of Arstotzka. If the player has already taken bribes, the revolutionaries (EZIC, as they call themselves) can be observed as simply another form of income, but their intentions are clearly to cause harm to Arstotzka. However, the player might feel that their cause is good, since his own situation is difficult as is. Soon, an EZIC messenger starts visiting during morning hours to give the player instructions as to how brake the protocol during the day. The dissonance between the organizational protocol and the bribe economy starts building up.

3rd distinction: bribe economy / revolutionary protocol

If the player is not clearly against the EZIC, he will start oscillating between following the organizations protocol, bribe economy's protocol and the EZIC protocol. There are more constraints, and more social systems involved. The distinction between bribe economy and EZIC is not clear, as EZIC is also part of the bribe economy. But joining them takes the player away from mere survival that the bribe economy represents, and ties him to a

larger cause. Whether he is really moved by it or simply thinking in more pragmatic terms is unimportant. In both cases the oscillation builds complexity that starts to guide the observations that are possible to him. The distinction between bribe economy and EZIC is re-entered into the form as the semantics of “joining a cause".

Figure 55: Revolutionaries as the third loop of the knot



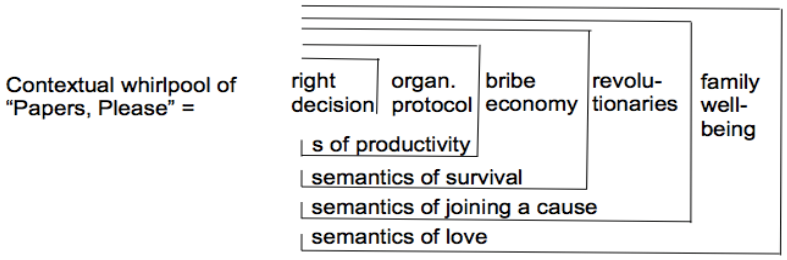
Family wellbeing

The complexity of the form has reached a point where the protocols collide and the player is pressured to prioritize. The game appears threathening, the player is not sure if he can win this game by simply playing along. The salary the player is paid is in most cases not sufficient enough for the player to pay the bills and buy food for his family. At this point, some of his family members might have died because of the lack of food or heating. There are many storylines that can take place depending on what the player decides to do. The pressure from the Ministry of Admission, as well as from EZIC, is getting more and more intense, and the player is offered a chance to buy fake passports for his remaining family to flee Arstotzka. It seems that neither the Ministry of Admission, the bribe economy, nor the EZIC can guarantee his family's safety.

4th distinction: revolutionary movement / family wellbeing

At this point, the game produces more intensive weighing of risks and rewards. The player might be able to escape the complexity of the form in different ways. Maybe by doing his job and avoiding distractions, maybe by following EZIC. But in most cases, the complexity takes the better of the player, as his past decisions have not been consistent, and have tangled up and caused the underlying contradictions to surface. In my own play-through, saving what was left of my family (just one child) seemed to be the best option. If this is the case, the player trades complexity for the system of love, where uncertainties can be resolved simply through intimacy and interpersonal trust. A simple but working solution for the overwhelming complexity of the world. If the player makes this decision, or chooses somehow to depart from the Ministry of Admission, the whole form is cancelled out for this specific observer – he is not oscillating anymore in this specific contextual constellation, but has to attune to some other whirlpool and its pressures.

Figure 56: Family as the final loop of the knot



In one of the happier endings, the player succeeds in leaving the country with a fake passport. If so, then the game offers a rather ironic twist of positions, as the player ends up being questioned by another immigration inspector, suddenly experiencing the familiar situation from the perspective of the person attempting to cross the border. Suddenly, the old contextual tension is gone and replaced with a situation where everything depending on this other person.

The model in its final form presents us with the whirlpool of contexts in which the basal oscillation is conditioned in different ways, giving it more shades of grey until it ends up in fierce complexity. This model has focused on systemic contexts, as we have followed Luhmann and considered systems to be the strong currents in the river of communications we call society. The social systems we have encountered here are organization, economy, social movement and love. The narrative that the player builds while playing the game can be observed as a back-and-forth oscillation between these contexts, as he considers different options and re-adjusts his view of what constitutes the "right decision". Other ways of modeling the game are – of course – possible, but this model resonates with my personal observations while playing Lucas Pope's *Papers, Please*.

The limits of a sociological intervention into a contextual knot

The question remains, how would this model help us to "open the knot" so to speak, i.e. to understand the problems that the organization is facing? The answer is this: we can now say how the contextual tensions are condensed into semantics – into conceptual perspectives – that do not fit together. The knot shows what the whirlpool shows, but we reserve the knot-analogy for problem-oriented consulting or clinical sociology, where we are determined to solve some problem[102]. This "steering" would be highly implausible on the level of society and its observer-cultures (see Luhmann 1997c), but with organizations – and the micro-cultures that they nurture – it can be done. The model helps us pinpoint how different contexts – systems or simply "frames" in some cases – are conditioned by the observer-culture, so that we can change how this conditioning takes place. Here, we cannot create semantics – this would amount to injecting buzzwords into the system, irritating some thoughts in the "psychic systems", but most likely triggering nothing in the contextual arrangement itself. What would work, however, is enforcing some rituals in the work-processes. The purpose of these added rituals would be to trigger a change of frame in some specific time and place of the organization.

[102] As a comparison: with the whirlpool of startup culture, we were interested in the culture and its morphology in society, leaving any problematizations of this culture aside. Startup culture could be problematized in many ways, as the reader should by now understand. As I have earlier noted, the culture is highly reflective and is already solving some of its problems, sometimes by taking distance to the more performative buzzwords, sometimes by attempting to return to more time-tested forms of entrepreneurship.

For example, if we want to make sure that a person operates in a specific context – a professional context or a specific frame of meaning – then we should create some boundary-ritual on the spot where there is difficulty in switching between frames. By a ritual we mean that the person has a moment to put his mask on, to see what constitutes him for the next few hours, and to act the part. Small rituals like putting on a uniform or doing an equipment inventory are great ways of changing a frame. Resolving a "bumb" in the switching between means that the shift between contexts – between systemic logics or situational frames – is naturalized. Even though we have observed semantics as designating the smooth changes and conditionings between the contexts, it is safe to say that we cannot solve contextual tensions by simply implementing new semantics or stories. Instead, we have to change the pattern of actions, and see if a new story starts to emerge, this time one that is more fluid, and better able to couple the previously dissonant contexts into a single form.

APPENDIX 3: A FORMAL LANGUAGE FOR SOCIOLOGICAL THEORIZING

If, as we have noted, sociology should find unity in studying contextual complexities, then it would be reasonable to develop a formal language to exchange information between different research programs and schools of thought. What could this common language be? My suggestion is to develop the whirlpool model further, so we can use it in a more stable way for displaying and comparing our theories and research. But the whirlpool model is only one side of more rich system, i.e. Spencer-Brown's "calculus of indications". In the context of Spencer-Brown's mathematical system, the operation of re-entry – which is the basis of our whirlpool model – is one operation among others, although it has a special status. As we have seen, it is a self-sustaining form where a distinction is re-entered into its indication, thus opening up the possibility of oscillating between the two sides. However, there are also two basic laws of form in Spencer-Brown's Laws of Form, and these laws can be read both ways, thus giving us four different calculations in relation to how distinctions work. I will suggest that we translate also these laws into sociological laws – i.e. laws about how the behavior of distinctions in society which consists of communications and nothing but communications.

If we take it that a "context" is an inter-connected set of distinctions creating a boundary in relation to other contexts, then we can say that a context is itself a distinction regarding other contexts. As such, it is an operation of severing the world into two – the inside being the context, the outside being the bulk of other contexts, and the distinction being the difference that makes a difference[103]. Let us see how Spencer-Brown's (2008) laws of form could be taken as a formal language for sociological theorizing (see Figure 58). For this, we need to offer sociological paraphrasing of Spencer-Brown's calculus.

THE LAW OF CALLING

The law of calling (Spencer-Brown 2008, 1) states that "the value of the call made again is the value of the call." This means that a distinction made twice is simply the value of the distinction. From our perspective of contextual complexity we can summarize this in the following way: a context that has already been observed can always be observed again and, if observed again, refers to the same context. As shown in Figure 58, we can read this equation either from left to right or from right to left, both revealing different aspects of this law.

When we read the law of calling – as an equation – from left to right, then we get what Spencer-Brown (2008, 10) calls "condensation". Here, a repetition of a difference can be condensed into the difference it makes. Sociologically, we could call this fixation of a context through the repetition of semantics. Thus, an observer-culture becomes more selective in what it identifies with, and more clearly differentiated from other observer-cultures.

We can also read the law of calling from right to left. If so, then we are dealing with the way the fact that an indication can always be repeated once it has been stated. In sociology, we can say that a context can be re-enacted, which also means it can spread. In Spencer-Brown's (ibid.) Laws of Form this is called "confirmation" –

[103] It is important to note here that a context is not automatically a "system". Thus, we are not saying that the context is self-organizing, self-observing network of operations, but merely that it "appears" as a distinctive context. Only when we find it to be in a whirlpool-form – i.e. functioning as a re-entry of its own boundary into itself – does the context become a dynamic observer-culture.

i.e. every distinction is available for its repetition. Alternatively, as sociologists, we could call this "repetition" instead of confirmation, as social forms are "confirmed" mostly through their repetition.

It is easy to see how repetition of a context and the fixation of a context are two sides of the same coin. A form becomes more distinct through its repetition, and is thus more available for repetition, thus making it more distinct. In this way, the equation makes sense.

THE LAW OF CROSSING

The law of crossing (ibid. 2) states that the "value of the crossing made again is not the value of the crossing". That is, if a distinction is made and one side indicated, but then the outside is again indicated, then an indication is not made. In our schema of contextual complexity, this means that contextual dissonance leads to open contingency. If confusing indications are offered about what the context is, then there is no clear contextual framing – communications are in danger of appearing as mere actions that do not signal any meanings.

Thus, if reading the law of crossing from left to right, we are observing how the uncertainty between contexts leads to more profound uncertainty in the situation. Contextual contradiction is equal to no context at all. Spencer-Brown (2008, 10) calls this "cancellation", but when observing contextual complexity, we can refer to it as a contextual "dissipation".

Reading from right to left, we can see the equation referring to situations where there is no clear context, nor even a contextual tension to begin with. Contextual "cancellation" could lead to this, or perhaps we simply arrive at a situation so strange that we have no ready-made patterns for facilitating communications. In this situation, context has to emerge iteratively, and through vague references made to what the context is. The problem is that there might be a hidden disagreement about what the primary shared context is[104]. Thus, we end up with the situation of "contextual turbulence", as the context cannot be grasped in a synchronized way by the participant systems. The emerging, unstable context draws from neighboring contexts, and cannot find stability. For Spencer-Brown (2008, 10) this is "compensation".

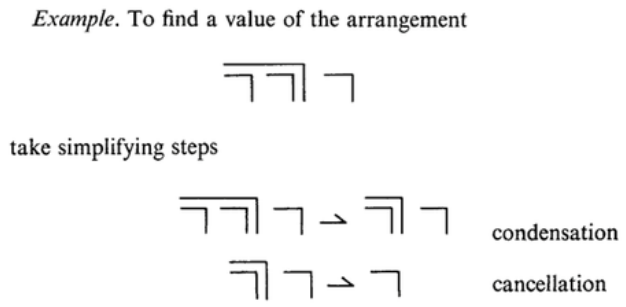
What makes the law of calling and crossing different from each other is that the law of calling is about the number of indications and the law of crossing is about the order of indications. It is in the law of crossing, in the arbitrariness of the order contexts, where we encounter the situation of open contingency. And open contingency – as we observed in Chapter 2 – is what fuels social systems to emerge.

With these two laws, we can start solving equations made out of distinctions. If we know that overlapping distinctions erase each other and that repeating distinctions count as one, then we can start simplifying more complex arrangements.

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[104] A strong symbolically generalized medium (Luhmann 2012, 190-250) is one factor in enabling an understanding of what is the context: If I buy your television with money (medium of economy), the context is clear. The deal does not bind us together as friends – this much we all know about how to use money. This effect that a medium has can also be burden to defining relations: if we already are friends, we have to be careful not to let the generalized medium of money override the intimacy of our friendship. Thus we might, for example, be careful about being too explicit about the amount and method of payments and the actual value of the television. From the perspective of economy, the friendship appears as inefficiency, and inflicts its constraints on free economy. Naturally, both definitions of the situation have to be included.

Figure 57: Spencer-Brown's (2008, 9) example for simplifying an arrangement by calling and crossing



How this process of simplification can be used in sociology remains an open question. My view is that it is cancelled out by the fact that due to the self-organizing nature of social life, re-entry often comes into play, finding a shortcut (through adaptation or exaptation) that was not visible for the observer doing the simplification. The calculation scheme itself might be trivial for sociology, even though it can be used for several other purposes. This is due to the sheer complexity of social systems – or any self-organizing system for that matter – that take their own outputs as their inputs. If we take this basic idea of cybernetics seriously, then it is the process of re-entry – and the law of crossing that irritates it into being – that remain as the most valuable tools for us.

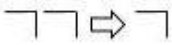
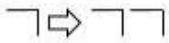
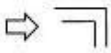
RE-ENTRY

Re-entry of the form inside the form can be seen as a solution to the problem posed by the law of crossing. It is Spencer-Brown's mathematical solution for bypassing the confusion produced by the law of crossing. It answers the question of whether a distinction can observe it's both sides without collapsing. Re-entry is something we have discussed in earlier parts of this study, especially in Chapter 5 – it is the emergence of self-organizing system on top of restless oscillation. Spencer-Brown calls this "re-entry" of the form inside itself. As Luhmann and others have frequently pointed out (see chapters 2 and 5), the form of re-entry can be observed as a basic form of any self-organizing system: a system maintains its boundary by constantly computing its perceived relation to its perceived environment, thus creating a system-history that we call identity. In this study, we have worked with the analogy of whirlpool, as the whirlpool is a steady state system feeding off on its surrounding non-equilibrium (see Hidalgo 2015, 29-30). Furthermore, as we have observed, cultures seem to emerge as whirlpools. It is interesting how well the analogy of a whirlpool fits here. A whirlpool can be produced basically in two ways – either by the meeting of opposing currents, or through a sudden hole appearing in the bottom of the body of water. Interestingly, there is a clear parallel in the way that observer-cultures seem to form – there is either a tension between contexts, or a void that causes contextual tension to form, and the emerging movement to create the steady-state into this non-equilibrium. Together these three – the laws of calling and crossing and the operation of re-entry – could serve as a basic vocabulary of sociological theorizing. Figure 58 presents my outline for how they relate to each other[105].

[105] In this table, the realism and constructivism of a culture (see the right column) are meant to give an idea of how an observer-culture would differ in its observations if it was dominated either by repetition, opposition, or adaptation of contexts. As Fuchs (2001, 154 & 294) has noted, a network with weaker identity – and thus higher dose of internal or external "opposition" – tends to be more "constructivist". Thus, it allows for

Figure 58: My suggestion for sociological reading of Spencer-Brown's calculus

Laws of form considered as a formal language for sociology

Four calculations* **and one self-sustaining "calculator"** (Spencer-Brown)	**General explanation for the calculations**	**Sociological reformulations**	**Contextual clarity** (law of calling, law of crossing, and re-entry)
Condensation (law of calling) 	To make the same distinction twice has the same effect as making it once	A repeated distinction institutionalized as a valid one for a culture. **Contextual fixation** (Tarde: repetition)	GOOD CONTEXTUAL CLARITY Single contingency in culture: uncertainty between participants is reduced by culture. Central dilemma: marked or unmarked, same or different? Condensation and confirmation enforce a realist attitude towards what is considered context ("it is what it is")
Confirmation (law of calling) 	Once made, a distinction is always available for repetition	A distinction calls for its repetition and variation in a culture. **Contextual dissemination** (Tarde: repetition)	
Cancellation (law of crossing) 	Crossing from the unmarked to the marked state and "re-crossing" returns one to the unmarked state	Incompatible distinctions create a double-bind and open up contingency in a culture. **Contextual dissipation** (Tarde: opposition)	LACK OF CONTEXTUAL CLARITY Cultural double contingency: uncertainty between participants elevated to uncertainty between cultures. Central dilemma: which "context" for drawing a distinction? Cancellation and compensation enforce constructivist attitude towards what is considered context ("viewpoints matter")
Compensation (law of crossing) 	Empty space opens up confusion of what is the "inside" of the form and what is the "outside"	Open contingency calls forth new, yet unstable distinctions in a culture. **Contextual turbulence** (Tarde: opposition)	
Re-entry (a self-sustaining distinction) 	Any operation that is able to look at the both sides of the distinction (and survive) can be summed up as re-entry of the distinction into itself	A culture endures contextual complexity and flux by conditioning its identity in relation to environmental perturbations. **Adaptation/exaptation in order to survive** (Tarde: adaptation)	SELF-PRODUCED CONTEXTUAL "CLARITY" Re-entry as a solution: realist attitude secured while the culture is operatively constructivist, thus blind to its own conditionings for observing "reality"

* "Call calculation a procedure by which, as a consequence of steps, a form is changed for another, and call a system of constructions and conventions which allows calculations a calculus." (Laws of Form, 3rd chapter, 5th canon.)

more variation in its meanings. In contrast, the ones with a stronger identity are more "realist" in their observations about the world, i.e. they do not allow for variation, and instead are in a lockdown with their worldview.

In order to become a formal language – and one that could be used across methodological and theoretical divides in sociology – the benefits and shortcomings of this approach should be extensively iterated on and tested. By formal language I do not suggest using it as a research tool – as it was used in this study – but simply as a shared alphabet for expressing sociological ideas in a concise way. What has to be accepted, to some extent, is the evolutionary nature of culture through variation, selection and stabilization. This time, fortunately, we are talking about the evolution of "populations of meaning" instead of human populations, thus blocking out any variation resembling the old "social Darwinism" with its racist implications. Or perhaps we could continue where Gabriel Tarde (1899) left off, as he was formulating his theory of "social laws" – "repetition", "opposition" and "adaptation", as these seem to go hand in hand with the laws of calling and crossing, and the operation of re-entry:

> Repetition, opposition, and adaptation, I repeat, are the three keys which science employs to open up the arcana of the universe. She seeks, before all else, not the mere causes, but the laws that govern the repetition, opposition, and adaptation of phenomena. These are three different species of laws, which must certainly not be confounded; yet they are quite as closely connected as they are distinct. In biology, for example, the tendency of species to multiply in geometric progression (a law of repetition) forms the basis of the struggle for existence and natural selection (a law of opposition); and the appearance of individual variations, the production of various individual aptitudes and harmonies, and the correlation of parts in growth (laws of adaptation) are necessary to the proper functioning of both. (Tarde 1899, 9-10.)

We could indeed observe calling, crossing and re-entry in terms of the theory of evolution. The law of calling as "repetition", the law of crossing concerning "opposition", and the re-entry as dealing with "adaptation"[106]. This is a matter of terminology. This is clear in Figure 58, where we can see how the laws of form could translate to studying contextual complexity of society. From this perspective, the re-entry depict a complex adaptive system that solves the problem posed by the "opposition" of context, i.e. the problem of ordering competing contextual framings. In the background, there has to be the "repetition" of meanings, and their slight variations, in order for the contextual understandings to enter into each-others territories.

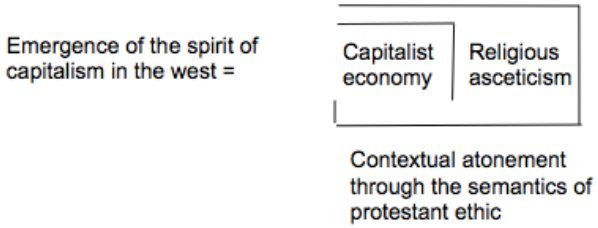
My proposal is that sociologists start incorporating and developing this schema as a new formal language for sociological theorizing. The current research has been one attempt at this, but it has only scratched the surface. This is why I have constructed toy models – to show how the model could be used in further cases. I think numerous examples of the usefulness of the model could be given by constructing models based on earlier sociological research. Perhaps this is the next step if we want to prove that this type of modeling should be turned into a formal language that could unify sociological theorizing.

The question is where to start with the testing and further development of this formal language. A good place to start would be to go through classic sociological studies and formalize them with our modeling language. There

[106] The more modern terms, and more common in the context of theory of evolution, would be variation, selection and re-stabilization, but for our purposes these are similar enough with Tarde's terminology. For example, selection takes place as some of the available variations are dropped off as useless – thus, there is less an actual "fit" with the surviving variations and the environment, and more of an misfit with the features that disappeared (unless they, through exaptation, are able to take over other functions). Thus, in our sociological context, we can safely replace "selection" with the notion of opposition, as it is the contextual opposition that pressures new communicative selections to emerge. The opposition of environmental irritations (new context) and available variations (present context) leads to selection pressure and adaptation.

is an abundance of theories and studies to be formalized. For example, we could depict how protestant work-ethic – through cultural exaptation – propelled a new fusion of religion and capitalism, as capitalist ethos could now be "re-entered" into religious communication in a conceptually conditioned, and thus socially accepted, package (see Weber 2002). Figure 59 presents a highly simplified model for this, but more detailed presentations should follow. Such model is not able to show the full insights offered by reading the actual research, but it should be able to capture and communicate some basic ideas in any given research.

Figure 59: Religious code appropriated into economic communications through protestant ethic



Other examples could be given, but here they would remain cursory. These demand work and precision that are beyond the scope of the current study. It is because of this that I have chosen to present more lighthearted toy models in the current chapter – the interpretation of classic sociological texts would shift attention to ideas about their correct interpretation, thus away from the model itself. However, turning classic sociological studies and theories into our formal language could be one important step we have to take if we want to show that this model can indeed unify the fragmented science of sociology. The goal is not – by any means – to attack the richness of any qualitative or quantitative method in sociology, but merely to enables different schools of thought to condense their research into similar formal language. This shared language would make it easier to build bridges between schools of thought, thus stimulating collaboration and scientific self-esteem of sociology.

Still, a lot of theoretical work has to be done in order to clarify the use of this modeling scheme. For example, a critical discussion on Spencer-Brown's (2008) controversial system of boundary-logic is needed. Furthermore, we need a critical discussion on the benefits and dangers of bringing back universal Darwinism into sociology. The term "universal Darwinism" will probably send shivers down many spines, even if we are only reflecting on the evolution of patterns of meanings in society, not on the evolution of humans or human populations of any kind[107]. But this is where my blind spot begins, and where others have to reveal the weakness of my research. I can only hope that some fruitful ideas will arise from these thoughts – if not through repetition, then maybe through opposition or adaptation.

[107] There are many reasons for the disdain for universal Darwinism in sociology. Most notably, of course, the shadow of 19th century Social Darwinism, and its inherently racist ideas, as it conceptualized the survival of the fittest in human populations. The ideas of social Darwinism were actively used for rationalizing the Holocaust. Along with these terrible connotations, however, another thing prevents universal Darwinism – universalistic models and general theories are currently frowned upon in science.