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Sociative causative in South American languages

Formal-functional analysis

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Abstract

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Abstract:

In earlier research, the sociative causative has been considered a subcategory of a prototypical causative and not a category of its own. In the sociative causative the causer both initiates the event and participates in it, unlike in the prototypical causative in which the causer is only the initiator. It has been proposed that the causer can participate in the event either by acting together with the causee, helping the causee, or supervising the causee. The sociative causative can be marked on the predicate by using a specific sociative causative marker or it can be a reading of a prototypical causative construction or a reading of an applicative.

The objective of the thesis is twofold. First, the intention is to find out, using a typological sampling method, if there are more languages with a specific sociative causative construction beyond those that are currently known and, second, how these constructions behave. Special attention is paid to the exact semantics of the sociative causation to see if it reflects the semantics proposed in the earlier literature. The contexts in which the prototypical causatives and applicatives can get the sociative reading are also studied. The intention is to find out where the sociative causative aligns in the causative continuum.

It has been proposed in the previous literature that the sociative causative is an areal feature of the South American indigenous languages, and 26 languages were previously known to have sociative causative. In addition to these 26 languages, a genealogically balanced sampling method was applied and four languages with sociative causative function were found. Since South America is one of the world's most linguistically diverse areas the data gathering was limited to the western part of the continent.

The 30 languages were analyzed formally and semantically. The analysis shows that the sociative causative usually describes the type of causation in which the causer is a co-actor with the causee or the causer helps the causee. The supervision type of sociative causation, however, occurred rarely. The sociative causative tends to be used with intransitive verbs that express motion or physical activity. In the causative continuum it seems to be in the middle, as the previous research proposes.

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Abbreviations used in glosses

=	Clitic boundary
1	First person
2	Second person
3	Third person
I	Set I personal prefix
II	Set II personal prefix
III	Set III personal prefix
A	Subject of a transitive clause
ABS	Absolutive
ACT	Active
ABL	Ablative
ABS	Absolutive
ALL	Allative
AM	Associated motion
ANTIC	Anticipatory
APPL	Applicative
ARG	Argumental case
ART	Article
ASP	Aspect
ASSOC	Associate applicative
BM	Boundary marker
CAUS	Causative
CLF	Classifier
CNT	Contiguity marker
CO	Co-participant
COM	Comitative
COMPL	Completive
CONTR	Contrastive
DAL	Demonstrative classifier
DC	Discourse connector
DE.CAUS	Direct event causative

DECL	Declarative
DEM	Demonstrative
DIM	Diminutive
DP.CAUS	Direct physical causative
DR	Direct
DS	Different subject
DSC	Discontinuous
DSTR	Distributive
DUR	Durative
EP	Epenthetic segment
ERG	Ergative
EV	Direct evidential
FUT	Future
GEN	Genitive
GER	Gerund
HAB	Habitual
IMP	Imperative
INACT	Inactive
INC	Incompletive aspect
INCL	Inclusive
INF	Infinitive
INTNS	Intensificator
IO	Indirect object
IPFV	Imperfective
LOC	Locative
LV	Linking vowel
M	Masculine
MIN	Minimal
MODE	Mode (neutralized realis/irrealis contrast)
MOT	Motion
N	Neuter
N.CLASS	Noun class
NCNT	Non-contiguity marker

N.FUT	Non-future
NFC	Noun with classifier function
NMLZ	Nominalizer
NUC	Nuclear case
NS	Non-salient
OBJ	Object
OBL	Oblique
PERFV	Perfective
P	Previous event
PL	Plural
POSS	Possessive
PRO	Free pronoun
PROG	Progressive
PST	Past
R.POSS	Corefential possessive
REC.PST	Recent past
REL	Relativizer
RELN	Relational
R/R	Reflexive/reciprocal
REFER	Referenciate
R.PST	Remote past
S	Subject of an intransitive clause
SG	Singular
SOC.CAUS	Sociative causative
THEME	Theme

1 Introduction

Causatives are valency changing operations in which a causer is added to the base constructions. They are cross-linguistically the most common valency-increasing processes and thus an extremely well and widely studied topic in both formal and typological-functional linguistics (Zúñiga & Kittilä 2019: 15). However, since causativization is a process that appears widely in the world's languages with a great amount of variation, not all of this variation is well studied. One of the lesser-known causative types is the *sociative causative* (Shibatani & Pardeshi 2002; Guillaume & Rose 2010; Zúñiga & Kittilä 2019), or *causative of involvement* (Dixon 2000) and it will be explored in more detail in this thesis. Sociative causative is a type of causative in which the causer of the action participates in the caused action. According to Guillaume & Rose (2010: 383, italics in the original) it is: "usually paraphrased with sentences like *make someone do something by doing it with them* or *help someone do something*".

Two important studies on the sociative causative are by Shibatani & Pardeshi (2002) and Guillaume & Rose (2010). Shibatani & Pardeshi (2002) propose a theoretical framework for this phenomenon. This framework describes the sociative causative as something that semantically lies between direct and indirect causation. Further analysis points out three different subtypes: joint-action, assistive and supervision. Guillaume & Rose (2010) examine the areal distribution of the sociative causative. The second article served as an inspiration for this thesis and helped to delimit the area of study in the South American continent. However, due to the great linguistic diversity of the continent, the decision was made to include only Southern and Western Amazonia, The Andes, as well as the dry areas in the Northern Chile and Paraguay (The Chaco basin and The Atacama Desert). These are the areas with most sociative causative as reported by Guillaume & Rose (2010).

According to Guillaume & Rose (2010) the sociative causative can be expressed through a specific marker, it can be a reading of a regular causative or an applicative can have sociative causative semantics. I will be using these three categories to organize my study and categorize the different kind of formal manifestations of the sociative causative function. I will approach the topic from a typological perspective,

that is on the basis of cross-linguistic comparison. This means that even though these formal types are used to categorize the sociative causative function across the languages, the core of the definition of the sociative causative is functional. A function-based definition allows me to include wide range of phenomena that reflect the linguistic diversity of the continent in the analysis.

The study of the sociative causatives in the South American context is significant for three reasons. First and foremost, it is not a well-studied phenomenon. As Guillaume & Rose (2010: 383) state, it has been considered a reading of the regular causative, but not a category of its own. Also, having a separate grammatical category for it seems to be rare amongst the world languages. This means that there is not that much cross-linguistically comparative data and a closer examination and analysis is needed to create more solid theoretical framework for the sociative causative. Second, Guillaume & Rose (2010) propose that it might be an areal feature in the continent, but they do not have a balanced sample. By using a balanced sampling in the area where it is attested the most might help finding more languages with sociative causative function. Having more data would permit a better analysis of the function. It might also tell something about the language contact in the area. Third, South American indigenous languages are not frequently mentioned in the literature on causatives (Velázquez-Castillo 2002: 507), so it is interesting to explore this category in this geographical area in more detail.

Based on the discussion above, the objective of this thesis is to explore the frequency of the sociative causative in the area, but also to find about the function itself and see if it should be considered a separate category. The present work is organized in the following manner. First, in Section 2.1, the typological approach and its implications for the theory, methodology and analysis are presented. Section 2.2 is dedicated to the theoretical background with the main focus being on the causatives and the form-function correlation they show as well as on the sociative causative function. The methodology and data are then explained in Section 3 followed by the analysis and the discussion in Sections 4 and 5, respectively.

2 Theoretical framework

In this section, I will first explain the approach that I have chosen for this study (Section 2.1), and after that, in Section 2.2, I will present the theoretical framework that I will be using to analyze the gathered data. The final Subsection 2.3 is dedicated to the South American indigenous languages. In the end of Section 2, I will present the research questions for the study.

2.1 Typological approach

Approaching a linguistic category from a certain perspective has implications for the theoretical background, data collection, analysis and explanations. Linguistic typology is the study of cross-linguistic variation (Comrie 1989: 34) and it offers the theoretical and methodological tools for this particular study, that aims to describe the diversity of a certain linguistic feature.

An important concept in the context of this study is *typological markedness.* It refers to the asymmetry between equal linguistic elements: some functions have more material when encoded into a grammatical form than others. The marked functions (those that require more coding than the unmarked ones) tend to have less behavioral potential than the unmarked ones, this is, to have more limited distributional or inflectional potential. Distributional potential refers to the number of syntactic contexts in which a certain linguistic element can occur, whereas inflectional potential refers to the number of possible morphological distinctions within a grammatical category. (Croft 2003: 87–88, 95)

To study linguistic diversity is to study variation of a category. A prerequisite of the linguistic analysis is to define this category, so that the members of the category can be recognized and consequently analyzed (van der Auwera & Gast 2010: 189). One tool used for defining a category in the typological research is the *prototype theory* (Rosch 1978). The members of a prototype category share a certain amount of properties. Depending on the number of properties the members share, they can be considered a core or peripheral member of a prototype category. The core members must have higher text frequency and more behavioral potential than the peripheral members. (Croft 2003: 162–163) Additionally, they need to be minimally coded. This means that the core members are determined using same information as when

determining the marked and unmarked values of a linguistic category (Croft 2003: 164).

As for the data collection, a typological approach requires that the language sample serves the purpose of the study. The most suitable sampling method depends on the research questions. The sampling methods can be roughly divided in two types: variety sampling and probability sampling. Variety sampling is used when the objective is to explore the variation of a certain linguistic feature amongst the world's languages. Probability sampling, on the other hand, is used to study the universals employing statistical methods. The goal in both of the sampling methods is to obtain balanced sample i.e., a sample that represents the languages evenly, for example, areally or genealogically. (Miestamo & Sinnemäki 2020: 654–655)

For the analysis, the most important consequence of the typological approach is using such concepts and their definitions that are not language specific but rather suitable for cross-linguistic comparison. This means that in the starting point is the *function,* that which the speaker wants to communicate (Stassen 2010). This contrasts with the *form,* the kind of devices that are used to communicate the function.[1] However, it is not purposeful to leave out any type of structural manifestations of a linguistic feature: "linguistic typology attempts to present a survey of all the different ways in which languages may encode some linguistically relevant property" (Stassen 2010: 91). As Stassen (2010: 96) highlights, the mixed formal-functional definitions of linguistic features are crucial for limiting the domain of a study. Additionally, the forms might play a role in the functional explanations of variation, as can be seen below. One way of studying linguistic categories across the languages is to use *comparative concepts*, developed by Haspelmath (2010). They are function-based tools for cross-linguistic comparison that contrast with *descriptive categories* that are language specific. He characterizes the comparative concepts the following way:

> "[…] they are not part of particular language systems and are not needed by descriptive linguists or by speakers. They are not psychologically real, and they cannot be right or wrong. They can only be more or less well suited to the task of permitting crosslinguistic comparison. They are often labeled in the same way as descriptive categories, but they stand in a

[1] Stassen uses the term *external* for the functional and *internal* for the formal dimension.

> many-to-many relationship with them […]. Comparative concepts are universally applicable, and they are defined on the basis of other universally applicable concepts: universal conceptual-semantic concepts, general formal concepts, and other comparative concepts." (Haspelmath 2010: 665)

When explaining linguistic phenomena, typology often relies on functional explanations. The most relevant for the present study is *iconicity*. Iconicity is the idea that the linguistic function and form are connected and that the form reflects the function (Croft 2003: 102). This connection can appear in many ways, but one generally cited example is the singular/plural distinction. The plural forms tend to be more complex morphologically than the singular forms which reflects the extra-linguistic reality.[2] *Economy*, in turn, is the idea that languages tend to move towards a more easily processable and producible way of expressing the functions. Together with iconicity, they are seen as competing motivations. (Croft 2003: 102) Thus, these two are in a continuous competition with each other and might explain why some of the forms are more marked than others.

2.2 Causatives

In this section I will introduce causatives and how they settle in the bigger context of valency changing operations. I will start by going through some important concepts in Section 2.2.1. After that, I will present the causative prototype that I will use (Section 2.2.2) as well as the cross-linguistic variation of causatives (Sections 2.2.3 and 2.2.4). Finally, in Sections 2.2.5 and 2.2.6 the idea of causative continuum is introduced and the sociative causative is defined. In the last subsection (2.2.7), there are some remarks on the causative-applicative syncretism.

[2] This has been criticized by Haspelmath (2008) who claims that this kind of asymmetries in languages can be explained better with frequency.

2.2.1 Key concepts for the study of causatives

Before going to the causatives in detail, it is important to define the relevant concepts for the study of valency. Most of the terminology used in this study has been defined several ways in the existing literature and as with many other topics in linguistics, there is no clear consensus on the definitions. For the most part, the definitions of Zúñiga & Kittilä (2019) are followed here. I will do that because it is a recent work that is based on the most important literature on the grammatical voice. Also, when defining the different valency changing operations, they use semantically oriented definitions and that is the most suitable tool for the present work. In addition, it is written from a functional-typological perspective, and it aspires to include a broad variety of phenomena with its definitions.

I start with the umbrella term *voice,* or more specifically *grammatical voice.* As Zúñiga & Kittilä (2019: 4) write: "Voice refers to the way a specific diathesis is formally marked on functional or lexical verbs in the predicate complex." For example, the active-passive contrast in English is a voice alternation. Diathesis, on the other hand, is the way the semantic roles (see below) are reflected in the grammar. To maintain the differentiation between the voice and the diathesis, only formally marked diathesis is counted as a voice alternation. For example, in the sentences 'the vase broke' and 'he broke the vase' there is a change in diathesis between the sentences, but there is no voice alternation (Zúñiga & Kittilä 2019: 181).

The third relevant term is *valency*. Zúñiga & Kittilä (2019: 3) define valency as: "Valency is the number of arguments a predicate takes: semantically, syntactically, or morphologically" *Arguments* can be either core or peripheral (Dixon & Aikhenvald 2000: 2). The peripheral arguments can be removed with the sentence still being grammatical, but the core arguments cannot. Most languages have some type of operations that can change the valency of the predicate, this is, operations that affect the core arguments of the predicate. The arguments can be further analyzed based on their syntactic behavior (called grammatical roles) or semantic characteristics (semantic roles). The grammatical roles generally defined in the literature on Indo-European languages are subject, direct object, indirect object and adjuncts, of which subject and object are considered core arguments (Zúniga & Kittilä 2019: 10). They are usually based in the marking of grammatical relations,

which makes them inapt for cross-linguistic comparison (Bahrt 2020: 35). Semantic roles refer to such terms as agent, patient, recipient, theme etc., and are based only on the semantic criteria. Also, the terms S, A and O are used to refer to the participants. S refers to the only argument of an intransitive verb, A the more agentive participant and O[3] the more patientive participant of a transitive verb (originally introduced in Dixon (1972), in my work I am following Næss (2007) in a sense that S, A and O are primarily used to describe participants of an event and not syntactic arguments). The valency changing operations can increase or reduce the syntactic or the semantic valency. Passive, for example, is an operation that changes the syntactic valency and causative changes the semantic valency. The latter will be discussed in more detail in Section 2.2.2.

Another important theoretical concept is *transitivity*. As Hopper and Thompson (1982: 1) write, "In many languages (and perhaps covertly in all languages) the transitivity relationship lies at the explanatory core of most grammatical processes." Likely due to large scope of the topic, "there is no universally accepted definition which captures precisely the range of functions the term is being used to cover" (Næss 2007: 2). However, transitivity has been traditionally seen as feature of a clause that has two participants, agent and patient, and in which these two participants are in asymmetrical relationship. This means that the agent acts on the patient, leaving the patient affected. (Hopper & Thompson 1980: 251; Næss 2007: 15) Transitivity deals with different semantic parameters of the arguments, such as agentivity, affectedness, and referentiality, as well as semantic and syntactic valency of the clause (Zúniga & Kittilä 2019: 3). It is important to note that the transitivity here is understood as a continuum (Hopper & Thompson 1980) and as something language specific (Næss 2007), whereas valency is something discrete (predicates can be either monovalent, bivalent or trivalent, but nothing in between).

2.2.2 Prototypical causative

Since causatives have been well studied and described in the linguistic research, the prototypical causatives have been defined numerous ways. As stated earlier, the definition of Zúñiga & Kittilä is followed in this study because the prototype they

[3] Sometimes P is used instead of O.

employ is rather broad and allows quite a lot of semantic, syntactic and formal variation. The definition is the following:

a. The syntactic valency of a causative clause is one higher than that of the base, non-causativized, clause (e.g., it is bivalent when its noncausative counterpart is monovalent, and trivalent when the base clause is bivalent).
b. A new A (the causer) is installed into the semantic argument structure.
c. The new A (the causer) is introduced as the subject of the causative clause; the base subject of the non-causative clause (the causee) may be a core argument or an adjunct in the causative clause.
d. Causativization is formally coded on the predicate complex.

(Zúñiga & Kittilä 2019: 15–16)

This is the broad prototype they present. The definition is semantic and syntactic, except for the (d) that refers to the formal encoding of the causative construction. See example (1) from Teko (Tupian) for an illustration of prototypical causative. The causative prefix *mõ-* and a causer are added to the intransitive sentence (1a) and as a consequence the valency is one higher in (1b).

(1) Teko (Guillaume & Rose 2010: 388)

a. intransitive

Mozepẽ	*ʔar-ãhã*	*o-keɾ*	*kotɨ*
one	day-only	3.I-sleep	there

'They slept only one day over there'

b. causative

Wãĩwĩ	*o-mõ-keɾ*	*ʔimãʔẽ*
woman	3.I-CAUS-sleep	child

'The woman is putting the child to sleep'

Zúñiga & Kittilä (2019: 18, originally from Kittilä 2009: 74) also give a narrower prototype that only accepts *agent-related causativization* and gives more specific semantic criteria for the participants and their actions. The definition is following:

a. An external agent (the causer) is added to a one-argument base clause headed by a semantically monovalent predicate.
b. All features of agency are introduced into the causativized clause. The agent's participation in the resulting state of affairs is volitional, purposeful, and controlled. It is the primary cause of the event or state in question; the latter does not occur if the agent does not induce it. Lastly, the agent targets its action directly at the patient (the causee), aiming at bringing about a change in the latter's state.
c. The introduction of the argument produces a transitive event involving a salient cause (the agent) and a salient effect (the patient). The agent is completely unaffected by the event, while the patient is thoroughly affected and thus registers the effect of the described event. Causativization does not have any necessary consequences for the specific kind of affectedness of the patient.

(Zúñiga & Kittilä 2019: 18, originally from Kittilä 2009: 74)

The protypes are presented here for two reasons. First, to give a starting point for the following sections in which the possible semantic and formal variation is addressed. Second, later when comparing the sociative causative to the other causative constructions in each of the languages the term *regular causative* is used to refer to the narrow semantic prototype, if not stated otherwise.

2.2.3 Semantic variation of causatives

As can be seen in the prototypes above, causatives share a cluster of properties. However, there is some semantic variation across the languages. Dixon (2000) has proposed nine different semantic parameters that are further divided in three classes depending on which part of the construction they are related to: to the verb (state/active, transitivity), to the causee (control, volition, affectedness) or to the causer (directness, intention, naturalness, involvement). If a language has different causative constructions (periphrastic, morphological, lexical) or the marking of the causee might vary, these parameters are possibly the factors that guide the choosing of a type of causative. I will now explain these parameters in detail.

Since causative is a process that changes the semantic valency of the predicate, the verb-related semantic parameters are relevant for the analysis of causatives. As Shibatani & Pardeshi (2002: 96, my italics) write:

> "*A closer analysis of base-verb semantics is important not only in accounting for the various restrictions that different causativization processes may impose,* but also in understanding the various ways that different groups of verbs align. Especially important is the semantic role borne by the subject of the base verb – whether it is the agent, the patient or both. *These considerations all point to the conclusion that causativization processes are organized largely according to the semantics of the base verbs."*

Dixon (2000) proposes two different semantic parameters related to the base-verb: the state/action distinction and the transitivity parameter. In some languages, different causativizing mechanisms have to be used depending on the semantics of the base verb. In the state/action distinction, the attention is in the inherent semantics of the verb. For example, some languages only allow morphological causatives used with the stative predicates. The same goes with transitivity, some languages only allow causativizing of intransitive verbs and some allow causativizing of all types of verbs: intransitive, transitive and ditransitive. There are also languages that mark causation differently for intransitives and transitives. Teko is an example of this kind of language (see example 1). The prefix *mõ-* can be added only to the intransitive bases and different morpheme is used to causativize transitive bases. Shibatani & Pardeshi (2002: 86) show how these two parameters have to be taken into account simultaneously in some languages, using an example from Japanese in which inactive intransitives cannot be causativized but the active intransitives can. The narrow prototype presented above only accepts the causativization of semantically monovalent bases, which tend to be highly intransitives.

Dixon suggests the three following causee-related parameters: control, volition and affectedness. If a causee has or does not have control over an event, causative might be marked differently in the predicate. In some languages causees that lack control cannot be causees of a morphological causative construction at all. Same goes with the volition, some languages use different construction or form depending on whether the causee is participating willingly or unwillingly. Causee can also be

partially or completely affected by the event, but this difference is very rare in the world's languages. In the narrow prototype by Kittilä (2009: 74) the causee has to be affected but there are no other restrictions given for the type of causee.

The causer related parameters proposed by Dixon are the following: directness, intention, naturalness and lastly, involvement. The directness parameter is going to be discussed more in detail in Section 2.2.5 where the definition by Dixon is extended. To put it succinctly, Dixon's definition describes whether the causer causes the activity directly as a single event, or through an intermediary stage or participant. The action caused by the causer can be also intentional or accidental (intention) and naturally occurring or requiring an effort (naturalness). Finally, the parameter of involvement describes how much the causer is participating in the caused event. When the causer is participating and thus involved, it is called sociative causative in the present study and it is described in more detail in Section 2.2.6. Again, if the causer related parameters are compared to the narrow prototype by Kittilä (2009: 74), the causer is required to act directly and not be affected by the caused event, but no other restrictions are given. And as I will explain later, it is the [+affected] parameter where the sociative causative deviates from the regular causative.

As can be seen, there is a great amount of variation in the semantics of the causatives in the world's languages and the narrow prototype by Zúñiga & Kittilä covers only one part of the variation. In turn, the broad prototype allows much more variation.

2.2.4 Formal variation of causatives

As for the form of the causatives, according to the traditional view, they can be either lexical, morphological or periphrastic (analytic). Morphological causatives are those that are formed from their non-causative counterpart through verbal morphology (Zúñiga & Kittilä 2019: 25). Morphological process can refer to varied formal changes in the underlying verb. Dixon (2000) distinguishes the following: internal change, consonant repetition, vowel lengthening, tone change, reduplication and affixing. Example (1) from Teko above, in which the morpheme *mõ-* is added in the base predicate, illustrates an instance of morphological causative through affixing. Periphrastic causatives are formed with two verbs and are biclausal, and there is a varying degree of connection between them (Dixon 2000: 35–36; Kulikov 2001: 887;

Zúñiga & Kittilä 2019: 26). In example (2) from Yuracaré (isolate), the verb *ibëbë* 'to treat someone in a certain way' works as an auxiliar and together with the main verb forms a periphrastic causative:

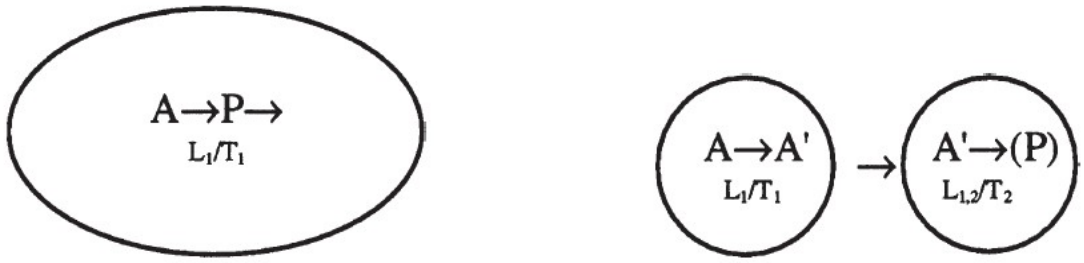
(2) Yuracaré (van Gijn 2006: 180)
abëssë *ti-m-bë-ø*
play 1SG-IO-treat-3
'He made me play.'

Dixon (2000: 34–35) also distinguishes a type of construction in which there is a stronger connection between the verbs. These are serial verb constructions, in which the two verbs form one predicate and thus the construction is monoclausal. The third formal process to create causative meaning are the lexical causatives. They are pairs of verbs in which one is intransitive and the other transitive. A lexical causative can be a single lexeme that can appear in transitive or intransitive sentences, such as *break* in English, or it can be two lexemes in which the other is a suppletive form of the other, such as *die* and *kill* in English in which *die* is intransitive and *kill* is transitive (Dixon 2000: 39; Zúñiga & Kittilä 2019: 25). Causative constructions also vary in the way the arguments are marked. The causee might be marked formally the same way as objects or adjuncts in a language, or it might have specific marking, even though rarely (Zúñiga & Kittilä 2019: 28). The syntax will not be discussed in more detail here. This does not mean that it is irrelevant for the study of the causatives: actually, Comrie (1989: 183) notes that there are languages in which the formal coding of the causee cannot be explained only by the semantics but the syntactic analysis is needed. For example, in Turkish, the causee is coded differently depending on the syntactic transitivity of the causativized verb. Causatives vary also in the way they present syncretism with the other valency-changing operations (Zúñiga & Kittilä 2019: 25).

2.2.5 Causative continuum and meaning-mechanism correlation

In the literature on causatives the most widespread semantic subtypes are direct and indirect causation (Zúñiga & Kittilä 2019: 30), briefly discussed in Section 2.2.3. If Dixon's direct-indirect parameter is considered, in which the distinction is based on the type of event, it is logical to think that the causee is more patientive in the direct causation that is formed by a single event, than in the indirect causation that requires

an intermediate stage and requires two events instead of one. Shibatani & Pardeshi (2002) call this the "fundamental distinction in the cognition of causation". According to them, direct causation includes physical manipulation which impedes the volitionality of the causee and the responsibility is completely on the causer. On the other hand, in indirect causation the causer does not physically participate in the causing, which gives more autonomy to the causee, thus the causee is more agentive than in direct causation. This is logical: in indirect causation the causing event is usually a directive one and inanimate causees cannot receive commands. For the sentence *I caused the cup to rise to my lips* to make sense, the causer should have magic powers (Haiman 1985: 108). Besides the difference in the degree of agency of the causee, direct and indirect causations differ in the spatiotemporal profile, as mentioned above. This is illustrated in Figure 1. In direct causation, the causing and the caused event coincide in time and space. In indirect causation, on the other hand, they do not necessarily do so.



Direct causation Indirect causation

Figure 1. *Event structure of direct and indirect causation.*
(from Shibatani & Pardeshi 2002: 90).[4]

When the causer is highly agentive (+volitional, + instigation) and the causee is patientive (+affected) (Næss 2007: 44), the event is prototypically transitive and the transitive verbs have a tendency to be the unanalyzable lexical items (Shibatani & Pardeshi 2002: 91). If direct causation has a tendency to be expressed through lexical causative, it is also possible to claim that the indirect causatives have tendency to be expressed by more complex forms (such as periphrastic). This is illustrated in Figure 2. This kind of correlation has been noted already by Haiman (1985), Givón (1990) and Dixon (2000), among others.

[4] A->P (A's causing action), P-> (the caused event), L (spatial profile of the event), T (temporal profile of the event).

+Lexical ---------- Morphological ---------- +Syntactic

+Direct ---------- Sociative ---------- +Indirect

Figure 2. *Formal and semantic causative continuum.*
(Tacconi 2016: 99, original in Spanish).

Dixon (2000: 74) calls the formal parameter "degree of compactness" and it has in one end the lexical causatives, then morphological causatives, serial verb constructions and finally in one end the periphrastic causatives. He goes further and proposes two different causative prototypes of which one corresponds to direct causation and the other one to the indirect one. He includes in these two prototypes values of almost all nine semantic parameters explained in Section 2.2.3. He also gives example for various languages in which the first prototype (direct) is more compactly marked than the indirect prototype. It is possible to consider this meaning-mechanism correlation a manifestation of the iconicity principle (see Section 2.1). As Haiman (1985: 109) puts it: "[…] greater linguistic distance between cause and effect […] signals greater conceptual distance […]." However, in their article Shibatani & Pardeshi (2002) discard any kind of dichotomous or scalar conceptualization of the meaning-mechanism correlation and propose a *causative continuum* instead, both in the semantic and formal dimension. The formal continuum they propose, however, is not only based on the form, but it also considers a certain construction's productivity. They note that productivity is a better predictor in a cross-linguistic comparison than purely formal criteria (such as simply classifying a construction to be lexical or morphological). Thus, even though the productivity correlates with the degree of compactness, Figure 2 is a simplification. Shibatani & Pardeshi (2002: 85, also noted by Dixon 2000: 75) point out that inside the continuum there are smaller continuums. This means that, for example, inside the scope of morphological causatives, it is possible to distinguish more or less compact morphological encoding (Dixon) or more or less productive processes (Shibatani & Pardeshi). Then, for example, the unproductive morphological causatives align with the lexical causatives and would be closer to the direct end, whereas the productive morphological causatives align with the periphrastic and would be closer to the indirect end (Shibatani & Pardeshi 2002: 112).

As to the semantic continuum, an interesting difference between Dixon's and Shibatani & Pardeshi's conceptualization is that the involvement parameter by Dixon (which was excluded from the two causative prototypes he proposes) is according to Shibatani & Pardeshi something that rests at the middle of the continuum and called sociative causative. The sociative causation is characterized as having an agentive causee (in this sense reminding the indirect causation) and constituting a single event (here reminding the direct causation) (Shibatani & Pardeshi 2002: 97). However, as it is a continuum, also sociative causation can be more or less direct and it has its own subcategories. These will be discussed in the next section.

2.2.6 Sociative causative

Sociative causative "is a particular type of causation, where the causer not only makes the causee do an action, but also participates in it, which is usually paraphrased with sentences like *make someone do something by doing it with them* or *help someone do something*." (Guillaume & Rose 2010: 383, italics in the original). Shibatani & Pardeshi (2002: 96) describe sociative causative as an "intermediate category between direct and indirect causation", as explained in the previous section. Besides these two articles, the sociative causative has been discussed in the typological literature before. Dixon (2000: 73) considers causer's involvement as a semantic parameter that causative construction can have or not (see Section 2.2.3). Kulikov (2001: 892) calls it *assistive* and classifies it as one semantic type of causative that has the meaning of 'helping', even though, according to him, it should not be even considered causative because it is lacking the causative semantics.[5] The first mentions of the sociative causative were in the description of Tupian languages, and it was called *comitative causative* (Guillaume & Rose 2010: 386), but since it has been rarely treated as separate category in the typological literature (Guillaume & Rose 2010: 383).

To my knowledge, the most extensive description of the sociative causative is the one by Shibatani & Pardeshi (2002). Shibatani and Pardeshi propose three types of sociative causative: joint-action, assistive and supervision. These three subtypes align in the semantic causative continuum (see Figure 3).

[5] Kulikov (2001: 892, bold and italics in the original) writes: "**Assistive** (cooperative) meaning ('help to bring about P2', 'assist at bringing about P2') does not incorporate the meaning '**CAUSE**' and, strictly speaking, should be treated separately from causatives *sensu stricto* […]".

+Direct ---------- Sociative ---------- +Indirect

|

Joint-action----Assistive----Supervision

Figure 3. *Semantic causative continuum with the sociative causative subtypes.*
(adapted from Shibatani & Pardeshi 2002: Table 2)

They are distinguished by the causer's involvement level, the causee's agency and the event structure of the caused event. Joint-action and assistive are "closer" to the direct end: in both cases, the causing and the caused events coincide and they require physical participation of the causer in the event. Also, the causee has less autonomy. They differ in the way the causer participates, in the joint-action type the causer in accompanying the causee in the caused event, and in the assistive type, the causer helps the causee to conduct the caused action. The supervision, on the other hand, is closer to the indirect end, as the causing and caused event might be having different spatiotemporal profiles and the causer and the causee do not need to be interacting physically (this is illustrated in Figure 4):

Joint action/assistive Supervision

Figure 4. *Event structure of the sociative causatives subtypes.*
(from Shibatani & Pardeshi 2002: 101)[6]

Shibatani & Pardeshi (2002) show that in Marathi (Indo-European, India), a language in which the sociative causative is an extension of the regular causative, the interpretation of the (sociative) causative differs depending on the semantics of the base predicate. As the causative form-meaning correlation predicts, the indirect causative is formed with analytic (and productive) construction. If an inactive intransitive verb is causativized using the morphological causative, there is only one

[6] A->P (A's causing action), L (spatial profile of the event), T (temporal profile of the event).

agent, the added causer, and the result is a unitary event and the result is direct causation. Now, if transitive base or active intransitive is causativized using the morphological causative, there are two agentive participants and the sociative interpretation is possible. These two, however, are not semantically equivalent. The second one corresponds to joint-action and assistive types in which the causer is more involved and the first one to the supervision type in which the causer is not physically involved.

As discussed in Section 2.1, the function can correlate with the form. Thus, including the formal criteria helps to define and delimit the domain of study, as suggested by Stassen (2010). Now, if Figure 2 in Section 2.2.5 is looked at, the expected form of the sociative causative is a relatively productive morphological form. However, as mentioned above, sociative causative has been generally considered a different reading of the regular causative and this is, indeed, the first formal type Shibatani & Pardeshi (2002) present. In these cases, the causee might be marked differently than in the regular causative. For example, in Japanese, when the causee is in accusative case, the meaning is sociative. However, when in dative case, the causation is indirect (Shibatani & Pardeshi 2002: 100). They also show a second formal type, in which the sociative causative has a marker that is reserved only to this function. They use as an example Alamblak (Sepik, Papua New Guinea), in which the morpheme *ha-* (referred as direct event causative by Bruce 1984: 155) contrasts with both the direct (3a) and the indirect causative:

(3) Alamblak (Bruce 1984: 155)

a. regular (direct) causative

ka-fkne-më-r-m

DP.CAUS-enter-R.PST-3SG-3PL

'He caused them to enter (something) by physically taking them'

b. sociative causative

***ha**-fkne-më-r-m*

DE.CAUS-enter-R.PST-3SG-3PL

'He caused them to enter (something) by entering with them'

Shibatani & Pardeshi (2002) discuss the relationship between the sociative causative and applicative as well, and explain that there are languages in which the same marker is used for applicatives and for causatives. This will be explained more in detail in the next section.

Guillaume & Rosé (2010) make a similar distinction. They also present these three types: languages in which the sociative causative marker contrasts with the other ways of expressing the causative function (illustrated by Alamblak above) and the type of languages in which the regular causative marker has an extended reading (like Japanese), although not necessarily requiring a different marking of the causee, and thirdly, the group of languages in which applicative marker is used to express the sociative causative meaning (see next section for further discussion). I will be using this three-way categorization in my analysis as well.

As a last theoretical note, following the definition of Zúñiga & Kittilä, the sociative causative is considered a prototypical causative, if the broad prototype is used. However, if the narrower definition is used, this is not so clear anymore. The last characteristic is *the agent is completely unaffected by the event,* and as the discussion in this section has shown, this is not necessarily the case in the sociative causative. The narrow prototype also does not accept indirect causation, so the supervision subtype cannot be considered prototypical either, although the causer is less affected than in the joint-action and assistive subtypes.

Now, to summarize this and the previous sections, my definition for the sociative causative is the following:

1. An external participant (A) is added to the underlying clause and the resulting clause has a valency one higher than the underlying clause.

2. It is formally marked in the predicate.

3. The resulting clause has causative semantics i.e. the causer makes the causee do an action.

4. The causer, besides causing the causee's action, participates in the caused action either doing it together with the causee, helping the causee or supervising the causee.

Some of the languages that Guillaume & Rose (2010) list as having sociative causative do not fit into my definition. In example (4) of Yuqui below, the predicate that results after adding the relevant marker is semantically intransitive, which means that the semantic valency cannot be one higher than in the non-causative counterpart. Thus, it cannot be interpreted as prototypically causative. Neither it has causative semantics.

(4) Yuqui (Villafañe 2004:133, original in Spanish)
gui[7]*-kienöö*
CAUS-cry
'They cry together.'

In this example, the semantic valency is not increased when the relevant marker is added. This is not unique for causative construction in the world's languages, Kittilä (2009: 69) shows that there are at least three different types of non-prototypical causatives in which the verb is morphologically causative, but it does not affect the number of arguments. However, the morphological causative has to have an agent-adding function somewhere else in the language for it to be considered causative in the first place. This is not the case for Yuqui. The other excluded language is Mosetén, and I will argue its exclusion in the next section, in which I will discuss the relationship between causatives and applicatives to the extent it is relevant for this study.

2.2.7 Causative-applicative syncretism

In the case of the prototypical causative, the added participant is a new A and in the case of the prototypical applicative a peripheral argument is promoted into O function. However, the line between causative and applicative in general is vague and depends on the conceptualization of the action (Zúñiga & Kittilä 2019: 236; Bahrt 2020: 265). For the study of the sociative causative the causative-applicative syncretism is relevant because sociative causative meaning could have been developed from comitative applicative as Guillaume & Rose (2010) propose. Shibatani & Pardeshi (2002), on the other hand, postulate that the causative-

[7] Guillaume & Rose (2010) do not present an example for Yuqui, according to them they could not find a good one. Also, they claim them the relevant marker is *ero-~ ro-*, but in the grammar (Villafañe 2004) these forms are presented only as a reconstruction of the current form and the current form is *gui-*, and it is called comitative causative.

applicative syncretism might be explained by the fact that regular causative markers develop sociative causative meaning. Causative-applicative syncretism[8] refers to a phenomenon in which causative and applicative are marked the same way in a language (Zúñiga & Kittilä 2019: 233–234). Even though the diachrony of the syncretism is relevant for the sociative causative, or rather, the sociative causative is relevant for the study of the diachrony of the syncretism, it will not be discussed here, because it is out of the scope of this thesis (see Bahrt 2020: 265–271, 273–277 for an overview).

Now, to answer my research questions, it is not important to discuss syncretism *per se*. However, there are a few important things to highlight to be able to analyze the third category *sociative causative as semantic extension of applicative*. As mentioned above, the difference between causative and applicative comes down to the way an extralinguistic event is conceptualized in the language. See (5) below:

(5) Machiguenga (Guillaume & Rose 2010: 394, originally from Wise 1990: 95)
*No-panki-t-**ag**-ak-e-ri*
1-plant-EP-**CAUS/COMIT**-PERFV-N.FUT-3SG.M
'I ordered him to plant / I planted with him'

The fact that this sentence can have two interpretations shows that it is not always easy to know if it is a causative or an applicative at hand. The first interpretation *I ordered him to plant* is a causative reading and the *I planted with him* is an applicative reading. So, in the first one, the added participant would be *I* and in the second one *him* would have been promoted into O function. However, as Fleck (2003: 896) notes, if the resulting construction is compared to the underlying construction (as in the definitions used in this study) to find out which participant is added, the following problem arises, "The problem with this approach is that it can be circular: without *a priori* assumption that a morpheme is a causative marker, there is no way to determine the identity of the arguments in the underlying clause" (italics in the original). Consequently, something else is needed. Zúñiga and Kittilä (2019: 235, also Shibatani & Pardeshi 2002: 119; Malchukov 2017: 9) note that cross-

[8] I am using the term syncretism in a broad sense to describe the multifunctionality of the marking without taking stance on the nature of the relation, this is, whether it is polysemous or homonymous (following Zúñiga and Kittilä 2019: 234).

linguistically it is common that bivalent and agentive (active) monovalent bases are more likely to get an applicative interpretation and monovalent patientive (inactive) bases are more likely to get interpreted as causative. This kind of tendency is reported for Australian languages (Austin 2005), in which there are generally two patterns: languages that have multiple affixes and some of them can be used with inactive intransitives that form causatives and others with active intransitives, that form applicative constructions. The other pattern, the interesting one for this study, is languages with one affix and a verb split. Again, the split occurs between the active and inactive intransitives. See (6) from Pitta-Pitta, in which the suffix *-la* can have either causativizing (a) or applicativizing function (b):

(6) Pitta-Pitta (Austin 2005: 12, originally from Blake 1979)
a. *kurra-* 'to fall' *kurra-la-* 'to drop'
b. *mirnti-* 'to play' *mirnti-la-* 'to play with'

According to Austin (2005: 7), in the case of many Australian languages, the relevant semantic factor is the volitionality of the S argument: "Volitional intransitive verbs form applied transitives, while non-volitional intransitives form causative transitives." As can be seen in (6a) there is a non-volitional (patientive) S and in (6b) there is a volitional (agentive) S. According to this, it would be expected that in my data the sociative causative reading would be possible when the relevant marker is added to inactive bases. This is because the inactive bases are the ones that tend to get non-volitional, patientive S. However, in the Marathi example (Section 2.2.6), the active intransitives, i.e. those that get agentive S, could get the sociative causative reading. This shows that the sociative causative lies somewhere between the prototypical causative and the prototypical applicative. Consequently, in the analysis, I will be focusing on the semantics of the base verb and how it affects the interpretations of the constructions that present sociative causative-applicative syncretism.

As mentioned in the previous section, two languages from Guillaume & Rose (2010) were excluded from the analysis. The other one was Yuqui and the second one is Mosetén. According to Sakel (2003: 253–254) the morpheme *jaj-* (here the allomorph *jij-*) is an applicative marker and it adds an object in the clause:

(7) Mosetén (Sakel 2003: 254, simplified glosses from Guillaume & Rose 2010: 401)

Khin'-dye-ra'	*mi'-we-ra'*	*jemon-e-'*	***jij**-khösh-te*
now	there.M	must	**APPL**-sleep-3M.OBJ

'Now we will have to accompany it (the rice), sleeping (in the plantation) '

Jaj- is used only in lexical forms, namely *to accompany sleeping* and to *live with.* According to (7) the criteria in my definition of the sociative causative are not filled, because there are no causative semantics here. Sakel gives only two examples, and since neither of them shows causation, I cannot include Mosetén in my sample based on the information available.

As the last part of the theoretical framework, I will discuss the linguistic diversity in the South American continent and the languages' typological profile.

2.3 South American indigenous languages

According to Campbell (2012a: 59) in the South American continent there are in total 108 language families of which 55 are constituted by only one member, this is, there are 55 languages isolates. Thus, in South America there is a quarter of the world's genealogical linguistic diversity. These 108 families have in total 420 languages, even though the estimates vary due to the various problems stated in Campbell (2012a): there are still uncontacted tribes (42 in Brazil only), the naming of the languages is not consistent,[9] and there is lack of high quality linguistic (and non-linguistic) information that would allow distinguishing the languages and the dialects of the same language.[10]

Muysken (2012: 237) lists the following features as common for South American languages: complex verbal morphology, agglutinative morphology, head marking, evidentials, both nominal and verbal classifiers, possession often marked on the possessed noun and clause subordination through nominalization. However, the languages present a complex typological profile due to the high genealogical

[9] The naming used in *Glottolog* is followed in this thesis.

[10] Having said this, it is necessary to keep in mind that the language-dialect distinction is not only based on linguistic traits, but rather on socio-historical factors (Silva-Corvalán & Enrique Arias 2017: 13).

diversity. Consequently, it is more reasonable to point out common areal features in smaller regions than common features for the whole continent. When using the term *areal feature* there is an assumption that the shared features would be contact-related and not inherited. Due to numerous issues, one of them being the shortage of historical and linguistic information, language contact has not been well studied in South America (Muysken 2012: 235). It is not a topic I will enter in detail in this study, but it is mentioned here for two reasons. First, according to my knowledge, having a specific[11] sociative causative marker is rare amongst the world's languages. The rarer the linguistic feature found in several non-related languages is, the more convincing proof it is for language contact. Second, Guillaume & Rose (2010) propose that the sociative causative is an areal feature for the entire South American continent. I will not be able to test this, but that is something that worked as criterion for delimiting the scope of the study.

Despite the difficulty of establishing linguistic areas in South America, there have been propositions for regions where the languages would share some features. To give some background for the data gathering, I will go through some basic information about them. Campbell (2012b) summarizes the different propositions as follows: Amazonian linguistic area, Lowland South American linguistic area (overlaps with the Amazonian), Andean linguistic area, Colombian-Central American area, Orinoco-Amazon linguistic area, Venezuelan-Antillean linguistic area, Vaupés linguistic area, The Chaco, The Southern Cone and the Fuegian languages (partially overlapping with the Southern Cone). Even though some traits, indeed, tend to be more common in these areas, several features extend to the neighboring areas and make the limits fuzzy (Campbell 2012b: 310). Note that these areas do not come from the same hierarchy levels, instead they cover different parts of the continent and sometimes overlap. Consequently, it is possible to question how useful this list of proposed areas is, but I decided to include it here to illustrate that there have been several propositions and no consensus. The area studied in the present work corresponds roughly to Amazonian, Andean and The Chaco linguistic areas (see Map 1). Also, the Lowland South American area is covered. However, as it overlaps significantly with the Amazonian area and the Chaco and includes many

[11] I am using the word *specific* marker instead of *dedicated* marker, following here Guillaume & Rose (2010).

other areas that are not included in this study, I use only the three areas mentioned above to illustrate the scope of the study (the way this area was chosen is explained in the next section).

If the relevant traits for the study of verbal morphology are considered, the typical characteristics of the languages spoken in Amazonian are ergatively-organized verb-alignment pattern, tendency to mark verbal categories through optional suffixes, tendency to cross-reference only one argument in the verb, complex verbal morphology and lack of agentive passive-constructions. The dominant way of marking verbal morphology in the Andean area is through suffixing and usually two core arguments are cross-referenced in the verb, and they are accusatively-organized. Both in the Andean area as well as in the Chaco there are lot of directional verbal affixes, and adpositions and adverbials can be attached to the verb root. In the Chaco area, active-stative verb alignment is the dominant pattern and only one core argument is marked in the verb. There is also a lack of morphological tense markers. (Campbell 2012b)

Map 1. Linguistic areas included in the study.

(Black = Andean linguistic area, Red = Amazonian linguistic area, Blue = the Chaco linguistic area)

Based on the theory presented in Section 2, the following research questions are formulated:

1) Is it possible to find more languages with special sociative causative function in the Western South America?
2) Which are the semantic nuances of the sociative causative, and do they reflect the semantic subcategories proposed in Shibatani & Pardeshi (2002)?
3) In what kind of contexts does a regular causative or an applicative get a sociative causative reading?
4) How does the sociative causative align in the causative continuum semantically and formally?

3 Methods and material

This section will explain how the languages analyzed in this study were chosen. In 3.1 the process of collecting the sample is explained and in 3.2 I will describe the data.

3.1 Collecting the sample

I decided to use two different sources to find languages with sociative causative function. First, I will include the languages Guillaume & Rose (2010) list in their article. Second, I will do my own sampling to get a more systematic picture of the distribution of the phenomenon. My sample will not include the language families from Guillaume & Rose's list to maximize the variation.

As discussed in Section 2.1, the implication of the typological approach for the methodology is important, but also both the intended extension of the present work and the objective of the study have an important consequence: they affect the sample size. Including only a few dozen languages allows a more fine-grained analysis of the data (Miestamo & Sinnemäki 2020: 655). The semantic analysis requires a close examination of each example of each language and is only possible when the number

of languages is reasonable. This has led to a decision to delimit *a priori* the studied area and not include the whole South American macro-area. The idea is to maximize the occurrences of the sociative causative in the sample. The assumption of the areal concentration of the studied phenomenon is based on the results in Guillaume & Rose (2010). They write that, "Our hypothesis of an areal feature is strengthened by the fact that within South America […] the languages with specific sociative causative markers tend to cluster in a region which could be defined as South-Western Amazonia" (Guillaume & Rose 2010: 391). It is relevant to note that the languages in Guillaume & Rose are not systematically collected but rather by using different questionaries and articles. This means that there are several languages from the same families. The intention in this thesis is to do a more systematical data collection. However, as it is done inside *a priori* chosen geographical area, the results will not allow to draw any conclusion about the broader areal distribution of the sociative causative function. The variety sampling method was used because there was no intention to do any statistical testing, but rather maximize the variation.

Map 2. *The areal distribution of the sociative causative in South America according to Guillaume & Rose (2010).*

The area was delimited the following way: first, the languages from all three categories in Guillaume & Rose (2010) were put in a map (see Map 2).[12] As there is a cluster of languages with sociative causative close to the Bolivian capital La Paz and it is also located in the geographical area that can be called South-Western Amazonia, it was chosen as the central point of the area. From there, a circle with a 2000-kilometer radius was drawn using a draw circle tool (see Map 3).[13] The 2000-kilometer limit is arbitrary, but the intention was to delimit the area in a way that the number of language families would be reasonable but to cover most of the area in which the sociative causative is attested in the sample of Guillaume & Rose (2010). The resulting area includes the states of Bolivia, Peru and Paraguay, Northern Argentina and Northern Chile, Southern Ecuador and Southern Colombia and Western Brazil (the capital of the state of Goiás, Goiânia, being the limit). This area covers the Western and Southern Amazonia, the Andes, the dry Chaco Basin area and the Atacama Desert (see Map 1 in the previous section).

Map 3. A priori *limited area for language sampling.*

It is important to note that despite of the geographic delimitation, the sample is intended to be genealogically balanced inside the chosen area. The sample was collected the following way. First, the data from all the South American languages

[12] The location for each language was taken from *Glottolog.*
[13] The tool can be found in https://www.mapdevelopers.com/draw-circle-tool.php

was brought from *WALS* to Excel. This data included wals code, glottocode, language name, geographical location, macroarea, genus and family for each language. Also, the extinct languages were included because the goal is the maximize the diversity inside the chosen area (Rijkhoff et al. 1993: 178). Then, the languages Guillaume & Rose (2010) list in their article were removed, as well as the language families they belong. For the rest of the language families, the geographical location was checked using *Glottolog*. If at least one member of the family was inside the area specified above, it was included for a further sampling. If not, the family was removed. Using this method, a total of 42 language families and isolates were included for further sampling. This was then complemented with the language families and isolates that were in *Glottolog* but not in *WALS.*[14] There were 15 isolates in *Glottolag* not present in *WALS*. This means that 57 language families and isolates were included from these two databases.

From these 57 families, one language was chosen per family. This was done aleatorily, using the RANDBETWEEN() function in Excel. If the randomly chosen language had no grammar or other relevant material (such as an article about the valency-changing operations) or this material was not available on-line or on request, another language from the family was chosen using the same procedure. If only one language of the family was inside the area and there was no source for it, the whole family was excluded from the sample because the approach is primarily areal and only secondarily genealogical. Every isolate was included because they form a family by themselves. Of the 57 families included in my final sample, 32 of them had grammar or other description available at least for one language. Consequently, the causative was analyzed in 32 languages. The list of these languages can be found in Appendix A. Similar way a description for all the languages in from Guillaume & Rose (2010) was searched. In Table 1, there is a summary of the availability of the sources for the language families in each sample. In case of Guillaume & Rose's sample, only the ones inside the delimited area are counted here, even though also the languages outside the area are included in the analysis. As a last note on the sampling, this study is on spoken languages, so no sign languages are included.

[14] As stated in the footnote (5), the naming of *Glottolog* is followed. Consequently, the names of the languages and the language families taken from *WALS* were changed according to the naming used in *Glottolog.* The differences between the genealogical classifications between these two databases were considered minor in this context and thus were ignored.

Table 1. *Availability of sources in the sampling process.*

	Spoken in the area according to *Glottolog*	Description available
N. of language families in my sample	57	32
N. of language families in Guillaume & Rose (2010)	10	10
In total	67	42

3.2 Data and glossing

I have gathered data primarily from different grammars. In some cases, the main source might be an article describing causative constructions in a language. However, if the grammar was available, it was also checked. In cases, in which there is a corpus included in the grammar, it may have been used to search for additional examples. Many of the analyzed languages only have one description available. These descriptions cover causatives, but some of them very scarcely. This means that sometimes I have to rely on one or two examples. Also, the terminology is not consistent. Only in few cases was the term *sociative causative* used. In conclusion, the final dataset consists of two different samples: my own sample and the list of languages in Guillaume & Rose (2010). However, two of the languages included in the latter sample were excluded as argued in Sections 2.2.6 and 2.2.7.

Many of the sources used to gather data are available in Spanish or in Portuguese. This means that the examples and the glosses are not in English. All translations are done by me, if not stated otherwise, and the translated parts are always indicated.

All glosses are original from each source indicated for the examples, and a list of them can be found in the beginning of this thesis. Wherever possible, they follow the standard abbreviations of the Leipzig glossing rules.

4 Results and analysis

In the first subsection, I will be focusing on the areal distribution of the sociative causative. It will be the only quantitative part of this thesis. After that, I will do a qualitative analysis on the language data. As already explained in Section 2.2.6, I follow the three-way classification used by Guillaume & Rose (2010) to structure the analysis. First, in Section 4.2, I will analyze the languages in which the sociative causative function is formally its own category, then the languages in which the regular causative marker can get a sociative reading (Section 4.3), and finally, in Section 4.4, I will analyze the languages in which an applicative marker can get a sociative causative meaning. The analysis will be morphological, syntactic and semantic.

4.1 Languages with the sociative causative function

As stated above, the language data is drawn from *WALS* and *Glottolog*. It is important to note, that as mentioned in Section 2.3, there is no clear consensus about the number of languages and their genealogical relations in South America. Thus, *Glottolog* has 716 language entries whereas in Campbell (2012a) there are 420 languages listed. Nevertheless, my sample represents a small portion of the linguistic diversity found in the continent as well as in the specific area chosen for this study.

Of the 32 languages that I analyzed, a sociative causative function was found in four languages. Two of them I analyzed as having a specific sociative causative marker and the two other categories I found one language for each. When Guillaume & Rose's list of languages and the languages I found were brought together, I ended up with the sample with the composition illustrated in Table 2. In Table 3, there are all the languages, the mechanism they use to express the sociative causative and the sample they come from. Note that Guillaume & Rose include Shipibo-Conibo in the first group, but I have analyzed it as belonging to the last group, as I will be arguing in Section 4.4.1. Shawi, Paumari and Paraguayan Guaraní are only counted once in Table 2 (Shawi as having a specific marker and Paraguayan Guaraní as having extended reading of the regular causative and Paumari as having extended reading of the applicative), even though they can be analyzed as belonging to two different

categories. In Appendix B, there are example of the sociative causative in all languages, as well as a semantic analysis of the causative constructions they have.

I have also marked how many languages are inside the limited area I used for sampling in Table 2. Naturally, all languages in my sample are located in the *a priori* defined area. Also, most of Guillaume & Rose's languages are spoken there, which is a consequence from the fact that the area was chosen according to the areal distribution of the languages in their article. Finally, the areal distribution of all 30 languages as well as the type of sociative causative they have are illustrated in Map 4.

Table 2. *Distribution of the languages in the two samples.*

	1. Specific marker	2. Extended reading of the regular causative	3. Applicative marker	In total	N. of languages inside the chosen area	N. of families with the sociative causative inside the chosen area
Guillaume & Rose	12	7	7	26	21	9
My sample	2	1	1	4	4	4
In total	14	8	8	30	25	13
Inside the chosen area	12	6	7	25		

Table 3. *Languages included in the analysis.*

Sample	Type of soc.caus	Language	Family
Guillaume & Rose	Specific Marker	(old) Mapudungun[15]	Araucanian
Guillaume & Rose	Specific Marker	Nomatsiguenga	Arawakan
Guillaume & Rose	Specific Marker	Cusco Quechua	Quechuan
Guillaume & Rose	Specific Marker	Cavineña	Pano-Tacanan
Guillaume & Rose	Specific Marker	Reyesano	Pano-Tacanan
Guillaume & Rose	Specific Marker	Teko	Tupian
Guillaume & Rose	Specific Marker	Kamayurá	Tupian
Guillaume & Rose	Specific Marker	Karo	Tupian
Guillaume & Rose	Specific Marker	Mundurukú	Tupian
Guillaume & Rose	Specific Marker	Tapieté	Tupian
Guillaume & Rose	Specific Marker	Tapirapé	Tupian
Guillaume & Rose	Specific Marker	Tupinambá	Tupian
My sample	Specific Marker	Maca	Matacoan
My sample	Specific Marker	Shawi	Cahuapan
Guillaume & Rose	Extension of regular causative	Trinitario-Javeriano-Loretano	Arawakan
Guillaume & Rose	Extension of regular causative	Asheninka Perené[16]	Arawakan
Guillaume & Rose	Extension of regular causative	Caquinte	Arawakan
Guillaume & Rose	Extension of regular causative	Matsés	Pano-Tacanan
Guillaume & Rose	Extension of regular causative	Galibi Carib	Cariban
Guillaume & Rose	Extension of regular causative	Macushi	Cariban
Guillaume & Rose	Extension of regular causative	Paraguayan Guaraní	Tupian
My sample	Extension of regular causative	Ticuna	Ticuna-Yuri
Guillaume & Rose	Applicative marker	Madi	Arawan
Guillaume & Rose	Applicative marker	Paumari	Arawan
Guillaume & Rose	Applicative marker	Yine	Arawakan
Guillaume & Rose	Applicative marker	Guahibo	Guahiboan
Guillaume & Rose	Applicative marker	Shipibo-Conibo	Pano-Tacanan
Guillaume & Rose	Applicative marker	Movima	Unclassified
Guillaume & Rose	Applicative marker	Yuracaré	Unclassified
My sample	Applicative marker	Toba	Guaicuruan

[15] Guillaume & Rose (2010) calls this Ancient Araucanian, but there is no directly corresponding language in *Glottolog.*

[16] Payne (2002) consideres Asheninka Perené as a dialect of a language called Asheninka, but *Glottolog* lists it as a language.

Map 4. *The areal distribution of the different types of sociative causative according to Guillaume & Rose (2010) and my sample.*

(Red=specific sociative causative marker, blue=semantic extension of the regular causative, green=semantic extension of the applicative)

4.2 Languages with specific sociative causative marker

In this section, I will present the data of languages in which the sociative causative is different from the regular causative marker. Guillaume & Rose (2010) list 15 languages in this group, from which two were left out as explained in Sections 2.2.6 and 2.2.7 and one is analyzed as belonging to the last category. Thus, the languages to be analyzed are: Old Mapudungun (Araucanian), Nomatsiguenga (Arawakan), Cavineña, Reyesano (Pano-Tacanan), Cusco Quechua (Quechuan), Teko, Kamayurá, Karo, Mundurukú, Tapieté, Tapirapé and Tupinambá (Tupian). In my sample, I

found 2 languages: Maca (Matacoan) and Shawi (Cahuapan). I also include Paraguayan Guaraní[17] (Tupian) here.

4.2.1 Form

Before going to the analysis, it is relevant to note that Guillaume & Rose excluded any periphrastic causatives from their sample as their intention was to focus on the morphological processes.[18] I considered all types of causatives in my sample but as it was expected (see Figure 2 in Section 2.2.5), the sociative causative is in both cases (Shawi and Maca) expressed with morphological causative. Affixing is used as the morphological process in all languages. In one instance, the Tapieté language, the sociative causative marker cannot appear alone. Instead, it needs to be accompanied by the regular causative marker. In other cases, the marker is in a paradigmatic relation with the regular causative markers.

In most languages, the syntax of the sociative causative followed the pattern of the regular morphological causative in the language, only different element being the sociative causative affix. An example is given from Cavineña in which the two contrasting causatives are *-mere* and *-kere*:

(8) Cavineña (Guillaume 2008: 297–301; Guillaume & Rose 2010: 388–389)

a. regular transitive

Ebakwa=tu	*ara-wa*	*misi*
child=3SG	eat-PERFV	tamale

'The child ate tamale'

b. regular causative

Epuna=ra=tu	*ara-mere-wa*	*misi*
woman=ERG=3SG	eat-CAUS-PERFV	tamale
tu-ja	*ebakwa*	
3SG-GEN	child	

'The woman fed the child with tamale'

[17] Guillaume & Rose (2010) list Paraguayan Guaraní in the second group, however I include it in both, following Estigarribia (2020), who claims that in Paraguayan Guaraní there is a specific marker for the sociative causative.

[18] However, I went through the periphrastic causatives in the languages listed in Guillaume & Rose (2010) and no periphrastic sociative causatives were found.

c. sociative causative (joint action)

E-ra=tu	*ara-**kere**-chine*	*torta*
1SG-ERG=3SG	eat-**SOC.CAUS**-REC.PST	cake
Don Francisco		
Mr. Francisco		

'I had / invited Mr. Francisco (to) eat a cake with me'

It can be seen here how the added agent (the new A) is in the ergative form in both of the causativized sentences (8b, c) (the woman, I) and the old A becomes a new O (the child, Mr. Francisco) and the old O also remains zero-marked core argument. It is also interesting to note that there is also the possibility to mark the old A as an oblique in the regular causative. In this case, the causation would be indirect and not direct, but this possibility does not exist for the sociative causation. Another example is given from Kamayurá:

(9) Kamayurá (Seki 2000: 291, original in Portuguese, translation by Guillaume & Rose 2010: 401)

a. intransitive

kunu'um-a	*o-jan*	*jawar-a*	*pojy-a*	*wi*
child-NUC	3-run	jaguar-NUC	danger-NUC	ABL

'The child ran away from the danger of the jaguar'

b. regular causative

kunu'um-a	*o-mo-jan*	*jawar-a*	*pojy-a*	*wi*
child-NUC	3-CAUS-run	jaguar-NUC	danger-NUC	ABL

'He made the child run away from the danger of the jaguar'

c. sociative causative

kunu'um-a	*w-**ero**-jan*	*jawar-a*	*pojy-a*
child-NUC	3-**COM.CAUS**-run	jaguar-NUC	danger-NUC
wi			
ABL			

'He made the child run away with him from the danger of the jaguar'

(9) illustrates how the sociative causative prefix transitivizes the clause syntactically the same way as the regular causative marker.

However, there is a language in Guillaume & Rose's (2010) sample in which the causative analysis is not that clear, but the process seems more like an applicativization. As explained in Section 2.2.7, the difference between the applicatives and causatives is not always straightforward and Mosetén, a language with similar behaviour was excluded. In the Tapirapé grammar the author had analyzed the relevant marker as applicative because it adds an object. Yet, she calls it comitative causative. I have decided to include Tapirapé in this section (see example 10), and not in Section 4.4 because the prefix *ero-* (here the allomorph *ra-*) does not have applicative function elsewhere in the language:

(10) Tapirapé (Praça 2007: 131, original glossing and translation in Portuguese)

a. *xãri'i-Ø* *a-par* *a-yj-ta*
Xãri'i-REFER 3.I-go.out 3.III-run-GER
'Xãri'i went out running'

b. *e-**ra**-par-o'o*
2SG.IMP-**COM.CAUS**-go.out-INTNS
'Go out fast with it (with the bike)'

In this example, the causative interpretation is not very clear. [19] However, examples like (11) show that if the marker has causative function somewhere else in the language, this previous kind of example can be considered causativization rather than applicativization.

[19] Compare to the regular causativization:

i. (Praça 2007: 128, original glossing and translation in Portuguese):

a. *kotãtã'i- Ø* *a-yj*
girl-REFER 3.I-run
'The girl ran'

b. *marare-Ø* *a-ma-yj* *kotãtãi- Ø*
cow-REFER 3.I-CAUS-run girl-REFER
'The cow made the girl run'

(11) Tapirapé (Guillaume & Rose 2010: 401, originally Praça, p.c.)

ã'é	*rãká*	***wer-ót***	*doze*
DC	REC.PST	**COM.CAUS**-come	twelve
tokonaré-Ø		*i-pyýk-ã*	
tucunaré.fish-ARG		NCNT-catch-GER	
xé=r-opý-Ø			
1=CNT-father-ARG			

'My father brought there twelve tucunaré fish that he caught'

All in all, formally the analyzed languages followed similar patterns: the sociative causative is marked through affixation and the constructions behave the same way as the regular causative constructions in each language.

4.2.2 Semantics

In all languages in the sample, except for two, the specific sociative causative marker can express the joint-action category proposed by Shibatani & Pardeshi (2002). This was either explicitly stated in the sources or there was an example that displayed it. In Reyesano (see example 12), Nomatsiguenga and Cusco Quechua all of the examples were the assistive type, but as there were only between one and three examples available per language, it is not possible to confirm that the joint-action interpretation is impossible.

(12) Reyesano (Guillaume & Rose 2010: 400)

*M-(a-)ade-**tsawa**(-a)*	*mua*	*eme*	*te*	
1SG-PST-walk-**SOC.CAUS**-PST	CONTR	1SG	BM	
iye	*ejanana*			
this	baby.child			

'I helped this baby child to walk (and now he can walk by himself)'

At the same time, there are a few languages in which the *only* possible interpretation is the joint-action: Teko, Tapieté and Tupinambá. Also, Kamayurá, Karo and Mundurukú have examples of only joint-action type of sociative causation, but again there is no proof that the assistive semantics are impossible. All of these are Tupian languages. In the Tupian linguistic tradition, what is called here a sociative causative

marker is called *comitative causative* (Guillaume & Rose 2010: 386), which indeed points to the direction of joint-action interpretation.

Tupian languages also show similar behavior as for the type of verbs that can take the sociative causative marker. All of them only accept sociative causation of intransitive bases, except Karo, where the marker is reported to appear with transitive bases, albeit rarely. This is something expected, because in several Tupian language in the sample there is a separate causative marker for intransitive and transitive bases of which the former is prefix and used to express direct causation and the latter a suffix and used to express indirect causation. This would also follow the pattern found for Marathi (see Section 2.2.6): if the causer is physically involved (i.e. the causation is direct), the intransitive bases are preferred. Additionally, all of the Tupian languages in the sample express the sociative causation through a prefix, which makes the sociative causative formally more similar to the direct causation marker. See Table 4 for a summary.

Table 4. *Summary of the languages with sociative causative as specific marker.*

Language	Semantic type of Sociative Causative	Additional semantic/syntactic information
Teko	ONLY joint-action	ONLY intransitive, movement and posture verbs, except sleep (which is semantically related to lie down).
Tapieté	ONLY Joint-action	Only found with run, walk.
Tupinambá	ONLY Joint-action	Intransitives only. Examples with run, dance, go out, be happy.
Kamayurá	Joint-action	ONLY intransitive movement and posture verbs. Animate causer.
Karo	Joint-action	Primarily with intransitive verbs. Both active and inactive predicates.
Mundurukú	Joint-action	Unproductive. Only with the following verbs: enter, take out, take down, take in, to rob (take out of the sight), take back, glean.
Tapirapé	Joint-action	Only active intransitives, only

		movement and posture verbs, except to be.
Paraguayan Guaraní	Joint-action	Not fully productive, example with walk. In some examples, no trace of soc.caus, rather conventionalized meaning.
Old Mapudungun	Joint-action, assistive	Examples with eat, die.
Cavineña	Joint-action, assistive	All kind of predicates allowed.
Shawi	Joint-action, assistive	All kind of predicates allowed.
Maca	Joint-action, assistive (only with posture verbs)	Only intransitives. Example with grow, lie on your back.
Nomatsiguenga	Assistive	Examples with cross river, fall. All kinds of predicates allowed except ditransitives.
Cusco Quechua	Assistive	Examples with go, dig up, work, fix, collect.
Reyesano	Assistive	Examples with walk, bathe.

None of the languages expresses the subcategory supervision using the specific causative marker. The supervision category is found in one of these languages, Shawi, in which it is expressed using the same prefix as the indirect causation and only the assistive and joint-action semantics can be expressed with the specific sociative causative marker.

In some languages, the sociative causative marker is completely unproductive or its use is strictly limited. In Mundurukú, only a small set of verbs are combined with it. In Kamayurá and Teko, it can combine only with posture or movement verbs. Now, if the causative continuum proposed by Shibatani & Pardeshi (2002) is considered in which the degree of productivity is the criterion for the formal continuum, it could be expected that in these cases, in which the productivity is either inexistent or limited, the causative event would be direct, this is, highly transitive. This does happen in Kamayurá and in Teko as the sociative causative expresses always direct causation,

that is, highly transitive events in which the causing and the caused events overlap. Teko only allows the joint-action type of sociative causation, which is the most direct one. See example (9) from Kamayurá above and example (13) from Teko below.

(13) Teko (Guillaume & Rose 2010: 388, originally from Rose: fieldnotes 2006)

*O-**er**-aho*	*o-**ero**-keɾ*
3.I-**SOC.CAUS**-go	3.I-**SOC.CAUS**-sleep

'(The husband) carries (his new wife, who had gotten drunk) and makes her sleep with him'

In both examples, there is a spatiotemporal overlap between the two subevents. Hence the causation is direct. This is less clear for the Kamayurá example, especially looking at the translation, but it is probable that the danger caused by the jaguar is such that the causing happens at the same time and both of the participants start running. In Mundurukú (see 14), the A (them) and the O (tapioca) are entering at the same time (tapioca cannot enter alone), this is, there is again a spatiotemporal overlap.

(14) Mundurukú (Gomes 2006: 82)

sariki	*Ø-ta*	*Ø-**duju**-õm.õm-Ø*
tapioca	RELN1-NFC	RELN1-**COM.CAUS**-enter.DUR-IPFV
i-ta-direm-ap		*ø-puxim*
RELN2-NFC-be.wet-NMLZ2		RELN1-against

'They are taking the tapioca into the house so that it doesn't get wet'

In Paraguayan Guaraní, also, the marker is unproductive. In some cases, it has even lost the sociative causative meaning. See (15a), in which the marker has clearly sociative causative meaning and (15b) in which the speaker is afraid, but the s/he is not making the child afraid, neither the child is necessarily afraid (Estigarribia 2020: 2019).

(15) Paraguayan Guaraní (Estigarribia 2020: 218–219)

a. *ja-**guero**-guata* *ñande-jagua*
1PL.INCL.ACT-**SOC.CAUS**-walk 1PL.INCL.INACT-dog
'We walk our dog' (and we ourselves walk together with it).

b. *che* *ro-**guero**-kyhyje* *che-memby*
I 1>2SG-**SOC.CAUS**-fear 1SG.INACT-child.of.woman
'I am afraid for you, my child.'

It is unclear though, with which verbs the sociative causative meaning is still possible.

Looking at Table 4, it might appear that there is a tendency for the sociative causative to appear with verbs expressing movement (enter, walk etc.), but this is only true for the Tupian languages, clearly creating a bias in the data. Also, the joint-action meaning seems to be typical for the Tupian languages.

4.3 Languages with sociative causative as semantic extension of regular causative

In this section I will go through the languages in which the regular causative (according to the narrow prototype by Kittilä 2009: 74) can also express the sociative causative function. Guillaume & Rose (2010) list in this group seven languages: Trinitario,[20] Asheninka Perené, Caquinte (Arawakan), Matsés (Pano-Tacanan), Galibi Carib, Macushi (Carib) and Paraguayan Guaraní (Tupian). In my sample I found two languages, Ticuna (isolate) and Shawi (Cahuapan). I will also propose that Paumari has a construction that fits in this group as well, despite also fitting to the last group.

4.3.1 Form

When it comes to the form, the interesting point would be whether the morphological or periphrastic causative can get the sociative semantics, especially in the cases in which both strategies are used to form causatives in a language. However, as earlier stated, Guillaume & Rose (2010) only took into account the morphological causatives. The only languages in my sample suitable in this category, Ticuna and Shawi, it is the morphological causative that can get the sociative meaning. This kind of bias in the data does not allow to draw any conclusions of the form.

[20] *Glottolog* uses the name Trinitario-Javeriano-Loretano, but I will be using the shorter name for convenience.

When it comes to the syntax, the relevant question here is the marking of the arguments. Even though the marker is the same as when expressing the regular causative, it would have been possible to expect some kind of variation in the participant marking. However, in none of the languages analyzed were there any morphosyntactic criteria that would have permitted distinguishing the sociative causatives from the regular causatives (like in Japanese, see Section 2.2.6). However, there are some transitivity restrictions. For example, in Trinitario, Galibi Carib, Macushi and Paraguayan Guaraní the sociative reading is possible only with the marker that is used with intransitive bases. According to Mihas (2015: 286),[21] the sociative meaning arises usually with ambitransitive verbs in the case of Asheninka Perené.

4.3.2 Semantics

The first aspect analyzed was the exact semantics of the sociative causative reading. Again, all but one language had clear examples of the joint-action type semantics. Matsés was the only language that had only had examples of the assistive semantics (see interpretations 16a and 16b). In none of the possible interpretations the person who feeds eat themselves. For two languages, Galibi Carib (17) and Macushi (18), there was only one example for each language, Galibi Carib seeming to have both assistive and joint-action semantics and the Macushi example at least joint-action.

(16) Matsés (Fleck 2003: 887)

aton mado-mpi-Ø *pe-**me**-o-sh*

3GEN son-DIM-ABS eat-**CAUS**-PST-3

'S/he fed his/her little son.'

a. by holding his mouth open
b. by feeding him with a spoon
c. by telling him to eat
d. by handing him a plate of food

[21] Mihas calls the marker applicative, but does not specify why. She also lists its two functions to be direct causation and sociative causation. Due to this, I agree with Guillaume & Rose and consider the suffix *-aka* as a causative and not an applicative.

(17) Galibi Carib (Hoff 1968: 127)
*uwa:**nopï***
'to make dance' (said of a partner whom one holds and teaches the steps)

(18) Macushi (Abbott 1991: 125)
*a-manun-**pa-**u-ya*
2-dance-**CAUS**-1-ERG
'I dance (with) you' (i.e., cause you to dance)

If there were not many formal restrictions to the contexts in which the sentence can get a sociative reading, the semantics of the base verb do play a role in some cases. In Paraguayan Guaraní a causative gets a sociative reading when active intransitives are causativized (Velázquez-Castillo 2002: 521). As in other Tupian languages included in the analysis, Paraguayan Guaraní has two causative markers (besides the sociative causative), one for intransitive verbs, which is a prefix, and one for transitive bases, which is a suffix. Only the marker for intransitive verbs can get the sociative reading, and only when combined with active predicates. Velázquez-Castillo (2002: 521) explains this the following way: the only participant of an active intransitive predicate is agentive, so when it's moved to the O position it does not lose all of the agency, even though it might be reduced radically. This allows the interpretation in which both participants have agency, and thus either they are co-operating (agentive causee) or the causee is being helped (semi-agentive causee). This is similar to Marathi, as explained in Section 2.2.6. In Ticuna, the sociative reading is only possible when the event includes motion. However, it is context dependent whether the causer also moves (sociative causative) or only the causee (regular causative) (Bertet 2020: 376). This is interesting, because as it will be seen in the next section, the applicative markers have a tendency get to a sociative causative reading with verbs that express motion (already noted by Guillaume & Rose 2010). In the case of Trinitario, Wise (1990: 98) gives an example with the verb *jump* while Guillaume & Rose (2010: 392) give an example with the verb *to go*, again two active intransitive predicates indicating motion. See Table 5 for a summary of the contexts in which the sociative causative reading is possible.

Table 5. *Summary of the languages that have sociative causative as extension of regular causative.*

Language	Semantic type of sociative causative	Context in which the sociative causative reading is possible.
Asheninka Perené	Joint-action	Tends to get the sociative interpretation with ambitransitive verbs. Some lexical restrictions. Some lexicalized use. Examples with: fish.with.net, climb, enter, cut, do, happen, drink.
Caquinte	Joint-action	Both transitive and intransitive predicates. Example with enter.
Paumari	Joint-action	When the event includes motion.
Galibi Carib	Joint-action, assistive	Only with intransitive predicates. Example with dance.
Macushi	Joint-action, assistive	Only with intransitive predicates. Example with dance.
Paraguayan Guaraní	Joint-action, assistive	Only active intransitives. Examples with run, walk, go out.
Ticuna	Joint-action, assistive	When the event includes motion. Example with sleep.
Trinitario	Joint-action, assistive	Only with intransitive predicates. Examples with go, jump.
Matsés	Assistive	Example with eat.
Shawi	Supervision	Example with eat.

In Galibi Carib and Macushi, only the marker for intransitive causative can get the sociative interpretation. Also, interestingly, both languages have their only example with the verb *dance* (see examples 17 and 18). This might be just a coincidence, but since they are both Cariban languages, it is possible that the sociative causative reading is limited to a few verbs in these languages. And again, it is a verb that has semantics of physical activity/movement.

According to Payne (2002: 490), in Asheninka Perené the sociative interpretation is possible interpretation with nearly all verbs of physical activity and in natural texts

much more common reading. See (19) below, in which interpretation (a) is sociative and interpretation (b) is regular causative:

(19) Asheninka Perené (Payne 2002: 489–490)
*i-chek-**aka**-ak-e-na-ro*
3M-cut-**CAUS**-PERFV-MODE-1-3F
'He made me cut it'
a. "He was accompanying me, both of us cutting."
b. "He made me cut it, and he didn't participate."

When analyzing the semantics, two languages stand out. In the cases of Caquinte and Shawi, it is not the regular causative that can get the sociative reading, but indirect causative. Despite this, I decided to include them in the analysis to show that it is not always the direct causative that can have the sociative reading. Now, if the causative followed the causative continuum of Shibatani & Pardeshi (2002), it would be expected to see the semantics to be closer to the supervision type. However, this is not the case with Caquinte, at least according to the only example given in Peterson (2007: 65):[22]

(20) Caquinte (Peterson 2007: 65, originally from Swift 1988: 72–73)
a. sociative causative
*i-ŋ-kih-**aka**-apoh-ak-e-ri*
3M-FUT-enter-**COM.APPL**-ALL-PERFV-FUT-3M
'He will make him enter with him.
b. indirect causative
*y-amen-**aka**-a-ɣe-k-e-na-ro* *maasano*
3M-see-**COM.APPL**-EP-DSTR-PROG-N.FUT-1-3F all
'He made me watch everything.'

In (20a) the entering happens at the same time and there is a spatiotemporal overlap. If the sentence (20b), which is an example of the indirect causation, is looked at, the difference is clear: in sentence (20a) the causation is more direct than in (20b). Of

[22] This example is from a book called *Applicative constructions* (Peterson 2007). However, as can be seen in (20b), the marker works as an indirect causative marker (referred as *mediato* by Swift (1988: 72)) and thus I analyze it as a case of semantic extension of indirect causative and not as applicative marker.

course, in (20b) there might be supervision, which is not explicitly stated in the translation.

Shawi is the only language among the 30 languages analyzed that had in its description explicitly stated that it has a sociative causative with the supervision semantics and the sociative reading with supervision semantics is only possible when the morphological indirect causative is used. See (21):

(21) Shawi (Rojas Berscia 2019: 103)

Wa'washa	*ni'ni'*	***a**-ka'-ra-r-in-Ø*
child	dog	**CAUS**-eat-PROG-N.FUT-3MIN.A-3MIN.O

'The child is making the dog eat/is feeding the dog (while watching him eat).'

As I showed in the previous section, Shawi also has a specific marker for the sociative causative, but it only has the assistive and joint-action semantics. Thus, its causatives behave exactly as the causative continuum predicts.

In Paumari, there is a causative suffix *ni-* that, together with a verb of motion, expresses an event in which both the subject and the object move. See the following example:

(22) Paumari (Chapman & Derbyshire 1991: 185)

*bi-a-**ni**-kha-'i-hi*	*ida*	*hado*
3SG-away-**CAUS**-MOT-ASP-THEME	DEM.F	knife

'He went to fetch the knife.' (i.e. He went and caused the knife to come.')

This can be considered a sociative causative because there is a caused event in which the causer is participating.

4.4 Languages with sociative causative as semantic extension of applicative

Guillaume & Rose (2010) list in this group six languages: Madi, Paumari (Arawan), Yine (Arawakan), Guahibo (Guahiboan), Movima (isolate), Yuracaré (isolate). Also,

Shipibo-Conibo (Pano-Tacanan) belongs to this group according to my analysis. In my sample, I found one language: Toba (Guaicuruan).

4.4.1 Form

In the case of every language analyzed, a morphological marker is used to express sociative causative function. This is for the same reason as in the previous sections, Guillaume & Rose (2010) only included morphological causatives, and the only example I found was also morphological. As already discussed in Section 2.2.7, these morphological markers are alike with the applicative markers (the relation can be an instance of homonymy or of polysemy (Zúñiga & Kittilä 2019: 234)).

As explained in Section 2.2.7, differentiating between applicatives and causatives only using syntactic criteria might be difficult. For this reason, the data is analyzed in further detail from the semantic point of view in the following section. However, to illustrate the syntactic behavior the causative/applicative marker see the following example:

(23) Yine (Hanson 2010: 276)
n1mapokanyi
n-**him**-hapoka-n1-yi
1SG-**ASSOC**-arrive-ANTIC-2SG
'You will arrive with me; I will make you arrive with me.'

Hanson explains that in (23) either the A or the O can be interpreted as the *associate,* hence the two possible readings. If the sentence is approached with the assumption that the added argument is the new A (*I*), the reading is causative, and thus can be analyzed as an instance of sociative causative.

In Toba, the syntactic subject is actually the causee and the added argument, syntactic object, is the causer (Censabella 2006: 10). See (24):

(24) Toba (Censabella 2006: 10, original in Spanish)
a. intransitive
ramaΩe *r-a÷ak*
3 3-embarrased
'He is embarrased'

b. sociative causative

ramaΩe	*r-a÷ag-**elek***	*so*	*Juan*
3	3-embarrased.of-**APPL**	DAL	Juan

'He is feeling embarrassed in front of Juan'/ 'He is embarrassed of Juan.'

(24a) is the underlying intransitive sentence and the (24b) is the resulting sentence. So again, even though the translation does not indicate it, with the *a priori* assumption that this is a causative construction and knowing that the applied object is actually the causer, it is possible to understand the event as follows: *Juan makes him to feel embarrassed with his (Juan's) actions.* This sort of reading would allow us to interpret it as sociative causative. Censabella (2006: 11) also notes that there is a difference in diathesis compared to indirect causation. The causative formed through applicative has the causee as a subject whereas the causative formed through causative affix has the causer as a subject.

In cases where the other argument is inanimate, it is hard to imagine a possibility in which the inanimate participant was the S of the underlying clause. The examples, such as the Toba one, can explain why some constructions are analyzed as causatives by the authors of the grammars even though they seem applicatives at first glance. This also goes the other way around, Guillaume & Rose (2010: 394) note that many authors call applicatives such constructions that can be analyzed as an instance of sociative causative.

Another interesting example is Shipibo-Conibo. Valenzuela (2010: 127) writes about Shipibo-Conibo: "…the addition of the associative -ki(i)n to a base verb has a valency-increasing effect. Hence, when attached to an intransitive stem, this suffix adds a second argument to the clause, generally interpreted as an "accompanied" or "helped" participant". This can be seen in (25).

(25) Shipibo-Conibo (Valenzuela 2010: 127)

a. *Jawen baba-ra yaká-ke/*jawen baba-n-ra.*
POSS3 granddaughter:ABS-EV sit-COMPL/POSS3 gd.-ERG-EV
'Her granddaughter is sitting'.

b. *Jawen* *baba-n-ra* *[jawen* *yoxan*
POSS3 granddaughter-ERG-EV POSS3 old.woman:ABS
pashkin-ke-tian] *yaká-**kin**-ke*
be.tired-P-DS sit-**ASSOC**-COMPL
'Since her grandmother was tired, the granddaughter sits with her'.

Even though this example points to the applicative diathesis (the S of the first sentence is the A of the second sentence, and it is the direct object that is added), it is not that simple. In (26), this kind of interpretation does not work since the translation in which the participant in the ergative case is actually not the one helping but the one that is making the speaker to help (as indicated in the text in parenthesis).

(26) Shipibo-Conibo (Valenzuela 2010: 130)
E-a-ra *Rawa-n* *tee-**kin**-ai* *jawen*
1-ABS-EV Rawa-ERG work-**ASSOC**-INC POSS3
wai-n.
chacra-LOC
*'Rawa helps me work . . .'
'I help Rawa work on his chacra' (Rawa indirectly obliges me to do it).

Valenzuela explains this as being an interpretation particular to some verbs, with 'to work' being one of them. This is a clear proof that the sociative causative and applicative are in close relation and, in some cases, hardly distinguishable. More evidence for this is the following sentence in (27) that can take three different interpretations:

(27) Shipibo-Conibo (Valenzuela 2002: 436)
Yoxaman-ra *bake* *bachi-n*
old.woman:ERG-EV child:ABS mosquito.net-ALL
*jiki-**kin**-ke*
enter-**ASSOC**-COMPL
'The old woman made the child enter the mosquito net (by entering herself)./ The old woman accompanied the child into the mosquito net./ The old woman helped the child enter the mosquito net.'

This example shows that the marker can have either sociative causative meaning, comitative meaning or assistive meaning. Since it is not possible to know what the underlying clause is, either the new A (old woman) or the new O (the child) could be the added argument. As example (25) showed, this particular marker also has an applicative function and this is why Shipibo-Conibo is included in this category, rather than in the first one.

4.4.2 Semantics

This category is consistent with the other two categories in the semantics of the sociative causative. Joint-action is the most common type of sociative causative among the languages studied. But as could be seen in example (24) from Toba, the indirect causation is also possible. There is no temporal overlap between the two events (Juan actions have probably happened before someone has felt embarrassed of him).

Guillaume & Rose (2010: 393) note that in the languages they studied the sociative causative that was marked with applicative markers was usually found with verbs of action and verbs of motion, and looking at the data in Table 6, this is obvious. In addition, I wanted to see whether the active/inactive split is relevant for the languages sampled (the same way it is for the Australian languages). The summary of the types of verbs forming each construction can be found in Table 6 as well.

Table 6. *Semantics of the intransitive base predicate in cases of sociative causative-applicative syncretism and summary of the types of sociative causative.*

Language	Type of sociative causative	Intransitives forming sociative causative	Intransitives forming applicative
Movima	ONLY joint-action	motion verbs[23]	non-motion verbs
Yuracaré	ONLY joint-action	go, go in (inanimate O), go up, arrive	leave, jump, cross, arrive, enter (animate O)

[23] When the source has not specifically stated with what kind of verbs each reading is possible, I have listed all the verbs I could find in the examples.

Paumari	Joint-action	go away	travel, cry
Yine	Joint-action	arrive (inanimate O), return	laugh, eat, arrive (animate O), sleep
Guahibo	Joint-action	go back	write
Shipibo-Conibo	Joint-action, assistive	enter, work, fall	enter, sit, exist, be happy about
Toba	Supervision	be embarrassed, be scared	climb

As the table shows, the causatives are formed mainly with motion verbs or verbs of physical activity, whereas the applicatives show more variation. In some cases, the interpretation depends on the context. The active/inactive split seems to be relevant only in the case of Toba. The fact that the split is not that relevant is actually expected. As the Marathi example showed, the active predicates are more likely to get the sociative interpretation as there are by definition two active participants in the event. However, in two cases the animacy of the causee seem to affect the interpretation. In Yuracaré not all verbs can take the applicative, only intransitive roots with agentive subject and there must be a change of location (Van Gijn 2006: 150; Gipper 2022: 111). However, it seems that there is not always causative semantics, but the interpretation depends on the type of O. (28) illustrates this:

(28) Yuracaré (van Gijn 2006: 149, 180)
Causative reading: *yupa* 'go in (sg)' > *ka-yupa* 'take something inside'
Applicative reading: *yupa* 'he enters'> *ka-yupa* 'he enters with someone'

However:

(29) Yuracaré (van Gijn 2006: 149, 180)
Causative reading: *wita* 'arrive (sg)' >*ka-wita* 'bring along (sg)
Applicative reading: *wita* 'he arrives' *ka-wita* 'he arrives with something'

In (29) there is no difference in the animacy of the O, so it remains unclear if these two sentences are actually differentiated by the speakers.

The case of Madi is more complicated. Only one example was available, and according to Guillaume & Rose (2010: 394) both causative and applicative interpretations are possible:

(30) Madi (Dixon 2004: 37)

Kojari	*to-**wa**-ki-joma-ma-hare-ka*
paddle	AWAY-**APPL**-in.motion-THROUGH.GAP-BACK-PST-DECL

'(The child) took the paddle back through the door'

So, this kind of sentences work the same way as in Shipibo-Conibo, it can be understood as an applicative conceptualized as following: *the child went through the door bringing the paddle with her*. However, as the child is animate and more volitional than the paddle, a reanalysis might happen (Guillaume & Rose 2010: 393–394). The resulting interpretation would be *the child made the paddle go through the door* (by going through it herself). So, this example points again to the direction that the animacy of the other participant might be relevant in the interpretation.

In Movima, the sociative causative reading is only possible with verbs of motion (Haude 2022: 19). Compare the two examples:

(31) Movima (Haude 2022: 15, 20)

a.

u'ko,	*us*	*majni=Ø,*		*joy-cheł--u'*
PRO.3M	ART.M	my_offspring=1SG		go-R/R-3M
nosdé	*n-us*	*a:kay-a=u;*		
over_there	OBL-ART.M	older_sibling-LV=3M		
*joy-a-**ɬe**=u*		*us*	*a:na=u*	
go-DR-**CO**=3M		ART.M	younger_sibling=3M	

'He, my son, went over there to his older brother's; he took his younger brother with him.'

b.

che	*jayna*	*chot*	*kamay-**ɬe**:-na=Ø*	
and	DSC	HAB	yell-**CO**-DR=1SG	
is	*so:t-e*		*di'*	*dichi:ye*
ART.PL	other-CLF.PERSON		REL	child

'And then I always yelled at the other children.'

In (31a) there is the verb *to go* and in the (31b) *to yell.* The first sentence can be interpreted as sociative causation, but the second one is rather an applicative that is used to express whom the action is for.

Finally, the types of applicatives that presented syncretism with the sociative causative markers are mostly comitative or instrumental applicatives. Only Toba and Madi show different patterns. In Toba the directional and locative applicatives are the ones used to express sociative causation and in Madi the relevant applicative marker can have up to eight different meanings, one of them being 'accompanied by'. The Toba type of pattern seems to be exceptional cross-linguistically, as Bahrt (2020) only finds two languages with causative-locative syncretism.

In this section, I analyzed the sample languages both formally and functionally. The languages showed different behavior depending on the category they belong but the was also variation inside each group. In the following section, I will discuss the results of the analysis in more detail.

5 Discussion

In this section, I will discuss the results of the analysis in the light of the theory presented in Section 2. First, in Section 5.1, I will go through the areal distribution of the phenomenon. After that, the results of the formal and semantic analysis will be discussed (Sections 5.2 and 5.3). Finally, Section 5.4 will be focusing on the causative continuum and the way sociative causative relates to it. Also, some functional explanations will be proposed.

5.1 Areal distribution

This study was based on the presupposition that when comparing the linguistic macro-areas (as defined in Dryer 1989), there are an exceptionally large number of languages in South America, and especially in the western parts of it, that express the sociative causation with a specific marker, with the regular causative or with the applicative marker. Thus, the intention was to see whether I could find more language families in which this phenomenon is attested. The idea was to grasp as

much variation as possible. For this reason, variety sampling was used, and the sample was genealogically balanced. There are in total 67 language families inside the limited area, including the language families in Guillaume & Rose (2010). A good description was available at least for one language in 42 families. From these families, a specific sociative causative function was found in 13 language families. To answer my first research question, yes, there were more language families with specific sociative causative function in this area, compared to the results of Guillaume & Rose (2010). This also reinforces Guillaume & Rose's (2010) proposition of the sociative causative as an areal feature in South America. However, this should be confirmed with comparative data from other macro-areas. Also, as the area chosen here was very specific, a balanced sample should be collected from the whole macro-area to see if the phenomenon is an areal feature for the whole continent or only for the three linguistic areas studied here: the Andes, the Amazonia and the Chaco.

Five of the Guillaume & Rose (2010) languages were outside of the chosen area (Teko, Galibi Carib, Macushi, Guahibo, Tupinambá), which means that it is also found elsewhere in the continent. However, two of these are Tupian languages and Galibi Carib and Macushi, both Cariban languages, belong to the second group, which is, in any case, probably underrepresented due to the fact that it might not be mentioned in the grammars although the sociative causative was a possible reading of the regular causative. The last one, Guahibo, is part of the third group. This means that apart from the Tupian languages, for which the specific sociative causative marker is clearly a genealogical trait, there are no specific sociative causative markers outside the chosen area according to the study of Guillaume & Rose (2010) (see Map 4).

It would be interesting to sample on a larger scale when doing research on the sociative causative particularly because if there were not more languages outside the area with a specific sociative causative marker, it would point towards a high intensity contact between the languages that do have it. This is because when a certain marked feature is common in closely located languages, it is likely to be due to the contact and because the grammatical items are less likely to transfer than lexical items (Muysken 2008: 6, 8).

As the analysis of the second and the third group has shown, the different kinds of constructions are not necessarily labeled as sociative causatives. If this is as common in the broader picture as in the sample analyzed here, it might mean that the sociative causative semantics are even more common than what the data gathering shows. As it is not usually treated as a separate category in the typological literature, the authors of the grammars might not explicitly state it and only the most prototypical causatives are mentioned. Besides that, the sources of many of the languages analyzed had a very limited description of the sociative causative marker, and sometimes the regular causative constructions were not covered properly. Most of the time, there was no mention of the (in)directness of the different causatives, and this is something that cannot be deduced (always) from the translations. Also, it was not always completely clear how productive the constructions are. This makes it hard to do any kind of generalization as the same information is not available for all of the languages. The lack of data is a common problem with South American languages, as stated in Section 2.3, but the following discussion is based on the data that was available.

5.2 Form of the sociative causative

Three formally different types of sociative causative were analyzed in the study. All of them, however, were expressed with categories formed by affixes. As mentioned several times, this might be due to the bias that the Guillaume & Rose (2010) dataset has. Nevertheless, this would be the expected result even without the bias, as languages in the Western South America have tendency to have rich verbal morphology and to be agglutinative.

The sociative causative function is fully productive with no syntactic (or semantic, see the next section) restrictions in only a few languages. There are also some languages in which the sociative causative is unproductive. Many of the languages allow sociative causation only for one type of verb or even for a closed set of verbs. The strongest tendency throughout the sample is that the sociative causative reading/specific marker is only allowed with intransitive verbs. This is expected because according to Shibatani & Pardeshi (2002: 99), “there is thus a tendency to

avoid sociative expressions involving transitive bases, indicating a preference for analytic causatives when two agents are involved and when the causee agent's action is clearly separable from the causers". The transitivity restrictions are thus related both to the syntactic and semantic transitivity.

As for the first group, there was no language that would have marked the arguments a different way with the specific sociative causative marker (compared to the process or regular causation). This was somehow expected because it is more economic for a language to express different semantics using one different element opposed to several different elements. Surprising, however, was the fact that there was no difference in the argument marking between the two causatives in the second group either. I expected similar behavior as in Japanese, in which the arguments need to be marked differently to get the sociative causative reading, compared to the regular causation. However, this was not the case, and in the sample languages the sociative causative reading seemed to the strongly related to the semantics of the base verb, rather than the syntactic marking of the arguments.

In the last group, the syntactic behavior of the arguments would be expected to be relevant for the reading of the constructions featuring causative-applicative syncretism as the causative and the applicative are inherently different in which argument they add to the underlying clause. However, examples (23) from Yine and (27) from Shipibo-Conibo show that the exact same sentence can be interpreted as sociative causative or some kind assistive/comitative applicative. Again, there is no grammatical marking that would differentiate these two readings.

Another example from the last group is Toba, which shows interesting syntactic behavior in the sense that the causer is not the syntactic subject of the clause, but the causee is. This is not prototypical according to the broad prototype, that requires that the added A is the subject of the causativized clause. Nevertheless, this is not exceptional in the world's languages. Zúñiga & Kittilä (2019: 16, footnote) call this *objective causative.* The objective causative might explain how some verbs can be conceptualized as applicatives or causatives. Shibatani & Pardeshi (2002: 119) explain that with the verbs *laugh* and *cry*, there might be "realignment of the causer and the causee vis-à-vis grammatical relations". This means that *he causes me to laugh* would be reanalyzed as *I laugh at him.* This is exactly what I postulated for the

Toba example in Section 4.4.1 with the expression *to be embarrassed* but in the other direction. Regardless of the direction of the reanalysis, there is clearly a semantic connection between these two ways of conceptualizing the event. Apart from these types of verbs that normally add an object, a similar interpretation goes for the verbs of movement. Shibatani & Pardeshi (2002: 118) propose that causative forms such *I make him walk by walking with him* have led to the applicative reading, *I walk with him.* This is the opposite of what Guillaume & Rose (2010) propose for Madi, in which *the child went through the door with the paddle* was reanalyzed as *the child took the paddle through the door.* My intention is not to answer the question about the direction of the change and neither how much these two conceptualizations actually differ in the speakers' minds. To answer the question, syntactic tests and study of the diachrony of these constructions in each language are required. In any case, it is clear that these interpretations are related to the semantics of the base verb and not the grammatical marking. Consequently, it is possible to cautiously answer the second research question: the syntactic transitivity is relevant to some level but the sociative causative reading depends mostly on the semantics of the base verb. This will be discussed more in the next section.

5.3 Semantics of the sociative causative

The languages in the sample tend to express the joint-action-type of sociative causation and only secondarily the assistive-type. This might be explained by the simple logic that to help someone, people are required to be accompanied by them, but to be accompanied by someone does not automatically imply helping. Having no example of a language that can express the supervision type of semantics with the specific sociative causative marker might indicate that the sociative causation is closer to the direct than the indirect end of the continuum. This would also be defended by the fact that in many cases the marker is not fully productive, and the limited productivity correlates with the semantic directness (see below). It is possible that the supervision type might not be that represented because in cases where there are two agent-like participants, there are two separate events and analytic causatives are preferred. This leads to the question whether this category is actually relevant when analyzing the semantics of the sociative causative. It definitely is part of the

causative semantics in some languages but it does not seem to be included in the semantics of the sociative causative in those languages that mark it differently from the regular causative. Nevertheless, it is important to note that the supervision is something that might not be explicitly stated in the translations because supervising is a stative action that is not likely to change the course of an event. In lesser studied languages, this might have gone unnoticed if the informants were not specifically asked about it.

Toba seems to behave differently also when it comes to the semantics of the sociative causative. The example (24) is not joint-action neither assistive, there is no spatiotemporal overlap as the feeling of embarrassment has to come only after someone acts. The other translation *I feel embarrassed in front of Juan*, however, indicates that there is some kind of situation of supervision. In Toba, the sociative causative would be more indirect one than in the majority of the sample languages.

To answer my second research question – Which are the semantic nuances of the sociative causative, and do they reflect the semantic subcategories proposed in Shibatani & Pardeshi (2002)? – the joint-action and assistive categories seem to be relevant for the analysis of the sociative causative semantics. Both of these semantics are present through the sample. The joint-action type seems to dominate in the first group, but, again, it is important to keep in mind the bias the number of Tupian languages cause. The supervision category seems to be more rare in all of the categories and, interestingly enough, no language with specific sociative causative marker expressed this kind of semantics. This means that there is no reason to consider supervision as a subcategory of the sociative causative, but rather a reading of other categories that are semantically close to sociative causation. This kind of analysis would mean that Toba actually does not have sociative causative.

As the discussion in the previous section showed, the semantics of the base verb contribute to the interpretation of the sociative causative. Guillaume & Rose (2010) already noted that in the third group the sociative causative reading was possible primarily with the verbs of physical activity and especially with the motion verbs. According to my data, this is also the case for the languages in the second group. It seems to hold for the first group as well, but as noted in the analysis, this is true only for the Tupian languages. Thus, in this case, it might be due to the genealogical

relation rather than something inherent for sociative causation. The strong tendency of the sociative causative reading to be possible with different motion verbs could be explained in some cases with the Caused Accompanied Motion expressions (Margetts, Riesberg & Helwigg 2022), this is, to what in English is conceptualized in the lexemes *bring* and *take.* For example, in Yuracaré (Gipper 2022: 111) and Movima (Haude 2022), the most natural way of expressing the semantics of *bring* and *take* is with a comitative applicative together with a motion verb. Semantically, these expressions are equivalent to the sociative causative.

The analysis also showed that there are languages in the last group in which the animacy of the O is relevant (Yine, Madi and Yuracaré). This seems to point to the fact that, in some cases, even though the joint-action type of sociative causative requires two agent-like participants, there needs to be asymmetry between A and O in order for the reading to be causative. This means that A needs to be more agentive than O, even though they are conducting the action together.

Going back to the motion-related causation in Yuracaré and Movima, the case of Ticuna seems similar initially, even though it is from the second category and not from the third one. This is because the sociative causative reading is possible only with events that include motion (the verb phrase has to have a morpheme that codes associated motion) (Bertet 2020: 376). However, the logic in which it is formed is very different. Also, interestingly, even though these two elements (causative morpheme and associated motion morpheme) are present, the interpretation does not necessarily mean that the causer is participating in the movement, but this has to be deduced from the context. The difference between the two ways of forming the sociative causative semantics can be seen in Figure 5.

Yuracaré and Movima: Motion verb + comitative applicative	= soc.caus
Ticuna: Verb + associated motion + causative	= soc.caus/ regular causative

Figure 5. *Sociative causative in Yuracaré, Movima and Ticuna.*

These three languages show that the sociative causative is expressed in different ways in the case of the second and third group. Moreover, it shows how the semantically based definitions that do not take a stand on the grammatical role of the

added argument, or the way the verbal phrase is formed, can reveal great formal cross-linguistic variation.

Now, whether the sociative causative should be considered a “separate category” or a reading of a regular causative is a tricky question. The languages in which it has a specific marker that has clearly causative semantics, but it contrasts with the regular causative, it is easy to argue that it is a separate category as it is formally and semantically distinct from the regular causative. In the case of the second group, it would be logical to treat the sociative reading as one reading of the causative, because the causatives in some languages can have a great variety of meanings from the nine parameters of Dixon (2000) and the sociative is just one of them. Especially, because my analysis on the sample languages shows that the two readings do not differentiate formally. In the last group the limits between the causative and applicative functions are very fuzzy and some cases permit two different analyses. As the Yuracaré, Movima and Ticuna examples show, the sociative causative can be approached from very diverse perspectives and, in the end, the way sociative causative is understood depends on the semantic definition that is used, this is, how the comparative concept is formulated.

It is clear throughout the analysis that in most of the languages analyzed the sociative causative function is semantically restricted to certain contexts and to certain verbs. Thus, it has less behavioral potential than the regular causative and it can be considered marked vis-à-vis regular causative. This was expected, because as explained through Section 2.2.2, sociative causative diverges from the narrow causative prototype and non-prototypical constructions tend to have less behavioral potential and to be more marked.

To answer the third research question, the contexts in which the applicative markers and the regular causatives get sociative causative readings depend on the semantics of base verb i.e., sociative causative is lexically restricted. Intransitive verbs of motion are most likely to get a sociative causative reading. Also, as the examples from Shipibo-Conibo and Ticuna show, the interpretation is sometimes purely context-dependent, and thus the pragmatic factors play a role as well.

5.4 Causative continuum

The causative continuum can refer either to the semantic or the formal continuum or the correlation between these two. As explained in Section 2.2.5, the form-meaning correlation predicts that direct causation is expressed through lexical and unproductive morphological processes whereas indirect causatives are more likely to be periphrastic and productive. As the sociative causative is in the middle of the semantic continuum, it would be expected that it is expressed through morphological means (see Figure 2 in Section 2.2.5). The dataset was biased towards the morphological causatives, which means that it is not really possible to draw conclusions of the fact that every language, in all of the three categories, expressed sociative causation by morphological means. However, the level of productivity can be analyzed. As Shibatani & Pardeshi (2002) propose that the more productive the causative is, the more indirect the causation, and *vice versa*. In the sample languages, there are cases in which the sociative causative is relatively unproductive, and sometimes it has led to some degree of lexicalization. However, in all cases the marker is still synchronically recognizable. This was already discussed in Section 4.2.2 in the case of Teko, Kamayurá and Mundurukú. In Mundurukú, for example, the unproductive sociative causative marker is still recognizable, but it is only allowed with some lexemes. Following Shibatani & Pardeshi, the lexically restricted morphological causative would be considered in the formal continuum along the lexical causatives and express direct causation, as confirmed in the analysis for these three languages. Paraguayan Guaraní is another example in which the sociative causative marker has lexicalized to some level. As in some cases the marker still has sociative causative semantics, the process of lexicalization seems to be happening. It is also good to note that the causatives, in general, tend to lexicalize, since they carry relevant information for the interpretation of the verb and the exact semantics vary greatly depending on the base (Bybee 1985: 18). In the case of sociative causation, the lexicalization would also be facilitated because of the fact that its meaning is very specific as it brings together two meanings: causation and comitative/assistive semantics. The more specific the information the morpheme carries, the lower applicability it has, i.e. it has low *lexical generality* (Bybee 1985: 17). Lower applicability leads to lexicalization because "inflectional categories *must* have full lexical generality" (Bybee 1985: 84, italics in the original).

The tendency to form sociative causative only with intransitive verbs is also a sign of limited productivity. According to Shibatani & Pardeshi (2002: 114), it is a process that eventually leads to lexicalization. They call this process *shrinkage of coverage*. As the sociative causative becomes less productive, the coverage of the semantic domain reduces. A similar phenomenon is reported in Athapaskan languages (Shibatani & Pardeshi 2002: 114, originally Rice 2000: 212). In all Athapaskan languages the intransitive bases with patientive arguments can be causativized resulting in direct causation. In a few languages an intransitive base with agentive argument can be causativized resulting sociative or indirect causation. Only in one language also a transitive base can be causativized and the meaning is indirect. They propose that the pattern was similar to the last one in all of the languages except the domain has shrunken. They conclude that "grammaticalization of causative constructions has the effect of lexicalization of the expressions (from more productive to less productive) with concomitant narrowing of the coverage of the semantic domain […]" (Shibatani & Pardeshi 2002: 115). Paraguayan Guaraní and Mundurukú illustrate an ongoing change, as in both languages the sociative causative is only possible with intransitive verbs, but it is also lexicalized to some level and express direct causation.

From the semantic point of view, Shawi has a causative system that follows neatly the continuum (see Figure 6). It has three different means of expressing causatives: lexical causatives and two different morphological causatives. The lexical causatives express direct causation, the other morphological causative sociative causation (joint-action and assistive) and the other morphological causative expresses both indirect causation and the supervision type of sociative causation.

Direct----------Joint-action---------Assistive----------Supervision----------Indirect

Lexical *Ichi-* *Ichi-* *A-* *A-*

Figure 6. *Causatives in Shawi.*
(Rojas Berscia 2019: 102–104).

Direct	Joint-action	Assistive	Supervision	Indirect
oɣi-	*-aka*	ND[24]	ND	*-aka*

Figure 7. *Causatives in Caquinte.*
(Swift 1988: 72–73).

Direct	Joint-action	Assistive	Supervision	Indirect
-agan, -n, -agat -gat, -it	-	-	*applicatives*	*-aganagan*

Figure 8. *Causatives in Toba.*
(adapted from Censabella 2008: 117)

The examples from Caquinte and Toba, however, show a different pattern (see Figures 7 and 8). When these three languages are compared, it is clear that the semantics of the causatives in each language occupy different domains. However, if supervision is not considered a subtype of sociative causation, Toba is not considered to have sociative causative as discussed above.

When it comes to the correlation between these two levels, Shibatani & Pardeshi (2002: 102) note that "What is interesting about sociative causatives is that this form-meaning correspondence does not obtain in a straightforward manner. In fact, languages differ as to which sociative type their causative forms might express." The Shawi, Caquinte and Toba causatives show exactly this kind of behavior. Nevertheless, when productivity is used as the formal criterion, following Shibatani & Pardeshi, instead of only categorizing the causatives as lexical, morphological or periphrastic, as traditionally proposed, the continuums do seem to align as predicted. In Shawi, the lexical causatives, which are the least productive ones, express unitary (direct) events whereas the two productive causatives occupy the rest of the causative domain. In the case of Caquinte the prefix *oɣi*-is not productive, but it is a derivative suffix and expresses direct causation. The productive form *-aka* occupies the rest of the causative domain. In Toba, all direct, sociative and indirect causatives are expressed different ways, the first being with the least productive morphemes and the last with the most productive ones. These three examples from my data thus reinforce the proposition of Shibatani & Pardeshi that the productivity seems to work

[24] The data I have does not allow me to say if the marker can be used for the assistive and supervision type of semantics.

as a better predictor of the causative form-meaning correlation than the purely formal criteria.

Cavineña causative seems to be rather peculiar. Figure 9 illustrates the causative system, which shows that the same suffixes are used both for direct and indirect causation and the sociative causative is expressed with a specific marker.

Direct----------Joint-action---------Assistive----------Supervision----------Indirect

-mere/-sha *-kere* *-kere* *-kere* *-mere/-sha*

Figure 9. *Causatives in Cavineña.*.
(Adapted from Guillaume & Rose 2010: 389).

-mere is used to causativize transitives and *-sha* intransitives and they create both indirect and direct causation. All three suffixes are almost fully productive (*-sha* shows some irregularities) and *-mere* and *-sha* cover a wide range of meanings (Guillaume 2008: 285–301). This example shows that not all of the languages' causatives form a continuum and the productivity does not always predict the directness.

Now, if the productivity correlates with the (in)directness of the causation, how can this be explained by the iconicity principle? According to Shibatani & Pardeshi (2002), more transparent the construction is, more separable the elements are and so are the two events of which the causative situation consists. When the construction is unproductive, the segments are hardly distinguishable, and this makes the two events of causative situation less separable. However, according to Haspelmath (2008: 22), who calls the traditional view on the iconicity of causatives *iconicity of cohesion*, the fact that the direct causatives show more "cohesive coding", is not actually explained by the iconicity but by the frequency because direct causatives tend to be more common than the indirect ones and frequency correlates with the cohesive coding. Now, when the sociative causative is taken into account, I argue that the Shibatani & Pardeshi's explanation might work better. This is because the sociative causative meaning is very specific. The more specific the meaning, the less contexts of use. Consequently, it could be assumed that it is less frequent than the indirect causative, which has more general semantics. If it is less frequent than the indirect causative, it should have less "cohesive" coding. However, in the sample languages, there does not seem to be significant differences in the cohesion of the coding they use in to

express different causatives (most of the causatives in the sample languages are bound morphemes, see this section and Appendix B). The problem is that there is not enough information to claim the contrary either, because for most of the languages there is no data on how productive the different processes are. Thus, more research on the frequency of sociative causative in each language is needed as well as more detailed descriptions on the productivity of the different causatives.

In any case, iconicity can be seen here at least one way, that is *the iconicity of paradigmatic isomorphism*. In Appendix B, the semantic continuums of the sample languages' causatives display how differently languages organize their causatives. To give concrete example, the Shawi and Caquinte examples show how the different competing motivations work. The motivation *iconicity* drives towards isomorphism (one meaning-one sign) as in Shawi and the *economy* towards polysemy (one sign-several meanings) as in Caquinte. However, it is important to note that the motivations are not always in conflict (Miestamo 2005: 215), for example, polysemy is also iconically motivated, because the meanings are related (all express some kind of causation) (Croft 2003: 106). The different diachronic developments and current synchronic forms can be explained by the fact that languages have different motivations as the driving forces (Miestamo 2005: 215).

One interesting observation that can be done from the analysis is that there are languages in which the sociative causative can be expressed two different ways. This is the case for Paraguayan Guaraní, Paumari and Shawi. This is against the economic motivation, as it does not make sense for a language to express the same function many different ways. However, in Shawi the two different ways of marking have slightly different semantics, the specific marker expresses the joint-action and assistive type of sociative causation, and the indirect causative expresses the supervision type. In Parauguayan Guaraní, the other form has started to lexicalize, so it can be assumed that it will lose its inflectional properties at some point and as a consequence the language would go towards more economic system and have only one way of expressing sociative causation. Only in Paumari these two ways seem to be semantically equivalent (compare 25b and 25c Appendix B). More research is needed to see if they really are.

To answer the fourth research question – how does the sociative causative align in the causative continuum semantically and formally? – it is possible to claim that semantically the sociative causative seems to be closer to the direct end. This is because the sociative causative expressions analyzed show an event profile in which there is a spatio-temporal overlap between the causing and the caused event. The most typical semantics seem to be the joint-action type. Also, formally it seems to be in the middle, because most of the sociative causative expressions are quite productive with some limitations, such as transitivity or verbal semantics. The productivity seems to be good predictor of the meaning-mechanism correlation, but not always, as the Cavineña example shows. All of this is consistent with the theoretical framework proposed by Shibatani & Pardeshi (2002).

6 Conclusions

In this thesis, I have analyzed the sociative causative function in 30 languages spoken in South America, of which 25 are located in the western part and five dispersed in other areas. As for the methodology, I adopted a typological approach that is suitable for cross-linguistic comparison. To define sociative causative, I used the theory of causative continuum by Shibatani & Pardeshi (2002) that propose a semantic continuum with three different types of sociative causation and use of productivity as the formal parameter. I will now sum up the most important findings and will also propose some new lines of research on the topic.

In the languages where the sociative causative is expressed through a separate marker, it is used to express only the joint-action and assistive categories proposed by Shibatani & Pardeshi (2002). This does not mean that the supervision type of causation does not exist, but rather that it is more common to express it through other means in language, and there is no reason to consider it a subcategory of the sociative causative. Consequently, the languages that are from the two other categories and express supervision type are not considered to have sociative causative (in my sample the only language like this would be Toba).

I showed through some example languages that the productivity seems to be a good predictor of the meaning-mechanism correlation when sociative causative is included in the analysis besides the more familiar lexical-morphological-periphrastic division.

However, this could not be confirmed for all the languages due to the lack of information. There are also languages that do not fit into this analysis, like Cavineña. To explain this kind of cases, more research on the diachronic developments of the causatives in each language is needed. Overall, this study shows that the theoretical framework proposed by Shibatani & Pardeshi (2002) seems to predict the behavior of the sociative causative to some extent, and in most cases, the sociative causative is both formally and semantically in the middle of the causative continuum, leaning towards the direct end.

One of the objectives of this thesis was to find more languages and language families with specific sociative causative function. A balanced sampling was done in *a priori* chosen area and four languages were found, at least one from each formal category. It is clear that the samples and the analyzed languages represent a very small portion of the linguistic diversity in the South American macro-area. All four languages found in my own sampling were from different language families, so it is reasonable to expect that the other languages belonging to the same families have ways of expressing sociative causative as well, but that remains an open question for future research.

The fact that the Guillaume & Rose (2010) sample does not have any languages apart from the Tupian languages outside the chosen linguistic areas with the specific sociative causative marker might point to the fact that the specific sociative causative marker is an areal feature to the Western South America. However, this is just speculation. A whole macro-area size balanced sampling would be needed to confirm this. Results might offer interesting insight into the language contact in the area. Besides doing a macro-area sized balanced sampling as proposed above, it would be crucial to include languages in which the sociative causative is expressed by analytic means, if there are such, to form a better picture of the meaning-mechanism correlation in relation to the sociative causative continuum.

Even though I managed to answer my research questions to some extent, for almost every language in the two samples more research on the causatives and their diachrony is needed to understand better the nature of the sociative causative. Even though causatives are well studied phenomenon in the worlds' languages, this study shows that there are still lesser-known causative types that can possibly reveal

something new about the function itself but also about the contact between languages. As the growing number of grammars of the South American indigenous languages show, there is interest in documenting these languages. This means that, in the future, even better analysis on the sociative causative function will be possible.

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Appendix A. Languages in my sample.

Family	Language
Aymaran	Central Aymara
Barbacoan	Awa-Cuaiquer
Boran	Bora
Bororoan	Bororo
Cahuapanan	Shawi
Chapacuran	Wari'
Chicham	Huambisa
Guaicuruan	Toba
Irántxe-Münkü	Irántxe-Münkü
Itonama	Itonama
Kanoê	Kanoê
Katukinan	Katukína-Kanamarí
Kunza	Kunza
Kwaza	Kwaza
Leco	Leco
Lule	Lule
Lengua-Mascoy	Enxet sur
Matacoan	Maca
Mochica	Mochica
Muniche	Muniche
Nuclear Macro-Gê	Xaványte
Naduhup	Hup
Nambiquaran	Southern Nambikuára
Peba-Yagua	Yagua
Pirahã	Pirahã
Taushiro	Taushiro
Ticuna-Yuri	Ticuna
Trumai	Trumai
Tucanoan	Secoya
Uru-Chipaya	Chipaya
Zamucoan	Ayoreo
Zaparoan	Arabela

Appendix B. Examples and analysis.

In this appendix there is an example of the sociative causative on each language included in the analysis. Additionally, the different causatives are illustrated on the semantic continuum when the source gives explicit information on the semantics of the causatives or it is clear from the examples. The source for each language is indicated after the language name.

1. Old Mapudungun (Valdivia [1606] 1887; Guillaume & Rose 2010)

Example:

a. intransitive
i-n
eat-INF
'eat'

b. sociative causative
*i-**kïlo**-n*
eat-**SOC.CAUS**-inf
'help to eat'

c. regular causative

lacutun	*lacutulcan*
'get drunk'	'make someone get drunk'

(Valdivia [1606] 1887: 44–45, for 1a and 1b glosses from Guillaume & Rose 2010: 399)

Semantic continuum:

Direct	Joint-action	Assistive	Supervision	Indirect
ND	*kïlo-*	*kïlo-*	ND	ND

2. Nomatsiguenga (Wise 1986)

Example:

a. regular causative

y-ogi-monti-e-ri *i-tomi*

3M-CAUS-cross.river-N.FUT-3M 3M-son

'He caused his son to cross the river (i.e., he commanded him to).'

b. sociative causative

*y-monti-a-**hag**-an-e-ri* *i-tomi*

3M-cross.river-EP-**CAUS/COM**-ABL-N.FUT-3M 3M-son

'He caused his son to cross the river (i.e., he helped him across the river).'

(Wise 1986: 593)

Semantic continuum:

Direct----------Joint-action---------Assistive----------Supervision----------Indirect

ND *-hag* ND ND *-ogi*

3. Cusco Quechua (Cusihuamán 1976; Soto Ruiz 1976; Itier 1997; Guillaume & Rose 2010)

Example:

Haku-yá
let's.go-come.on
*alla-**ysi**-mu-wa-nki!*
dig.up-**SOC.CAUS**-over.there-1SG.OBJ-2SUBJ(FUT)
'Come on, let us go then. You will help me dig up (the potatoes) over there!'
(Guillaume & Rose 2010: 400, originally from Cusihuamán1976: 211)

Semantic continuum:

Direct	Joint-action	Assistive	Supervision	Indirect
ND	ND	*-ysi*	ND	ND

4. Cavineña (Guillaume 2008; Guillaume & Rose 2010)

Example:

a. regular transitive

Ebakwa=tu ara-wa misi

child=3SG eat-PERFV tamale

'The child ate tamale'

b. regular causative

Epuna=ra=tu ara-mere-wa misi

woman=ERG=3SG eat-CAUS-PERFV tamale

tu-ja ebakwa

3sg-gen child

'The woman fed the child with tamale'

c. sociative causative (joint action)

E-ra=tu *ara-**kere-**chine* *torta*

1SG-ERG=3SG eat-**SOC.CAUS**-REC.PST cake

Don Francisco

Mr. Francisco

'I had / invited Mr. Francisco (to) eat a cake with me'

(Guillaume 2008: 297–301, Guillaume & Rose 2010: 388–389)

Semantic continuum:

Direct----------Joint-action---------Assistive----------Supervision----------Indirect

-mere/-sha *-kere* *-kere* *-kere* *-mere/-sha*

5. Reyesano (Guillaume & Rose 2010; Guillaume 2012)

Example:

*M-(a-)ade-**tsawa**(-a)* *mua* *eme* *te*
1SG-PST-walk-**SOC.CAUS**-PST CONTR 1SG BM
iye *ejanana*
this baby.child
'I helped this baby child to walk (and now he can walk by himself)'
(Guillaume & Rose 2010: 400)

Semantic continuum:

Direct	Joint-action	Assistive	Supervision	Indirect
ND	-	*-tsawa*	ND	ND

6. Teko (Rose 2003; Guillaume & Rose 2010)

Example:

*O-**er**-aho* *o-**ero**-keɾ*
3.I-**SOC.CAUS**-go 3.I-**SOC.CAUS**-sleep
'(The husband) carries (his new wife, who had gotten drunk) and makes her sleep with him'
(Guillaume & Rose 2010: 388, originally from Rose: fieldnotes 2006)

Semantic continuum:

Direct	Joint-action	Assistive	Supervision	Indirect
bo-	*ero-*	-	-	*-okar*

7. Kamayurá (Seki 2000)

Example:

a. intransitive

kunu'um-a	*o-jan*	*jawar-a*	*pojy-a*	*wi*
child-NUC	3-run	jaguar-NUC	danger-NUC	ABL

'The child ran away from the danger of the jaguar'

b. regular causative

kunu'um-a	*o-mo-jan*	*jawar-a*	*pojy-a*	*wi*
child-NUC	3-CAUS-run	jaguar-NUC	danger-NUC	ABL

'He made the child run away from the danger of the jaguar'

c. sociative causative

kunu'um-a	*w-**ero**-jan*	*jawar-a*	*pojy-a*
child-NUC	3-**COM.CAUS**-run	jaguar-NUC	danger-NUC

wi

ABL

'He made the child run away with him from the danger of the jaguar'

(Seki 2000: 291, original in Portuguese, translation by Guillaume & Rose 2010: 401)

Semantic continuum:

Direct	Joint-action	Assistive	Supervision	Indirect
mo-	*ero-*	-	ND	*-ukat*

8. Karo (Gabas 1999)

Example:

a. regular causative

õn	*aʔ=ma-ket-t*
1SG	3SG=CAUS-sleep-IND[25]

'I put him/it to sleep'

b. sociative causative

ŋa	toat	owẽ	**ta**-no-gat
3SG.FEM	3R.POSS	baby	**COM.CAUS**-eat-IND[26]

'She fed her baby, eating with it.'

(Gabas 1999: 63, 65)

Semantic continuum:

Direct	Joint-action	Assistive	Supervision	Indirect
ma-	*ta-*	-	ND	ND

[25] Glossed as IND1 in the original source, but it has been simplified here.
[26] See the previous footnote.

9. Mundurukú (Gomes 2006; Guillaume & Rose 2010)

Example:

sariki	*Ø-ta*	***Ø-duju**-õm.õm-Ø*
tapioca	RELN1-NFC	RELN1-**COM.CAUS**-enter.DUR-IPFV
i-ta-direm-ap		*ø-puxim*
RELN2-NFC-be.wet-NMLZ2		RELN1-against

'They are taking the tapioca into the house so that it doesn't get wet' (Gomes 2006: 82)

Semantic continuum:

Direct	Joint-action	Assistive	Supervision	Indirect
ND	*duju- ~do-*	-	ND	ND

10. Tapieté (González 2005)

Example:

a. regular causative
a-mi-ñani
1SG.ACT-CAUS[27]-run
'I make him to run'

b. sociative causative
*a-**mi-ri-**ñani*
1SG.ACT-**CAUS**[28]-**COM-**run
'I make (him/her) to run and I run with (him/her)'
(González 2005: 171)

Semantic continuum:

Direct	Joint-action	Assistive	Supervision	Indirect
ND	*i-ri- ~mbi-ri-*	ND	ND	ND

[27] Glossed as CAUS1 in the original source, but I have simplified it here.
[28] See the previous footnote.

11. Tapirapé (Praça 2007; Guillaume & Rose 2010)

Example:

ã'é	*rãká*	***wer**-ót*	*doze*
DC	REC.PST	**COM.CAUS**-come	twelve
tokonaré-Ø		*i-pyýk-ã*	
tucunaré.fish-ARG		NCNT-catch-GER	
xé=r-opý-Ø			
1=CNT-father-ARG			

'My father brought there twelve tucunaré fish that he caught'

(Guillaume & Rose 2010: 401, originally Praça, p.c.)

Semantic continuum:

Direct----------	Joint-action---------	Assistive----------	Supervision----------	Indirect
ma-	*era-*	-	ND	*-akãr*

12. Tupinambá (Rodrigues 1953; Guillaume & Rose 2010)

Example:

a. non-sociative causation
mo-oryb
CAUS-be.happy
'make someone be happy'

b. sociative causation
***ero**-oryb*
SOC.CAUS-be.happy
'make someone be happy with oneself'

c. sociative causation
Xe-r-ykeyr-a *xe-r-**eno**-sém*
1SG.II-RELN-older.brother-ARG 1SG.II-RELN-**SOC.CAUS**-go.out
'My older brother took me out'
(Guillaume & Rose 2010: 387, originally from Rodrigues 1953: 136)

Semantic continuum:

Direct	Joint-action	Assistive	Supervision	Indirect
ND	*ero-*	ND	ND	ND

13. Maca (Tacconi 2016)

Example:

a. intransitive
hoy-oqoy-pham
1S-lie.on.your.back-CLIT[29]
'I am lying on my back'

b. sociative causative
*h-oqo-**tshen**-pham*
1A-lie.on.your.back-**CAUS**-CLIT
'I am laying someone down (helping him by taking a part of his body)'
(Tacconi 2016: 108, original in Spanish)

Semantic continuum:

Direct----------	Joint-action---------	Assistive----------	Supervision----------	Indirect
Forms with *-i*	*-tshen*	-	-	Forms with *-n,* periphrastic causative

[29] In the original source there is no information on the abbreviations used for glosses, but I assume this is an abbreviation for *clitic.*

14. Shawi (Rojas Berscia 2013, 2019)

Example:

a. sociative causative as a specific marker

Ashin-ni *wa'wi*

mother-ERG son(of a woman)

ichi-nanuwi-r-in-Ø

SOC.CAUS-play-N.FUT-3MIN.A-3MIN.O

'The mother makes her child play (but she does it with him(but she helps him with it).'

(Rojas Berscia 2019: 104)

b. sociative causative as extension of regular causative

Wa'washa *ni'ni'* ***a**-ka'-ra-r-in-Ø*

child dog **CAUS**-eat-PROG-N.FUT-3MIN.A-3MIN.O

'The child is making the dog eat/is feeding the dog (while watching him eat).'

(Rojas Berscia 2019: 103)

Semantic continuum:

Direct----------Joint-action---------Assistive----------Supervision----------Indirect

Lexical *Ichi-* *Ichi-* *A-* *A-*

15. Trinitario (Wise 1990; Guillaume & Rose 2010)

Example:

a. regular intransitive

No *'jiro-no* *t-yon-ono*

ART.PL man-PL 3-go-PL

'The men went away'

b. regular causative

Ma *tata* *t-im-yon-nu-po*

ART.M.SG father 3-CAUS-go-1SG-PST

'My father sent me (there)'

c. sociative causative: joint action

*V-**im**-yon-yore*

1PL-**SOC.CAUS**-go-FUT

'We will take her with us (on our trip to another village)'

(Guillaume & Rose 2010: 392, originally Rose 2006: fieldnotes)

Semantic continuum:

Direct	Joint-action	Assistive	Supervision	Indirect
ND	*-im*	ND	ND	ND

16. Asheninka Perené (Payne 2002; Mihas 2015)

Example:

*i-chek-**aka**-ak-e-na-ro*
3M-cut-**CAUS**-PERFV-MODE-1-3F
'He made me cut it'
a. "He was accompanying me, both of us cutting."
b. "He made me cut it, and he didn't participate."
(Payne 2002: 489–490)

Semantic continuum:

Direct----------Joint-action---------Assistive----------Supervision----------Indirect

oi~i-~v-, *-aka,*	*-aka*	-	ND	*mi~min*
mi~min[30]				

[30] *mi~min* is a malefactive causative.

17. Caquinte (Swift 1988; Peterson 2007)

Example:

*i-ŋ-kih-**aka**-apoh-ak-e-ri*
3M-FUT-enter-**COM.APPL**-ALL-PERFV-FUT-3M
'He will make him enter with him.
(Peterson 2007: 65, originally from Swift 1988: 72–73)

Semantic continuum:

Direct	Joint-action	Assistive	Supervision	Indirect
oɣi-	*-aka*	ND	ND	*-aka*

18. Matsés (Fleck 2002, 2003)

Example:

aton mado-mpi-Ø *pe-**me**-o-sh*
3GEN son-DIM-ABS eat-**CAUS**-PST-3
'S/he fed his/her little son.'

a. by holding his mouth open
b. by feeding him with a spoon
c. by telling him to eat
d. by handing him a plate of food

(Fleck 2003: 887)

Semantic continuum:

Direct	Joint-action	Assistive	Supervision	Indirect
-me	ND	*-me*	*-me*	*-me*

19. Galibi Carib (Hoff 1967)

Example:

*uwa:**nopï***
'to make dance' (said of a partner whom one holds and teaches the steps)
(Hoff 1968: 127)

Semantic continuum:

Direct	Joint-action	Assistive	Supervision	Indirect
-nopï	*-nopï*	*-nopï*	ND	*-po*

20. Macushi (Abbott 1991)

Example:

*a-manun-**pa-**u-ya*
2-dance-**CAUS**-1-ERG
'I dance (with) you' (i.e., cause you to dance)
(Abbott 1991: 125)

Semantic continuum:

Direct	Joint-action	Assistive	Supervision	Indirect
ND	*-pa*	ND	ND	ND

21. Paraguayan Guaraní (Velázquez-Castillo 2002; Estigarribia 2020)

Example:

a. sociative causative as semantic extension of regular causative

Juan *o-ñe-**mbo**-guapy* *ja*

Juan 3ACT-REF-**CAUS**-seat and

o-je-joko

3ACT-REF-hold.in.place

'Juan was made to sit down and was held in place.'

(Velázquez-Castillo 2002: 521)

b. specific sociative causative marker

*ja-**guero**-guata* *ñande-jagua*

1PL.INCL.ACT-**SOC.CAUS**-walk 1PL.INCL.INACT-dog

'We walk our dog' (and we ourselves walk together with it).

(Estigarribia 2020: 218)

Semantic continuum:

Direct	Joint-action	Assistive	Supervision	Indirect
mbo-~ mo-	*mbo-~ mo-, guero-*	*mbo-~ mo-*	ND	*-uka*

22. Ticuna (Berter 2020)

Example:

Chaȳ a-̀ pe-́ e-́́ e
cha=̄ ya=̀ pe-́ **’e-́́ e**
1SG.SBJ=AM.3M/N/NS.OBJ=sleep-**CAUS**
‘I cause him to go and sleep (e.g. I tell my son to go to bed without moving myself.).’
‘I go and cause him to sleep (e.g. I go back home from fishing and rock my baby to sleep.).’
‘I go with him and cause him to sleep (e.g. I walk my drunk husband back home after a party and put him to bed.).’
(Berter 2020: 376)

Semantic continuum:

Direct----------Joint-action---------Assistive----------Supervision----------Indirect
-’é-́’e *-’é-́’e* *-’é-́’e* *-’é-́’e* *-’é-́’e*

23. Madi (Dixon 2004)

Example:

Kojari *to-**wa**-ki-joma-ma-hare-ka*
paddle AWAY-**APPL**-in.motion-THROUGH.GAP-BACK-PST-DECL
'(The child) took the paddle back through the door'
(Dixon 2004: 37)

Semantic continuum:

Direct----------	Joint-action---------	Assistive----------	Supervision----------	Indirect
na-~niha-	Applicative *ka-*	ND	ND	*na-~niha-*

24. Yine (Hanson 2010)

Example:

n1mapokanyi
n-**him**-hapoka-n1-yi
1SG-**ASSOC**-arrive-ANTIC-2SG
'You will arrive with me; I will make you arrive with me.'
(Hanson 2010: 276)

Semantic continuum:

Direct----------	Joint-action---------	Assistive----------	Supervision----------	Indirect
-kaka	Applicative *him-*	ND[31]	ND	*-çica*

[31] Hanson (2010: 275) gives an example with the assistive semantics, but that particular example does not have causative semantics. Thus, I cannot be sure if it is possible to have assistive and causative semantics at the same time.

25. Paumari (Chapman & Derbyshire 1991)

Example:

a. comitative applicative

papai-a *bi-ka-va-adaha-hi* *ida*

father-ERG 3SG-N.CLASS-COMIT-travel-THEME DEM

kodi-vanami

my-paddle

'Father travelled around with my paddle'

b. sociative causative as semantic extentsion of an applicative

mamai-a *bi-a-**vi**-kha-'i-hi* *ida*

mother-ERG 3SG-away-**COMIT**-MOT-ASP-THEME DEM

kidi-isai

her-child

'Mother took (i.e. went with) her child.

(Chapman & Derbyshire 1991: 295)

c. Sociative causative as extension of a regular causative

*bi-a-**ni**-kha-'i-hi* *ida* *hado*

3SG-away-**CAUS**-MOT-ASP-THEME DEM.F knife

'He went to fetch the knife.' (i.e. He went and caused the knife to come.')

(Chapman & Derbyshire 1991: 185)

Semantic continuum:

Direct----------	Joint-action---------	Assistive----------	Supervision----------	Indirect
ND	Comitative applicative *na-,* causative *ni-*	ND	ND	ND

26. Guahibo (Queixalós 2002; Guillaume & Rose 2010)

Example:

a. instrument applicative

Mahalu *computadora* *Ø-ka-yakina-Ø*

Mahalu computer 3OBJECT-APPL-carve-3SUBJECT

baharpaliwaisianü

those.stories

'Mahalu wrote these stories with the computer'

b. sociative causative

Kuwainü ***Ø-ka**-nawiata-Ø* *pihawa*

God 3-**SOC.CAUS**-go.back-3SUBJECT his.wife

'God took his wife back home'

(Guillaume & Rose 2010: 393)

Direct	Joint-action	Assistive	Supervision	Indirect
ND	*ka-*	ND	ND	ND

27. Shipibo-Conibo (Valenzuela 2002, 2010)

Example:

Yoxaman-ra *bake* *bachi-n*
old.woman:ERG-EV child:ABS mosquito.net-ALL
*jiki-**kin**-ke*
enter-**ASSOC**-COMPL
'The old woman made the child enter the mosquito net (by entering herself)./ The old woman accompanied the child into the mosquito net./ The old woman helped the child enter the mosquito net.'
(Valenzuela 2002: 436)

Semantic continuum:

Direct	Joint-action	Assistive	Supervision	Indirect
-n, /*ak*/-	*-kin*	*-kin*	ND	*-ma*

28. Movima (Haude 2006, 2022)

Example:

u'ko,	*us*	*majni=Ø,*	*joy-cheł--u'*
PRO.3M	ART.M	my_offspring=1SG	go-R/R-3M
nosdé	*n-us*	*a:kay-a=u;*	
over_there	OBL-ART.M	older_sibling-LV=3M	
*joy-a-**łe**=u*		*us*	*a:na=u*
go-DR-**CO**=3M		ART.M	younger_sibling=3M

'He, my son, went over there to his older brother's; he took his younger brother with him.'
(Haude 2022: 15)

Semantic continuum:

Direct	Joint-action	Assistive	Supervision	Indirect
-poj	Appicative *-łe*	-	ND	*-poj*

29. Yuracaré (van Gijn 2006; Gipper 2022)

Example:

ka-*yupa*
COM.APPL-go.in
'take something inside'
(van Gijn 2006: 180)

Semantic continuum:

Direct	Joint-action	Assistive	Supervision	Indirect
-tA, *-che*, reduplication, vowel change	Comitative applicative *ka-*	-	ND	Periphrastic causative

30. Toba (Censabella 2006, 2008)

Example:

a. intransitive

ramaΩe	*r-a÷ak*
3	3-embarrased

'He is embarrased'

b. sociative causative

ramaΩe	*r-a÷ag-**elek***	*so*	*Juan*
3	3-embarrased.of-**APPL**	DAL	Juan

'He is feeling embarrassed in front of Juan'/ 'He is embarrassed of Juan.'

(Censabella 2006: 10, original in Spanish)

Semantic continuum:

Direct----------Joint-action---------Assistive----------Supervision----------Indirect

-agan, -n, -agat -gat, -it	-	-	applicatives	*-aganagan*