

Consequences and behaviour problematised: The establishment of alcohol misuse as an object of empirical inquiry in late 18th- and early 19th-century European medicine

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ABSTRACT

AIMS – This article discusses European medical thought on alcohol in the late 18th and early 19th centuries against the backdrop of concurrent transformations in the epistemological and social underpinnings of medicine at large. **DESIGN** – The article focuses on key medical works on alcohol written in the 1700s and early 1800s. The analysis draws on historical typologisations of medical practice and knowledge-formation (Ackerknecht, Jewson), and the notion of “working knowledges” (Pickstone). **RESULTS** – The defining feature of the era’s medical thought on alcohol was that the issue began to be treated more rigorously in empirical terms. Doctors aspired to build an objective body of knowledge about diseases consequent on excessive drinking. The singling out of alcohol misuse as a special cause of diseases laid ground for viewing misuse itself as a phenomenon whose determinants and underlying dynamics were to be delineated in empirical terms. Remote causes of drinking were commonly traced to the socio-cultural sphere, which had a bearing on doctors’ ideas on “alcohol addiction”, too. **CONCLUSIONS** – Earlier historiography has identified medical thought on alcohol at the turn of the 19th century as the starting point of individualising disease concept of alcohol addiction. The proper legacy of the era is rather the establishment of alcohol-related phenomena as objects of empirical inquiry, and the articulation of socio-cultural embeddedness of alcohol-related pathologies.

KEY WORDS – alcohol, addiction, diseases, aetiology, history of medicine, 18th century, 19th century

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Introduction

The decades from the late 18th century to the mid-19th century saw the establishment of alcohol-related questions on the medical agenda. It was not, to be sure, an *ex nihilo* appearance of alcohol or drinking

into physicians’ consciousness. Alcoholic drinks, most notably wine, had constituted an important part of *materia medica* since the inception of the art of healing. In addition, the virtues of moderation and

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the perils of excessive drinking had been commonly referred to in dietetic doctrines pursuing preservation of health. In keeping with the dietetic prudence, immoderate drinking had been adduced in pursuance of various diseases' aetiologies from gout to melancholy (Bynum, 1968; Porter, 1985). However, since the late 18th century an increasing number of medical studies took an interest in alcohol misuse and its deleterious effects *per se*. "Hard drinking", "drunkenness" or "alcohol misuse" became the starting point – rather than an occasional facet – for many medical tracts, essays and subsequently research monographs and articles. A chronological sampling of titles on the subject serves as an illustration: "History of some of the effects of hard drinking" (Lettsome, 1791); "An Essay, Medical, Philosophical, and Chemical on Drunkenness and its Effects on the Human Body" (Trotter, 1804); "Tracts on Delirium Tremens [etc.]" (Sutton, 1813); "Alcoholismus chronicus eller chronisk alkoholssjukdom" (Huss, 1849 & 1851). In this article, I will examine the contents and the background of this transformation of medical approaches to alcohol in Europe.

The intensified medical interest in alcohol misuse in the late 18th and early 19th centuries has not gone unnoticed in historiography. General reviews of the history of medical thought on alcohol have chronicled the era's most notable doctors and their intellectual contributions (Bynum, 1968; Sournia, 1990; Madden, 1995). In addition, one theme has attracted special attention. A number of both positivist (Hirsch, 1949; Jellinek, 1941) and social constructionist histories (Levine, 1978; Conrad & Schneider, 1980; Spode,

2005; Valverde, 1998; Ferentzy, 2001) of the "disease concept of alcohol addiction" have attributed the first coherent formulations of the concept to the works of certain medical figures at the turn of the 19th century. Positivist historiography has portrayed doctors such as Benjamin Rush and Thomas Trotter as "the bedrock upon which the modern concepts of the problem drinker are built" (Hirsch, 1949, p. 230) because they were the first to argue that habitual drunkenness was a disease to be cured rather than merely a vice or sin to be condemned.

From the constructionist history point of view the paradigm shift "from sin to disease" around the turn of the 19th century did not spring from the great minds of the doctors but was occasioned by a wider cultural and social transformation in Western societies. It was rooted in the emergence of modern bourgeois ethos which put emphasis on the self-control of rational individuals as the warrant of social order and capitalist production. A deviant from this norm, the habitual drunkard was to be cured to meet the standards of normality. The "medicalisation" of habitual drunkenness thus amounted to a new form of individualised governance of deviancy (Conrad & Schneider, 1980). Most paradigmatically, it has been argued, the essentially modern ethos moulded ideas on drunkenness in the United States in the early 1800s (Levine, 1978; Ferentzy, 2001), but similar claims have been made in reference to continental Europe as well (Spode, 2005).

Studies on British discourses on alcohol and drunkenness in the 17th and early 18th centuries have challenged the argument for a clear-cut paradigm shift concerning

ideas on alcohol addiction at the turn of the 19th century. The allegedly modern idea of habitual drunkenness as a progressive pathology which by degrees undermines one's control over drinking was widely circulating much earlier, not only in medical texts but also in religious sermons against intemperance (Porter, 1985; Warner, 1994; Nicholls, 2008). These critiques have rightly relativised the view of a rupture in ideas on addiction around the turn of the 19th century. I would like to add, however, that the identification of contemporary medical thought on alcohol with the discovery of addiction entails a further shortcoming. The histories written from the vantage point of the "disease concept of alcohol addiction" fall short of forming a lucid picture and interpretation of medical thought on alcohol at the turn of the 19th century because the concept reminiscent of our present-day idea of alcohol dependence constituted but a fragment of the era's medical concern with alcohol.

What, if any, then, were the characteristics of medical thought on alcohol in Europe in the late 1700s and early 1800s, and how to account for their emergence? Answering these questions requires, first of all, sensitivity to the problem-orientation of contemporary doctors. This methodological standpoint is based on the premise that in order to understand an idea or a theory of the past, one has to identify the question(s) or the "problematic" underlying its formation (see Collingwood, 1983). I argue that late-18th and early 19th-century medical thought took its shape in the form of two problematics. The medical titles cited above reflect the formation of questions concerning the adverse *consequenc-*

es of alcohol misuse to the point where two long-lived alcohol-specific clinical concepts, *delirium tremens* and *chronic alcoholism* (or chronic alcohol poisoning), were introduced. Many doctors also trained their gaze on alcohol misuse itself. The *behavioural problematic* did not, however, end in the formulation of ideas reminiscent of our present-day notion of alcohol addiction. A neglected feature of the late-18th and early-19th century medical concern with drinking behaviour is the emergence of aetiological interest in the predisposing causes of alcohol use and misuse.

William Bynum has argued that the contemporary upsurge of medical studies on alcohol amounted to a "culmination" of interest which had been gathering pace since the early 1700s (1968, p. 166). I argue that a defining feature of this culmination was that alcohol misuse began to be treated more rigorously in *empirical* terms. The formation of the two problematics led to the establishment of alcohol misuse as an empirical object of medical inquiry. Understanding this development requires understanding of the changes in the epistemological and social underpinnings of medical practice and knowledge-formation at the time. This context has gone largely neglected in previous historiography.

Epistemological and social underpinnings of the medical problematisation of alcohol misuse

A material factor contributing to the growing concern with alcohol in Europe since the 17th century was the increased availability and affordability of alcoholic drinks,

most notably of distilled spirits, which was facilitated by agricultural and technological developments (see Braudel, 1973, pp. 162–175). As for Britain, where the “gin epidemics” of the early 18th century heated up debates on the issue, social historians have argued that medical concern with alcohol grew as a part of wider problematisation of drunkenness as a threat to social order and public health (Warner, 2002; Nicholls, 2008, 2009). Much the same could be argued for many other European countries where alcohol misuse figured in public debates on the “social question” and national prosperity throughout the 19th century (Spode, 1993; Petersson, 1983; Prestwich, 1988). It is nevertheless hard to account for the development of medical approaches to alcohol-related phenomena in the late 18th and early 19th centuries merely by increased alcohol consumption and growing cultural consciousness thereof. The institutional and intellectual context of medicine itself has to be taken into account.

The intensification of medical interest in alcohol concurred with a more general transformation in the ideals governing medical practice and knowledge-formation. The 1700s and the early 1800s saw a gradual subjugation of *a priori* theoretical systems by an emphasis on empirical observation as the foundation of clinical work and, tentatively, scientific medicine (Bynum 1994). This transformation has been discussed extensively in terms of epistemological issues as well as social dynamics and power structures (Ackerknecht, 1967, 1982; Foucault, 2003; Porter, 1997, pp. 306–314; Jewson, 1976; Pickstone, 2007). To form a conceptual background for my analysis on the medical

problematisation of alcohol use, I discuss these facets through a critical reading of a typologisation coined by historian Erwin Ackerknecht and further developed by sociologist Nicholas Jewson.

Bedside medicine and hospital medicine

In his seminal works on the history of medicine, Erwin Ackerknecht (1967, 1982) conceptualised the 18th- and 19th-century transformation of medicine in terms of successive “types” which he named after the dominant sites of medical practice and knowledge-formation. The tradition leaning on *a priori* theoretical systems in education and practice was dubbed “medicine of the book”. The emergence of empirical outlooks took place as “bedside medicine” ascribed to the latter half of the eighteenth century, and as “hospital medicine” from the turn of the 19th century on. Bedside medicine rested largely on descriptive symptomatology, speculative pathology and patients’ own understanding on their health and healing. Ties to the *a priori* theoretical medicine were thus preliminarily challenged by a combination of natural historical and biographical approaches to the phenomena of health and disease (see also Porter, 1995; Pickstone, 2007, 2009). Disease was understood in terms of systemic disturbance of the mind-body totality. The emergence of “hospital medicine” with the establishment of large state hospitals marked a further breakthrough of empirical outlooks. Physical diagnostics, pathological anatomy and “numerical methods” were the means providing objective knowledge about diseases. Michel Foucault’s (1976/2003) oft-cited notion of medical or clinical “gaze” refers precisely to this change in the understanding of

diseases now “made visible” by the new clinical techniques. Diseases came to be understood either as localisable lesions in the body or changes in the normal physiological functioning of the body (see Bynum, 1994, pp. 25–54).

Nicholas Jewson has elaborated on the fact that bedside medicine and hospital medicine not only had different epistemological characteristics but their respective “modes of production of medical knowledge” rested on distinct social dynamics (1976). Thus bedside medicine and hospital medicine for Jewson are not mere descriptive categories. Instead, he calls them “medical cosmologies” with distinct social and cognitive underpinnings which had bearing on the “first principles of problem orientation, explanatory strategy, methodology, and acceptable results” (1976, p. 226). The most obvious difference in terms of the social configuration of the cosmologies is that while bedside medicine served a predominantly self-paying upper-rank clientele, the state financed hospitals which catered for larger populations including the lower classes of society. With a shift from the former to the latter cosmology, the social distance between the physician and the patient increased, and the volume of the “raw material” for the production of medical knowledge proliferated.

The critical thrust of Jewson’s argument is that the move from the bedside to the hospital cosmology amounted to a move from person-oriented to object-oriented medicine – a process which was in the late 19th century exacerbated by “laboratory medicine”. In consequence, there was a change in “the frame of reference within which all questions are posed and all an-

swers are offered” (1976). While bedside medicine was concerned primarily with the *health and wellbeing* of the patient as a whole person, the diagnosis of *diseases* and the forming of an objective body of knowledge on them became the objective of hospital medicine. Concurrently, the institutions of the medical public came to the fore as the sphere where medical knowledge was presented and judged. Acclaim of peers within this public became the warrant of a doctor’s position as an expert.

Towards an analysis of the medical problematisation of alcohol misuse

Certain themes highlighted by the typologies above have indisputable heuristic power as regards the increase in medical studies of alcohol during the late 18th and early 19th centuries. The development of the medical public in the form of medical journals and monographs targeted to peer physicians can be seen as an institutional background for the increase in the output of medical studies on alcohol. On a more substantial level, as will be shown in due course, the medical alcohol-problematic came to be structured more rigorously around the notion of disease, and the building of an objective body of knowledge on the issue.

Yet there are certain themes that the typologies do not illuminate but may even blur. The critical histories of medicine such as that of Jewson’s tend to emphasise the ever growing inclination of modern medicine towards a certain kind of reductionism. The gaze confined to the inner spheres of the body in the isolated space of the clinic surpasses not only the patient as a person but also the socio-cultural under-

pinnings of the phenomena of health and disease (for a critical discussion on these critical histories see Osborne, 1992). However, it is well recorded in the historiography of medicine that the turn of the 19th century gave birth not only to “the clinic” but also to more pronounced public health concerns. It may seem that the emergent “social epidemiology” which focused on populations and the clinical medicine concerned with corporeal bodies were diverged in their scope and methods. Yet, as Christopher Hamlin has argued, historically “a population orientation is not essential to an interest in the health effects of the social” and “such a focus has long been an element of clinical medicine both in the West and beyond.” (Hamlin, 2006, p. 22) The medical problematisation of alcohol misuse in the late 18th and early 19th centuries is a case in point. The emergence of clinical interest in the consequences of alcohol use was linked to problematisation of drinking as a phenomenon in which socio-cultural factors played a major role.

In what follows I illuminate the interrelated problematisation of alcohol misuse as a clinical and socio-cultural phenomenon by tracing the formation of the “consequences” and the “behavioural” problematics as they emerged and diverged from the more traditional medical view on alcohol as an aspect of dietetics and medication. The account draws on primary sources most of which have been acknowledged as key texts of the era in previous historical overviews (Bynum, 1968; Sournia, 1990). A few references to the American Benjamin Rush are an exception to the European emphasis, and Rush, too, received a notable part of his medical education in Edinburgh (Rush, 1948). While I do not attempt to

produce a systematic comparison between different national contexts, the temporal structure that my account follows entails a curious geographical trajectory as well. The first wave of notable medical works on alcohol in the late 18th century emerged in Britain. If there was a leading centre of medical education in Europe at the time, it was the University of Edinburgh. Apart from Rush, doctors such as Thomas Trotter and Anthony Fothergill were also graduates of the institution which in Jewson’s account is dubbed the centre of bedside medicine outlooks in the late 18th century. The paradigmatic hotbed of hospital medicine, Paris, did not produce major French studies on alcohol in its heyday. It took a Swedish doctor Magnus Huss, who had studied in Paris (as well as in Vienna, Halle and Berlin), to write a book on alcohol in the mid-19th century which adhered to the outlooks of clinical hospital medicine so rigorously as to win him the Monthyon Prize of the French Academy of Sciences in 1853 (see Bernard, 1984), and to stimulate medical alcohol research in France in the latter half of the 19th century (Prestwich, 1988, p. 38). Between the British doctors and Huss’ endeavours, the hub of European alcohol studies, judged by the volume of published studies, resided in German-speaking medical institutions of the Continent (see Bynum, 1968). The focus of the following account is on the early British and the later German and Swedish studies written by doctors working at the patients’ bedsides, private practices and, later, in larger hospitals.

My analysis is informed by historian John Pickstone’s notion of “working knowledges” (Pickstone, 2007). Pickstone has made an insightful note on Ackerkne-

cht's and Jewson's typologisations by arguing that the "types" or "cosmologies" are best seen as Weberian ideal types rather than as characterisations of distinct historical phases divided by clear-cut ruptures (Pickstone, 2009). While some epistemic techniques obviously have more or less identifiable historical points of origin, the history of medicine is better seen as incorporating co-existence and inter-penetration of the elementary components of what Pickstone calls "working knowledges": biography (or "cultural" approach), natural history, analysis, and experimentation (Pickstone, 2000, 2007). It is an empirical matter, then, to study how these elementary components are combined and employed in respect to particular medical problematics and how their combinations change over time.

Formation of the consequences problematic and the persistent importance of "manner of living"

Alcohol and health

In early modern medical literature, heavy drinking appears frequently as an issue of dietetics, that is, preservation of health and prevention of diseases (Cheyne, 1724; Buchan, 1772, pp. 55–58). As an aspect of one's manner of living, intemperate use of alcoholic drinks was one form of excess to be avoided in order to lead not only a healthy but also a virtuous life. Such axiomatic guidelines were traditionally based on a theoretical tradition stemming from the writings of Roman physician and philosopher Galen (129–c. 200). Within this tradition, food and drink made up one of the six categories of *non-naturals* – the others being air, motion and rest, excretions and retentions, sleep, and passions

of the mind (Broman, 2003, pp. 466–467; Mikkeli, 1999). Imbalance of the non-naturals in proportion to one's inborn natural *temperament* – dictated by humoral fluids – amounted to a pathological state. Accordingly, restoration of the balance was an essential feature of therapeutics. Even with the gradual subjugation of humoral pathology by an emphasis on the nervous system in physiology in the 18th and 19th centuries, dietetic doctrines retained the basic balance–imbalance logic.

Apart from dietetics where theoretical medicine intertwined with the ethical notion on the duties of a virtuous human being, alcohol figured in the sphere of medical therapy. In fact, to speak of alcohol as a general category is anachronistic in respect to both medication and dietetics. Beer, wine and spirits had distinct therapeutic uses as stimulant/sedatives of varying degrees (Curth, 2003; Risse, 2010, pp. 224–225). By the same token, as for dietetics, the less potent drinks such as beer and cider were often considered inherently wholesome, whereas spirits were seen appropriate for watchful medical use only, because "according to its use, a poison may be transformed into a medicine, and a medicine into a poison" (Forthergill, 1796, p. 25). Professor William Cullen's assessment of the utility of drinks judged from a physiological standpoint encapsulates the mainstay of physicians' understanding on the issue throughout the era under scrutiny in this article: "The stimulus of fermented or spirituous liquors, is not necessary to the young and vigorous; and, when much employed, impairs the tone of the system." (Cullen, 1784, p. 99)

In reality, physicians were a far cry from possessing exclusive authority over alcohol

use. The lay usage of alcohol in self-physicking and recreation surpassed the boundaries of medical therapeutics and preservation of health. As Steven Shapin (2003) has noted, the early modern dietetic doctrines figured in a field densely occupied by lay common sense. The doctor's authority was circumscribed by an ethos where, according to a common saying, "every Man past Forty is either a Fool or a Physician" (2003, p. 266; see also Rosenberg, 1992). The late 18th- and early 19th-century doctors writing on alcohol began to claim authority over the issue by arguing that they possessed more exclusive knowledge on it.

From aggregation of diseases to alcohol-specific disorders

The social commentators who wrote admonitory tracts against the abuse of spirits during the early 18th century British gin epidemics consulted physicians in order to substantiate arguments that spirituous liquors not only had adverse moral and social ramifications but also deleterious health effects (Warner 2003). Yet it was only from the last decades of the 18th century on that doctors themselves began to claim a more prominent position as specialists of the alcohol issue.

The first wave of medical tracts and essays on misuse of alcohol in the late 18th century still bears close resemblance to the contents and undertones of tracts previously written by priests and social commentators. Take, for example, Benjamin Rush's *An Inquiry into the Effects of Spirituous Liquors upon the Human Body, and Their Influence upon the Happiness of Society*, which went through several revised editions and retaining the famous Physical and Moral Thermometer (Rush 1784;

1823); John Coakley Lettsome's *History of some effects of hard drinking* (1789); or Anthony Fothergill's *An Essay on the abuse of spirituous liquors* (1796). In keeping with the title of Rush's early Inquiry, the subtitle of Fothergill's essay tellingly dubs the work "an attempt to exhibit, in its genuine colours, its [abuse's] pernicious effects upon the *property, health, and morals*, of the people" (Fothergill, 1796; emphasis added). The genre of these works has to be remarked on. They were not directed only or even primarily to fellow physicians but to the general public as educational tracts (see Katcher, 1993). Admonishing against the abuse and all its imaginable consequences, the doctors kept with the ethos apparent in, for example, Bishop Thomas Wilson's 1736 *Distilled spirituous liquors, the bane of the nation*.

Admittedly, making a distinction between a moralist or social commentator on the one hand, and a learned physician on the other is somewhat forced in the context of the late Enlightenment and the emergent nation states. Furthermore, condemnation of the moral and social ills related to drunkenness reverberates in medical works on alcohol throughout the era under scrutiny here. That said, the turn of the 19th century also saw explicit attempts to define the *medical* approach to alcohol-related phenomena more narrowly by way of parenthesising the moral, economic and social consequences. Thomas Trotter's 1804 *Essay on Drunkenness* is a case in point. While acknowledging the social and moral effects of drunkenness as a burning question against which moralists and priests had rightly "poured forth their anathemas", the book's self-declared aim was "to point out the issue as highly im-

portant in a medical view” (Trotter, 1804, p. 2).

The medical view for the Edinburgh-trained naval physician and private practitioner implied focusing on “the *physical influence* of the custom [...] *reacting on our mental part*” (1804, p. 3, emphasis added). The ethos of self-declaredly *medical* approach to alcohol-related harm becomes pronounced during the early 19th century. While works such as Carl Rösch’s *Der Missbrauch geistiger Getränke* (1839) and Magnus Huss’ *Alcoholismus chronicus* (1849 & 1851) make use of a rhetoric which highlights the manifold evils of alcohol misuse, the doctors hasten to emphasise that it is a scientific observer “standing on unbiased ground” (Huss, 1849 & 1851, I, p. I) who is now discerning the deleterious *health effects* of the phenomenon from a strictly medical point of view. The proper measure of alcohol misuse from a medical point of view is disease, and it is to be judged on scientific grounds.

Doctors’ claim to expertise over the alcohol question rested on empirical observation. Drawing on natural-historical outlooks, the elementary epistemic strategy was to describe, aggregate and classify the diseases and symptoms often met with heavy drinkers. Again, Trotter’s Essay is emblematic and arguably original in its comprehensiveness at the time. Trotter’s catalogue of diseases is voluminous; there is a variety of inflammatory diseases such as brain-fever, rheumatism, pleurisy, gastritis and hepatitis, along with gout, jaundice, indigestion, dropsy, palpitation, palsy, ulcers and impotency as well as madness and idiotism (Trotter, 1804, pp. 107–135). In addition, Trotter discusses

diseases induced by acute alcohol intoxication, and the state of drunkenness itself as a disease as it gives birth to “actions and movements in the living body, that disorder the functions of health” (1804, p. 8).

A contemporaneous review of the Essay pointed out that while Trotter was original in some of his opinions, and while there had been no monograph-length studies on the subject before, many of the symptoms and effects of drunkenness had been described before (Anonymous, 1805, p. 73). From a historical point of view, Trotter’s book testifies to the establishment of alcohol misuse on the medical agenda as a specific cause of diseases by way of its comprehensive articulation of views that had been taking shape earlier in the 18th century.

During the first half of the 19th century, the early aggregative accounts leaning on description and classification were accompanied by studies which took on more specific questions, such as the physiological mechanisms of alcohol intake and the gross pathological lesions exclusive to heavy drinkers (see Bynum, 1968, pp. 179–180). The interest in “everything that relates – or may relate – to alcohol misuse” was thus complemented by a question concerning pathologies exclusive to heavy drinkers. To an extent, the interest in misuse-specific diseases leaned precisely on the analytical strategy of pathological anatomy and physical diagnostics as opposed to mere description and classification of symptoms and diseases. However, contrary to the reductionist tendencies often identified with the general transformation of medicine towards bodily localisation of diseases, medical studies on alcohol show rather that the new orienta-

tion did not expel the importance of the biographical approach from clinical work, nor from knowledge-formation.

In a sense, the more specific studies highlighted the epistemological value of individual patients' idiosyncratic life-histories. In his *Tract on Delirium Tremens*, Thomas Sutton gave an influential delineation of the condition formerly discussed most notably by Samuel Burton Pearson as "brain fever" (Bynum, 1968, p. 162) but yet to have "taken a station in medical writings" (Sutton, 1813, pp. 3–4). Sutton's goal was to show that delirium tremens was distinct from the general notion of brain fever or *phrenitis* (1813, pp. 4–5). Howsoever vast epistemic weight was to be put on the expected morbid changes in the contents of the cranium (1813, p. 51), the identification of the aetiology of delirium tremens with heavy drinking did not rest on pathological findings but on knowledge about patients' preceding manner of living. In fact, Sutton's identification of delirium tremens with drinking habits was not the starting point but the outcome of the study that was based on case-histories he had gathered while working as physician to the forces and as a private practitioner. After describing 16 patient cases Sutton concluded:

It has been remarked, in several of the above instances, that the parties attacked with delirium tremens have been given to drinking; and I feel firmly persuaded, that all cases of this diseases are connected with indulgences of that nature." (Sutton, 1813, p. 47)

Magnus Huss' concept of *chronic alcoholism* has a similar history and underlying

logic. Working at the Royal Serafimer Hospital in Stockholm, Huss had observed a growing number of patients with nervous symptoms whose origin could not be readily detected by means of physical diagnostics or in the autopsy (Huss, 1849 & 1851, II, pp. 1–2). With scrutiny on the patients' manner of living, however, it could be observed that many of them had a history of drinking rather large amounts of distilled spirits for quite a long time.

Reflecting his observations upon earlier medical literature on alcohol, Huss took on to prove that if there was an alcohol-specific pathology, it manifested in the altered functions of the nervous system. The pathological findings in various organs or the nervous system, though often met in heavy drinkers, could not prove a necessary link between alcohol and the chronic symptoms (Huss, 1849 & 1851, I, pp. 1–3, 22). The result of Huss' study, based on an analysis of 139 cases, was the definition of chronic alcohol poisoning, *alcoholismus chronicus*, as consisting of chronic nervous symptoms – motor, sensory and psychic – which do not have any direct or primary connection to detectable alterations in the structure of the nervous system (Huss, 1849 & 1851, I, pp. 17–18). They constitute an independent chronic poisoning disease (divided into six subtypes) by virtue of a shared cause: prolonged misuse of alcohol (1849 & 1851, I, p. 21).

(Re)formation of the behavioural problematic

Aetiology of alcohol-related diseases and the socio-cultural antecedents of excessive drinking

The singling out of alcohol misuse as a special cause of diseases laid ground for prob-

lematising misuse itself as a phenomenon whose determinants and underlying dynamics were to be delineated in empirical terms. It needs to be noted, however, that the extension of empirical interest from the clinical problematic of consequences to the antecedents of use and misuse of alcohol was not an over-determined outcome of the era's medical ideals. Neither did it make for a pervasive sea change in how medical figures, let alone the lay public, were to perceive of excessive drinking thenceforth. Well through the 19th century, drunkenness was commonly seen as a plain instance of excess calling for no further discussion. In keeping with the traditional dietetic doctrines discussed above, drunkenness was a self-evident cause of diseases along with indolence, luxury, dissipation, solitary vice and the like moral notions (Carter, 2003, p. 21). The emerging psychiatric profession, in turn, saw drunkenness predominantly as a physical cause of madness – albeit an increasingly frequent one – comparable to aetiological factors such as intestinal worms (Bynum, 1968, p. 163). That said, there were elements in the governing principles of medical thought which quite logically allowed the search for the causes of misuse beyond individual morality to those willing to do so. Rather than psychiatrists, it was general practitioners that took the initial steps beyond the moral axiom of alcohol misuse in the early 19th century.

The aetiological principles prevailing at the time divided causes of diseases into two classes: “proximate” and “remote”. The bodily change or abnormality identified with a certain disease was the proximate cause of that condition. Remote causes, in turn, divided into predisposing

and exciting causes. They were the factors which, to quote a definition by William Cullen, “in series or in concurrence [sic] produce the proximate cause” (cited in Stott, 1987, p. 127). In clinical work, physicians were interested in the causes of particular events. Much emphasis was put on the remote causes, because the proximate cause, say an observable lesion in a tissue, could not explain the onset of a disease in a particular case. Hence the gaze was trained on the factors preceding the onset. The factors which made for the sufficient causal chain for the onset of disease could vary greatly from one patient to another. This entailed a kind of network-view of interrelated remote causes whose combinations could differ from case to case (Hamlin, 2006). If one was to write a comprehensive study of a certain disease, the aetiological chapter would typically consist of an aggregation of all observed remote causes considered relevant (Carter, 2003, pp. 10–23.)

When misuse of alcohol was singled out as a special remote cause of diseases, the aetiological logic outlined above was extended into considerations on the other remote causes that excessive drinking was commonly associated with. Although a rather eclectic and pious moralist-cum-physician, Benjamin Rush provides a telling encapsulation of this logical extension: “Nearly all diseases have their predisposing causes. The same thing may be said of the intemperate use of distilled spirits.” (Rush, 1823, p. 20)

The causes that predisposed to excessive drinking were not the only factors that made up the aetiologies of alcohol-related diseases. Given that similar drinking habits could cause a given set of symptoms or

a disease for someone while no observable health problems for another, factors such as physical environment and personal constitution were considered decisive especially for exciting causes. Still, as misuse of alcohol was the necessary cause of misuse-related diseases, the causes of drinking and excessive drinking received special attention.

These aetiological musings were largely analogous to concurrent views posited on environmental public health threats. The causes that brought people in contact with harmful agents such as poisons or contaminated air were seen to warrant attention (Hamlin 2006, 26). When it came to alcohol, the causes that brought people into contact with the substance and contributed to immoderate drinking were commonly seen to reside in the sphere that can be called socio-cultural.

The elementary logic in construing alcohol misuse as a phenomenon connected to factors beyond wilful acts of the drinking individual leant on a biographical approach. Doctors' musings on the issue resulted in narratives of individual drunkards' life histories but also of the drinking customs that prevailed in society. In the early tracts written by British doctors, and in Trotter's *Essay* in particular, references to patients' case histories merged with a more general discussion on the history of drinking and its manifestations in contemporary societies. The "data" for such general considerations came from everyday observations as well as historical accounts and sources ranging from Plato to the Bible. The doctors explained the excessive drinking customs in the vein of the Enlightenment-born historical sociology where customs and institutions were "ex-

plained" by the history that had produced them (see Berry, 1997, pp. 54–55).

Socialisation into these customs brought an individual into contact with alcohol. People could get in touch with alcohol through various routes. The habit could be learned in childhood from the parents (Fothergill, 1796, p. 19; Trotter, 1804, pp. 154–155), or through socialisation into to the mores of certain occupations – especially if the handling of alcohol was part of one's occupational duties (Rush, 1823). In his book on the health of the seamen, the long-time naval physician Trotter described the characteristics of sea life that predispose sailors to immoderate use of alcohol as follows:

"The early entrance on ship-board, [...] before an education has been completed to regulate the moral conduct; the bad example of others; and the abominable custom of grog-drinking, lay the first foundation for this most pernicious practice: to all these may be added, those merry makings and gusts of joy, which the thoughtless sailor plunges himself into, when he returns from a long voyage, and with plenty of money in his pockets." (Trotter, 1797, p. 399)

With the growing number of patient cases observable in the hospital medicine world, predisposing causes were towards the mid-19th century discussed more systematically in terms of age, sex, occupation, domicile (urban/rural), dwelling conditions, and so forth. The chapter on aetiology in Magnus Huss' *Alcoholismus chronicus* follows this very analytical formula, an earlier notable example of which was Franz Wilhelm Lip-

pich's 1834 *Grundzüge zur Dipsobiostatik*. Based on the application of “numerical methods” to the total of 139 patient cases, Huss argued that a typical sufferer of chronic alcoholism in Stockholm was a middle-aged working-class male who had for many years been in the habit of drinking. The typical amount of drinks was five or six glasses of spirits daily as part of a customary diet and some more on weekends for recreation (Huss, 1849 & 1851, II, pp. 173–174).

The more numerous cases offered a view not only to the typical case but also to variation in the role that drinking played in the lives of Swedes. The meaning and uses of alcohol were different for a widow who had recently lost her husband compared, for example, to a sailor who used to drink heavily after coming ashore (1849 & 1851, II, pp. 155, 173). Sensitivity to drinking as a meaningful practice thus remained even when more rigorously analytical outlooks came to the fore.

Huss' work drew heavily on an earlier study by German doctor Carl Rösch. As for aetiology, Rösch had postulated a notion referring to an inclination or devotion to drink – *Trunkergebenheit* – as a mediating concept between drinking behaviour and its predisposing causes. The most general cause of the devotion according to Rösch was the “tendency of all human beings towards pleasure, the prospect of entering by the consumption of intoxicating drink into that poetic, blissful state where you forget everything that is unpleasant in the life on earth” (Rösch, 1839, p. 155).

The human tendency towards pleasurable feelings and the passion of sorrow as a cause of drinking had been recognised by earlier medical writers, as well as by

18th-century philosophers and Romantic writers interested in the altered states of the mind (Nicholls, 2009, pp. 59–72; Taylor, 1999). The “social” approach to the theme in early 19th-century medical thought shows in Rösch's attention to observable variation among people in their devotion to drinking. Some of the variation could be explained by differences in physical constitution and psychological temperament (1839, pp. 158–159), but to a notable degree it came down to what the *life on earth* was like for different people. Rösch discussed physical labour and irregular employment which troubled, for example, day labourers, and socialisation into the custom through imitation (1839, pp. 155–157). Poverty, “where the most necessary needs are lacking”, was “not the rarest cause of drinking devotion” (1839, pp. 157).

With some exceptions, such as George Cheyne's allusions, this kind of view on the social dynamics of drinking behaviour had not been commonplace a century earlier. As Jessica Warner has argued, the early 18th-century medical commentators of the British gin epidemics adhered to much more reactionary social thought (Warner 2003). Drawing on the outlooks of political arithmetic, they demonstrated that increase in the production and consumption of gin was linked to social unrest and ill health among the labouring poor (Warner 2011). Yet they failed to acknowledge the mediating factors, especially the social conditions of the poor, by which the drinking-related harm was compounded (Warner 2003). The early 19th-century clinicians discussed much the same macro-structure phenomena – legislation and increased availability of alcohol – as their

early 18th-century British colleagues had done (Rösch, 1839, pp. 261–299; Huss, 1853). Yet they were more sensitive to the dynamics of social interaction and social conditions as factors underlying the life-histories of their alcoholic patients, and contributing to the prevalence of excessive drinking and drinking devotion in society. The notion of socio-cultural embeddedness of alcohol-related phenomena had a bearing on the turn-of-the-19th-century medical ideas on “addiction” as well.

Habitual drunkenness and compulsive drinking as pathologies

The idea that habitual intemperance could turn into “second nature” to the point where it undermined one’s attempts to break the habit was an integral part of the dietetic understanding on alcohol already in the early 18th century (Porter, 1985). The idea was shared by early modern doctors and priests (see Warner 1994), whose respective attempts to promote a temperate manner of living and warn away from intemperance were but two sides of the same ethical/medical concern with virtuous and healthy living. As it has been inscribed into texts dating from the 18th century, the pernicious habit of excessive drinking appears also in the patients’ and doctors’ self-reflections upon their personal tribulations with alcohol (see Madden, 1967; Cheyne, 1733, pp. 325–326). To an extent, the late 18th- and early 19th-century medical views on habitual drunkenness built on these notions. Yet the traditional understanding was also transformed.

It needs to be emphasised that the late 18th-century medical concern with habitual drunkenness as a disease was closely connected to the pronounced conscious-

ness about misuse-related diseases. When misuse of alcohol was thematised as a distinct cause of diseases it became the more obvious that successful therapy of those diseases would rely on changing the habit. Thomas Trotter, for example, explicates the logic quite clearly: “Whatever this disease may be, whether stomach complaints, with low spirits, premature gout, epilepsy, jaundice, or any other of the catalogue, it is in vain to prescribe for it till the evil genius of the habit has been subdued.” (Trotter, 1804, p. 171) In Benjamin Rush’s works, too, the importance of ‘curing’ the habit stems from the therapy of alcohol-induced diseases.

The oft-quoted call for total abstinence by Rush and Trotter was only a part of their suggested methods for dealing with the more insistent habits of drunkenness. While Rush (1823, pp. 31–36) recommended doctrines of Christian religion along with heroic measures such as drowning into cold water and association of unpleasant feelings with the image of drinking, Trotter’s approach echoed the patient-centred ethos of “bedside medicine” and its biographical approach to individual cases. Instead of laying down general rules, Trotter states that doctor must “scrutinize the character of his patient, his pursuits, his modes of living, his very passions and private affairs. He must consult his own experience of human nature, and what he has learned in the school of the world.” (Trotter, 1804, p. 172) The remote causes discussed above have a bearing on the therapeutic process as well: “The perfect knowledge of those remote causes which first induced the propensity to vinous liquors, whether they sprung from situation in life, or depended

on any peculiar temperament of body, is necessary for conducting the cure.” (Trotter, 1804, pp. 3–4)

The habit was understood to have its physiological underpinning in the disordered functioning of the nervous system over-irritated by prolonged use of an artificial stimulus. The cessation of drinking was aimed to affect this facet of the problem, but the more important task was to propose something that would “effectually wean” the patient’s “affections from it.” (1804, p. 180) While rational arguments were often in vain, Trotter noted that much could be achieved by rousing particular passions such as “a parent’s love for his children, the jealousy attached to character, the desire of fame, the pride of reputation, family pride, &c.” (1804, p. 188)

The emergence of more objectifying analytical outlooks in the first half of the 19th century gave birth to a qualitatively different concept of excessive drinking as disease. The habit of drunkenness for Trotter was not a clear-cut either/or category dividing symptomatically distinct “pathological” drinking from “normal” drinking but a matter of degree. In turn, Carl von Brühl-Cramer’s (1819) famous concept of dipsomania (*Trunksucht*) delimited the disease status to a condition with a clear defining symptom, involuntary craving to drink oneself into intoxication. Brühl-Cramer developed a typologisation of dipsomania according to the frequency and the typical course of the involuntary bouts of drinking. The German doctor practising in Moscow differentiated between continuous, remittent, intermittent, periodic and mixed forms of dipsomania (see Kielhorn, 1996, pp. 123–124). Each form followed

a particular course of events which was, along the lines of analytical outlooks, supposed to reduce to alterations in the state of the nervous system. Accordingly, the aim of therapy was to affect the physiological basis of the compulsion with medications such as sulphuric and nitric acid.

The concept of dipsomania did not refer to all misuse of alcohol, but to symptomatically specific involuntary bouts of excess. Rösch highlighted the difference between the devotion to drink and the compulsive craving of dipsomaniacs as defined by Brühl-Cramer. Huss argued to the same effect, remarking that among the total 139 cases of chronic alcoholism he had studied, only three patients could be diagnosed as dipsomaniacs in the true sense of Brühl-Cramer’s definition (Huss, 1849 & 1851, II, pp. 47–56). The same demarcation can be found in the work of Jean-Étienne Dominique Esquirol. A rare contribution from a psychiatrist (and from a Frenchman) to the behavioural problematic of alcohol misuse in the first half of the 19th century, Esquirol’s concept *monomanie d’ivresse* distinguished a mental disease characterised by an involuntary craving stemming from a “disordered condition of the system” from other causes of alcohol abuse (Esquirol, 1845, p. 352).

Despite doctors’ aspiration objectively to demarcate between diseases and normal states, it was also admitted that it was often difficult clinically to discern between a mere devotion to drink and the pathological craving – not least because the craving was understood to develop from an ordinary desire for alcohol (Huss, 1849 & 1851, I, pp. 151–152).

In its early 19th-century form, *dipsomania* stood next to *delirium tremens* and

chronic alcoholism in that it was understood to be an alcohol-specific disease. Alcohol misuse was the necessary cause of the condition; the disease did not develop unless one had for a longer time been in the habit of drinking excessively (Huss, 1849 & 1851, II, p. 48). Hereby the remote causes of misuse discussed above under the rubric *socio-cultural* were integral to the aetiology of this “addiction disease”, too. Doctors’ empirical approach to the antecedents of alcohol misuse thus facilitated putting notable weight on “nurture” when it came to the causes of drinking and excessive drinking – including “addiction” as a disease. The moral implication of the fact as expressed by Brühl-Cramer was that “since moderate drinking is not considered immoral, the disease cannot be immoral” (cited in Bynum, 1968, p. 171). The breakthrough of the doctrine of hereditary degeneration in the latter half of the 19th century changed the scenery, as it facilitated viewing habitual drunkards as inherently deviant individuals (see Bynum, 1984).

By the mid-19th century therapeutic optimism as for curing compulsive craving had somewhat waned among the clinicians, for experience seemed not to substantiate it. Magnus Huss concluded in an 1856 piece on the subject that all medical methods tried so far had proved more or less futile, just like religious and moral approaches (Huss, 1856, p. 72). Yet the problem was not ignored by physicians but institutionalised during the latter half of the 19th century as specialised alcoholic asylums were established. The *raison d’être* of the institutions that emerged in the United States and in Europe was precisely the treatment of and research on alcohol addiction, or “inebriety” (Lender, 1979;

Berridge, 1990; Valverde, 1997; Prestjan, 2004). The new profession of “inebriety specialists” focused on the issue formerly discussed by general practitioners as a sub-question among alcohol-related diseases and their aetiology. Hereby the late 19th-century institutions facilitated reformulation of the behavioural problematic by giving excessive drinking as an individual pathology a prime position among the problems of alcohol.

Conclusion

The institutional and intellectual contexts of late 18th- and early 19th-century European medical thought on alcohol have gone relatively neglected in previous historiography. In this article I have examined the emergence of studies on alcohol at that time against the backdrop of concurrent transformations in medical practice and knowledge-formation. In keeping with the general aspirations to base medicine on empirical grounds, the interest in alcohol-related pathologies culminated in attempts to build an objective body of knowledge on the ills consequent on alcohol misuse. I have highlighted that the empirical approach was also extended from the clinical problematic of consequences to the behavioural problematic of misuse itself by way of search for the remote causes of alcohol use and misuse. The development of both the “consequences” and the “behavioural” problematic was characterised by a move from natural historical outlooks to the analysis of the compounds of the phenomena. What remained central throughout, however, was the biographical or “cultural” approach and the view it opened to drinking as an meaningful aspect of a manner of living.

The early wave of medical studies on alcohol discussed above established alcohol misuse as an object of medical inquiry. It was followed by a further expansion of studies into various aspects of the issue in the late 19th century (see Abderhalden, 1904), not to mention the 20th century. Today, the adverse effects, acute and chronic, of alcohol use on body and mind constitute a rather uncontested object of clinical diagnosis and treatment largely informed by biomedical research. The “behavioural problematic”, in turn, has evoked and continues to stir much more debate. The 20th century saw the elaboration of two rather distinct and even mutually antithetical “research programmes” (Lakatos, 1978) on alcohol use behaviour: bio-medically oriented research on alcohol addiction as an individual disease; and social epidemiological research on the social determinants of population-level health problems related to alcohol use. Earlier historiography of late 18th- and early 19th-century medical thought on alcohol has portrayed the era’s doctors as forerunners of the former, individualising approach. In this article I have shown that sensitivity to the problem-orientation and the epistemic outlooks of the era undermine any straightforward argument to that effect. In historical hindsight,

the defining feature of the era’s medical thought on alcohol was rather the articulation of a more holistic view incorporating elements that can now be found scattered in both social epidemiological and more individualising paradigms – as well as cultural studies on alcohol use as a meaningful practice.

To what extent the articulation of the socio-cultural embeddedness of alcohol-related harm comes down to specifically European ways of thinking and institutional settings as compared to American medical concern with alcohol in the late 18th and early 19th centuries (cf. Osborn, 2006, 2009) would constitute an interesting point of historical comparison. Making all allowances, it needs to be noted that the synthetic and generalising nature of my account leaves room for more focused studies on national traditions, debates and points of contention within Europe as well.

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