Depersonalized case histories in the Babylonian therapeutic compendia

Johnson, Justin

DOI:

[10.1515/9781501502507-012](https://doi.org/10.1515/9781501502507-012)

License:

None: All rights reserved

Document Version

Publisher's PDF, also known as Version of record

Citation for published version (Harvard):

Johnson, J 2015, Depersonalized case histories in the Babylonian therapeutic compendia. in J Cale Johnson (ed.), *In the Wake of the Compendia: Infrastructural Contexts and the Licensing of Empiricism in Ancient and Medieval Mesopotamia*. Science, Technology and Medicine in Ancient Cultures, vol. 3, De Gruyter, Berlin, pp. 289-316. <https://doi.org/10.1515/9781501502507-012>

[Link to publication on Research at Birmingham portal](#)

General rights

Unless a licence is specified above, all rights (including copyright and moral rights) in this document are retained by the authors and/or the copyright holders. The express permission of the copyright holder must be obtained for any use of this material other than for purposes permitted by law.

- Users may freely distribute the URL that is used to identify this publication.
- Users may download and/or print one copy of the publication from the University of Birmingham research portal for the purpose of private study or non-commercial research.
- User may use extracts from the document in line with the concept of 'fair dealing' under the Copyright, Designs and Patents Act 1988 (?)
- Users may not further distribute the material nor use it for the purposes of commercial gain.

Where a licence is displayed above, please note the terms and conditions of the licence govern your use of this document.

When citing, please reference the published version.

Take down policy

While the University of Birmingham exercises care and attention in making items available there are rare occasions when an item has been uploaded in error or has been deemed to be commercially or otherwise sensitive.

If you believe that this is the case for this document, please contact UBIRA@lists.bham.ac.uk providing details and we will remove access to the work immediately and investigate.

J. Cale Johnson

Depersonalized Case Histories in the Babylonian Therapeutic Compendia

Abstract: Standard histories of medicine identify Hippocratic texts such as *Epidemics* as the earliest medical case histories in human history. In contrast to the Hippocratic case histories, it is often stated that Babylonian medicine made no use of individual case histories. In this paper, I investigate ‘depersonalized case histories’ in the Babylonian therapeutic corpora (ca. 800–600 BCE, although in many cases probably based on earlier lost sources). On the face of it, the suggestion that certain complex collocations of symptoms derive in a straightforward way from individual cases might seem far-fetched, or at minimum not a demonstrable interpretation. Comparison of Babylonian therapeutic texts with the treatment of ‘cases’ in Mesopotamian law, in particular in so-called imperial rescripts in which an individual case is converted into a general statute, suggests that certain clusters of symptom descriptions actually represent ‘depersonalized’ case histories in which personal details have been intentionally omitted from the tradition in order to make these cases suitable for inclusion within *authoritative* (or as I suggest we call them *infra-structural*) technical corpora. The identification of this process of ‘depersonalization’ may also play an important role in bringing epistemological critiques of one kind or another (Foucault on ‘the clinical sciences’ or Forrester on ‘thinking in cases’) into a fruitful dialogue with Mesopotamian materials.

1 Introduction

Technical compendia, ancient or modern, impress us all with their apparent completeness, reliability, and timelessness, of essential facts presented in a transparent, ostensibly non-rhetorical format. Moreover, editions of ancient technical compendia, particularly those that can be easily mapped into present-day technical disciplines (e.g., the Astronomical diaries)¹ leverage the force, rhetorical and otherwise, of modern science and make no apologies. But then again astronomical and mathematical materials from ancient Mesopotamia – even if somewhat marginalized in general histories of science – have always enjoyed a privileged status as exemplars of scientific thought within Assyriology. Questions of their empirical validity, for example, have become pre-eminent in discussions of ancient Mesopotamian science,² and the absence of a complex semiotics of observation (much less

1 See Sachs and Hunger 1988, 1989, 1996.

2 Most recently Rochberg 1999; 2004; Grasshoff 2011 and Rochberg 2011.

the social variables that occur in therapeutic texts) have allowed investigations of Babylonian astronomy and mathematics to be carried out without too much attention paid to the textual or social mediation of these disciplines.³

As always, the discussion of these definitional issues within Assyriology reflects on-going debates about the history of science within the broader academy. As Rochberg has repeatedly emphasized (see her contribution in this volume as well), there are usually two comparanda in the minds of readers: the supposed invention of science in ancient Greece and the development of ‘modern’ scientific methods in early modern Europe. Since Rochberg has dealt with the question of Greek rationalism at length in this volume, let me say just one or two words here about how recent methodological discussions of how we should investigate ancient science are relevant to the definition of medical case histories as a transhistorical genre. In print perhaps the most enlightening exchange in recent years was in a broadside from Lorraine Daston entitled “Science Studies and the History of Science” (2009) and the response it drew from Peter Dear and Sheila Jasanoff (2010). Leaving aside the *hinter den Kulissen* aspect of the two pieces (and bracketing the discussion of disciplinary identity, which plays out quite differently in work on the ancient world), the key issue raised in Daston’s paper was the problem of anachronism and its usual doppelgänger teleological or Whig histories of scientific reasoning. Simplifying Daston’s argument somewhat, historians of science act like historians and seek to drive out anachronism and Whig histories at all costs, largely by burrowing into archives and building up micro-historical explanations that also have explanatory power at the macro-historical level, while the Science and Technology Studies (STS) movement has not learned these lessons and continues to place a ‘presentist’ ideological critique at the center of their agenda.

If we take the twin problem of anachronism and Whig histories seriously, *mutatis mutandis*, the key danger we face in attempting to expand the genre of ‘medical case history’ into a time and place where it has not previously been identified, viz. ancient Mesopotamia, is that we map a Graeco-Roman technical genre into a decidedly non-Graeco-Roman historical context. Thus much of this paper is concerned with describing how case histories worked in specifically Mesopotamian contexts. It should come as no surprise that case histories are very different things in the Graeco-Roman world and in ancient Mesopotamia and that consequently we will be pre-occupied here with defending the existence of case histories in Mesopotamia rather than carrying out a point-by-point comparison of Graeco-Roman and Mesopotamian case histories. Only through a careful investigation of the role of juridical models in ancient Mesopotamian thought (especially scientific thought), and in particular the role of depersonalization in transforming a legal rescript into

3 Recent work by Robson and on the social history of Mesopotamian mathematics (2008) and empiricism in the Neo-Assyrian court (2011) or Ossendrijver on the social network behind late Babylonian astronomy (2011) are the outliers that prove the rule.

a new statute promulgated by the ruler, can we begin to see how depersonalization was a standard institutional response to new cases and situations in Mesopotamian elite culture. And while we should keep the ideological critique of STS in view, Daston's suggestion that we focus on the micro-historical context of Mesopotamian case studies and the way in which they impact on macro-historical questions will preoccupy us here.

Central to our description of 'depersonalized case histories' as a legitimate element in the history of medicine will be a heightened concern for the relationship between notational practice and the institutional contexts in which notational practice takes place. This emphasis fully agrees with the "technical turn in the humanities", as Ben Kafka has recently christened it:

Inspired largely by science studies, humanists have started to think seriously about the technics of knowledge. With respect to the history and theory of paperwork, we can probably trace this approach back to Bruno Latour's essay "Visualization and Cognition: Drawing Things Together," which illustrated how science studies might illuminate the production of other kinds of official or quasi-official knowledge.⁴

But even if Science (and Technology) Studies has largely inspired this 'technical turn', Daston's recent paper on "The Sciences of the Archive" (2012) allows us to remain agnostic vis-à-vis the on-going debates between STS and orthodox historians of science. In the uncertain zone of intersection that sometimes exists between Graeco-Roman and Babylonian medicine, however, the interdependence between notational technique and institutional practice operates quite differently. And, in fact, much of what I suggest in this paper could be boiled down to a very simple description of the difference between medical case histories in Greece and Mesopotamia. In Mesopotamia, I would like to suggest, the medical discipline was thoroughly professional and indeed fully institutionalized: would-be 'physicians' were expected to have mastered a fixed corpus of both written and oral tradition, and the written materials were quasi-official standardized compendia. When the ruler chose his royal physicians, they would invariably have been drawn from the most accomplished members of these quasi-official institutions. The institutional contexts at work in Mesopotamia also, as I propose below, led to a fairly strict implementation of a 'common ground filter' that prevented disputed, largely oral materials from being introduced into the written corpus. In the *Introduction* to the volume I have written about the 'infrastructural compendia' that came into existence in this type of environment, so I have not reiterated those arguments here.

On the contrary, the Hippocratic corpus, as specialists in Graeco-Roman medicine regularly point out, is a mixed bag of genres meant for a widely divergent set of audiences. Moreover, since the social character of medicine in the Graeco-Roman world seems to have been far less institutional in the strict sense of the term,

⁴ Kafka 2012, 110, citing Latour 1986.

it is little wonder that teacher-student relationships and informal networks took the place of institutional entities in the eastern Mediterranean. Informal networks made up of teacher-student affiliations necessarily require that the teachers in question issue new texts under their own names, an idea that only takes place on a handful of occasions in all of cuneiform literature. Thus from a macro-historical point of view, it is precisely the absence of formal, royally sanctioned institutions that allows a public and explicit history of leading medical thinkers to arise. If we look at the place of the case histories in *Epidemics* in the broader history of Graeco-Roman medicine, it is fairly clear that the case histories were central to Galen's positioning of himself with respect to 'Hippocrates' and the epistemologically oriented schools of thought in Hellenistic Greek medicine.⁵ Moreover, as van der Eijk has emphasized, Galen's transformation and repurposing of individual case histories drawn from the *Epidemics* was actually meant to further his own brand of 'qualified experience', itself an attempt at a partially Aristotelian reading of the *Epidemics*.⁶

As these few citations make clear, both the micro- and macro-historical aspects of the case studies contained in the *Epidemics* have been the object of extensive study and reflection, but the same cannot be said for the Babylonian materials at either level of analysis. Unlike the diagnostic materials, for which we have a well-known historical moment at which the tradition was reorganized and even the name of the editor in charge of this reorganization, viz. Esagil-kīn-apli, the therapeutic materials are authorless and include few, if any, traces of internal reorganization or revision. In our efforts to develop a meaningful historical background for the Babylonian therapeutic corpora – the largest in the ancient world other than the materials in Greek and Latin – we are therefore thrown back on the texts themselves, nearly all of which are late, fragmentary and skeletal. Rather than making this into a tale of two cities, or better a tale of two therapeutic traditions, I would also like to suggest that the Mesopotamian materials raise crucial theoretical issues, particularly in reference to recent discussions of 'styles of reasoning' and historical epistemology (see my discussion of the 'two paradigms' in the *Introduction*).

2 'Thinking with cases' as an epistemological paradigm

While specialists in ancient medicine have been preoccupied by a range of questions that are specific to the Hippocratic case histories, historians of science have

⁵ van der Eijk 2007; van der Eijk 2012; Berrey 2013.

⁶ van der Eijk 2007, 293; van der Eijk 2012.

increasingly focused on the compilation of compendia of case histories as a distinct form or style of reasoning. If the depersonalized case histories of the Babylonian therapeutic tradition were central to early scientific thought in Mesopotamia, as I would suggest, the nuances of ‘thinking with cases’ within particular sectors of specialized knowledge (including the development of different types of case-driven compendia) becomes one of the central questions within a history of early Mesopotamian scientific reasoning. Can we imagine a brand of Mesopotamian scientific thought that is more concerned with ‘procedural’ than ‘empirical’ truths? Or more simply, how would a member of the Mesopotamian literati have defined a given statement or description as true, valid or correct? What I would like to suggest here is that the juridical paradigm, which was used to validate particular statements as true, generally valued procedural and hierarchical correctness over a narrowly defined set of correspondences to the natural world. The obvious corollary is that a specifically medical ‘empiricism’ is not built into the system, but only emerges in moments of rupture or reorganization.

Historians of science such as Crombie, Hacking and Forrester have argued for distinct ‘styles of reasoning,’ and Forrester in particular has emphasized the special relevance of ‘reasoning in cases’ as a seventh style of reasoning alongside the six that Crombie originally outlined.⁷ Forrester traces case-driven epistemological models – largely case-driven pedagogical models – through Kuhn and the use of the Socratic method in American law schools before arriving at the work of Michel Foucault. Aristotle had famously denied the relevance of individual facts, to which Foucault juxtaposes the emergence of the ‘clinical sciences’:

The examination that places individuals in a field of surveillance also situates them in a network of writing; it engages them in a whole mass of documents that capture and fix them ... Thanks to the whole apparatus of writing that accompanied it, the examination opened up two correlative possibilities: firstly, the constitution of the individual as a describable, analyzable object ... and, secondly, the constitution of a comparative system that made possible the measurement of overall phenomena, the description of groups, the characterization of collective facts, the calculation of the gaps between individuals, their distribution in a given ‘population’. One is no doubt right to pose the Aristotelean problem: is a science of the individual possible and legitimate? A great problem needs a great solution perhaps. But there is the small historical problem of the emergence, toward the end of the eighteenth century, of what might generally be termed the ‘clinical’ sciences; the problem of the entry of the individual (and no longer the species) into the field of knowledge ...⁸

Foucault goes on to introduce his notion of biopower, which Forrester quite rightly situates in Foucault’s equally well-known “attachment to traditional political theory, with its emphasis on sovereignty and law as the source of legitimate power and

⁷ Forrester 1996, apud Furth 2007.

⁸ Foucault 1977, 185–191, apud Forrester 1996, 12.

authority within the nation-state”.⁹ Foucault correctly recognizes the centrality of notational practices in the development of these ‘new’ clinical sciences, but of course there is nothing new at all about attaching the particular details of the event, situation or population in which an individual finds him- or herself within a document. This was the hallmark of the earliest administrative records in Mesopotamia (ca. 3300 BCE) and remains the predominant goal of administrative systems throughout the rest of Mesopotamian history. Indeed, within the specific intellectual history of Mesopotamian cuneiform traditions, it is the very opposite phenomenon, viz. the intentional ‘depersonalization’ of an individual event that was exceptional.

Within the Assyriological literature itself, depersonalized texts need to be rigorously distinguished from so-called ‘scribal exercises’ or ‘model’ texts. Scribal exercises and model texts are normally identified in the administrative or legal genres by the absence of personal names, dates and locales in combination with an overly schematic set of numerals or internal calculations. Texts such as these represent an abstract template that has been extracted from an administrative or legal procedure (and the innumerable documents that conform to the template) rather than an individual case. In speaking of a text as ‘depersonalized’ I mean something quite different: namely, an individual case, transaction or situation (originally specified by the individuals involved, location and date) from which the distinctive traces of individual participants have been purposefully removed. This depersonalization – entailing a host of reconfigurations in the text itself – was seen as a necessary step before a new ‘case’ could be introduced into a standardized compendium. And at least in Mesopotamia, the most important example of this type of depersonalization and codification has only been unearthed in recent years in the historical procedure through which a new legal statute could be promulgated by a Mesopotamian ruler, although processes of abstraction and summary within second-order administrative documents have a long and complex history in Mesopotamia (see *Depersonalization in Mesopotamian legal compendia* below).

One of the most important discussions of case histories as a ‘style of reasoning’ may be found in Charlotte Furth’s introduction to *Thinking With Cases: Specialist Knowledge in Chinese Cultural History* (Furth *et al.* 2007). As Furth and many of the contributors to this volume reiterate, the compilation of case histories makes more sense in certain epistemologies and the institutional contexts in which these epistemologies are rooted.

Cases are connected to one another by common patterns, while at the same time they never deny ‘the priority of individual cases over any possible generalizations invoking them.’

⁹ Forrester 1996, 12; Forrester cites Foucault’s “later work on governmentality and pastoral power”, in the form of several short papers and interviews (for example, Foucault 1981, 225–254 and 1988), but see now the new publications of his courses at Collège de France 1978–1980.

Whatever the field, a case record sets out some truth claim that is specific to an individual situation, while the accumulation of individual narratives forms an archive available for consideration in common.¹⁰

One point in Furth's discussion that is of particular relevance to the Mesopotamian situation is the priority given to individual cases, even in the context of generalization. This notion is particularly relevant in that Mesopotamian texts, as a rule, do not engage in explicit meta-commentary or theorization, preferring to allow the classification and configuration of individual cases to project implicit theoretical models. This may have resulted from the reluctance on the part of Mesopotamian scribes to put in writing any statement that did not belong to the discursive 'common ground' of an entire school. But even beyond this reluctance, I would also like to suggest that legal processes of adjudication served as a privileged epistemological model for the establishment of technical realities of professional practice in Mesopotamia, even the specifically technical questions of Babylonian medicine (on the specific interaction between textual compendia, the performative speech at the center of an act of judgment and professional identity, see the *Introduction* to this volume).

3 Depersonalization and imperial rescripts in the Mesopotamian legal tradition

One of the most vexed and contentious questions in the entire history of Mesopotamian law centers on the status and fixity of the Mesopotamian law codes such as the Codex Hammurapi. These collections of legal statutes are often taken as purely ideological devices, meant to impress upon the population the role of the ruler as a 'just king' and lawgiver. This point of view is perhaps best represented in F. R. Kraus's famous paper "Ein zentrales Problem des altmesopotamischen Rechtes: Was ist der Codex Hammu-rabi?" (1960). Kraus suggested that "the codes were an academic exercise, part of the proto-scientific activity of scribes, on a par with the omen lists and medical treatises", and as Westbrook goes on to say, "[t]his thesis, further expanded by Bottéro, has gained wide acceptance among Assyriologists".¹¹ Put somewhat differently, the *communis opinio* was that the codes were not meant to be cited in the way that a magistrate in our own age might cite a standardized compendium of legal statutes.

Kraus's statement that the Code of Hammurapi was "part of the proto-scientific activity of scribes, on a par with omen lists and medical treatises" may strike many readers, particularly those not trained in Assyriology, as odd, and the use of

¹⁰ Furth 2007, 4.

¹¹ Westbrook 1989, 201.

juridical texts and procedures as models for the validation and codification of medical knowledge certainly contravenes one of the founding principles of Foucault's famous etiology of the clinical sciences.¹² Nonetheless, the textual form of Greek law codes played a substantial role in Langholf's path-breaking work on the earliest strata in *Epidemics* and their precursors in *On Diseases*, and Langholf's work in turn served as one of the major inspirations for Geller's work on the similarities between the earliest Greek medical texts and the Mesopotamian *Diagnostic Handbook*.¹³ The idea behind Kraus's statement, however, finds its best exposition in Bottéro's description of the role of the Code of Hammurapi as a model for other forms of scientific endeavor, not least the omen compendia.

Les « lois » des « codes », ce sont en réalité des « cas » (le « code » de Hammurabi les appelle lui-même des « décisions de justice »): c'est-à-dire des problèmes juridiques suffisamment dégagés de leurs circonstances trop individualisantes, exposés en leurs données essentielles, puis résolus selon l'esprit de ce droit non écrit qui était le seul en vigueur en Mésopotamie. La casuistique de ces « codes » consistait à grouper ces problèmes autour d'un même sujet, dont on faisait varier les données, de manière à montrer le plus d'aspects possibles d'une question, un peu comme varient les éléments de nos paradigmes grammaticaux.¹⁴

Bottéro's statement, though still reliant on the idea that the “spirit of the unwritten law ... was the only (legal) force in Mesopotamia”, makes it clear that the Code of Hammurapi was conceptualized as a collection of individual cases and that it served as a model for the compilation and reorganization of other types of ‘technical’ compendia.¹⁵

In the same foundational paper from Westbrook, whose summary of Kraus we mentioned above, Westbrook reiterated the *communis opinio* that Mesopotamian law codes did not represent normative positive legislation, while at the same time emphasizing that the only Mesopotamian legal instrument that is known to have been used to perform legally binding acts, viz. the royal edict, was

¹² Foucault 1977, cf. Forrester 1996, 13. Foucault's *La vérité et les formes juridiques* (1994), which I know only from a German translation (2003), speaks to many of the issues here in play and is a useful ‘introduction’ to more recent works tackling the question of how legal procedures are capable of validating knowledge such as Latour 2010 (2002) and Kafka 2012.

¹³ See Langholf 1990, 70–71 and Geller 2004 respectively.

¹⁴ Bottéro 1974, 173.

¹⁵ As already made perfectly clear in Bottéro's account and subsequently elaborated in Steinkeller's well known paper entitled “Of Stars and Men: The Conceptual and Mythological Setup of Babylonian Extispicy” (2005), legal models were central to native conceptualization of omina, and thus central to Mesopotamian theories of knowledge and belief systems more generally. Fincke and Rochberg have revisited these links in recent years (Fincke 2007 and 2009, Rochberg 2009 and 2010, references courtesy N. Anor, who will treat these issues in his dissertation). We should carefully avoid conflating native beliefs about the source and legitimacy of ominous signs with similarities in procedure and textual production in two distinct areas of specialized knowledge, viz. law and medicine. For a sustained critique of ‘divinatory empiricism’ (a modern construct for which there is no Mesopotamian evidence), see Rochberg 2010.

always retrospective; it affects existing and not future contracts. This is in strong contrast to modern legislation, for which the norm is prospective rules. In short, the principal areas of substance in a legal system: property and inheritance, family law, contract and delict – areas that receive the full attention of the cuneiform legal codes – are virtually ignored in the only true legislative instrument of the cuneiform sources, the royal edict.¹⁶

Just a few years after Westbrook's carefully argued summary and defense of the academic character of the law codes, C. Janssen published a curious royal letter issued by Hammurapi's son Samsu-iluna (reigned 1749–1712 BCE, middle chronology) and preserved in four later copies.¹⁷ The letter describes two legal cases involving a type of female priestess known as the *naditu*. These *naditu*-priestesses were seen as married to the sun-god Shamash in Sippar, were not allowed to marry within the human species, and lived together in a cloister throughout their lives.

In both of the legal cases mentioned in the letter, the economic well-being of a *naditu*-priestess was threatened: in the first instance because her family had not provided an endowment for her living expenses, as was the norm, and in the second case because a creditor to whom one of her family members owed money wanted to seize the *naditu*'s slave as payment for the debt. Crucially these two situations are not covered by the famous Code of Hammurapi, which Samsu-iluna's father Hammurapi had established, and Samsu-iluna was forced to develop a new piece of legislation in order to prevent the impoverishment of the cloister. The royal letter published by Janssen is Samsu-iluna's response to these two cases involving hungry *naditu* and, in the words of Dominique Charpin, the letter is "altogether remarkable, both from the standpoint of its composition and from that of its legal significance".¹⁸ The second complaint, for instance, describes a particular legal case:

"The judge Awil-Sin has a claim of money owed by Mar-Shamash, a man from Sippar. Because the latter did not pay it back, he seized Mar-Shamash, saying:

'If you keep your property and I receive nothing, I will seize the slave of your daughter the *naditu*-priestess of Shamash, who lives in the cloister'.

That is what he said."

That is what they told me.

In response to the specifics of this legal case, however, the king does not issue a specific response along the lines of "Awil-Sin is not allowed to seize the slave of the *naditu* in question", but rather issues a general legal rule that looks very much like the statutes that appear in the Code of Hammurapi. As Charpin emphasizes, "[e]ven the style of the passage is altogether similar to the verdicts (apodoses) of the Code of Hammurabi":¹⁹

¹⁶ Westbrook 1989, 217.

¹⁷ Janssen 1991.

¹⁸ Charpin 2010, 74.

¹⁹ Charpin 2010, 74.

A *naditu*-priestess of Shamash whose father and brothers have provided her support for her to live and for whom they wrote a tablet, and who lives in the cloister, is not responsible for the debts or the *ilku*-service of the house of her father and her brothers. Her father and brothers shall perform their *ilku*-service and ... Any creditor who seizes a *naditu*-priestess of Shamash for the debts or the *ilku*-service of the house of her father and brothers, that man is an enemy of Shamash!²⁰

It is precisely this way of transforming a historically concrete moment into an abstract ‘if p, then q’ statement, with the central actors in the original case now replaced with exceedingly abstract descriptions, that I would like to describe as ‘de-personalization’.

Even though the particular data on imperial rescripts was not yet available to Westbrook, when he published his magisterial “Biblical and Cuneiform Law Codes” in 1985, the extended description of a process of ‘generalization’ that Westbrook offered in reference to the *tamitu* texts (a kind of divinatory question posed by an individual) is exemplary. Westbrook describes five steps leading from an individual case to its generalization, but we can focus on just a few key moments in the middle of the process.

In most cases the name of the person for whom the question was being put is replaced by “so-and-so, son of so-and-so” (*annanna apil annanna*). W. Lambert explains: ... “the suppression of the names suggests the reason for the handing down of these documents Just as in law a case once decided can become a precedent so that future parties having the same problem can find the answer without recourse to the expensive and time-consuming process of the law” The third step represents the second stage of generalization, whereby the anonymous precedent is put into casuistic form, and the fourth step is the compilation of lists of the casuistic rules with the addition of their logical variations This ‘scientific’ treatment is necessary because in Mesopotamian eyes it makes the series universally applicable (by exhausting all possible alternatives) and therefore authoritative.²¹

Thus we see that very much the same process that Westbrook described for the *tamitu* texts was eventually shown to exist in the case of the hungry *naditus* as well. The formulation of a version with “so-and-so, son of so-and-so” in place of the name of an individual, well known in certain ritual genres, was one step on the way to a properly casuistic formulation, viz. “If a man” If we can map the process outlined by Westbrook for the *tamitu* records into the specific domain of

²⁰ Charpin 2010, 74.

²¹ Westbrook 1985, 259 (= 2009, 15). Elman’s recent critique of Mesopotamian *Listenwissenschaft* draws heavily on this particular argument from Westbrook, but at least here in Westbrook’s extensive work he is contrasting the particular style and social conditions of the process of generalizing legal cases in Mesopotamia with the use of “abstract principles of law ... in modern systems” (Elman 2014, 26 citing Westbrook 2009, 33, although the quotation here is from Westbrook 1985, 259 = Westbrook 2009, 15). Westbrook goes on to cite the limited evidence for *written* legal reasoning in Mesopotamia, but does not infer that the practice of legal reasoning was thereby hamstrung or deficient.

imperial rescripts, it soon becomes apparent that the process of depersonalization is absolutely central to the preparation of an individual case for inclusion in a compendium.

Charpin cites several other letters from the Old Babylonian period in which this process of depersonalization seems to be attested, but even if we bracket for a moment the long-running disputations about the status of the Code of Hammurapi as a legal instrument or the role of imperial rescripts in shaping the textual history of the Mesopotamian law codes, the process of depersonalization visible in Samsu-iluna's letter is manifest and indisputable. Samsu-iluna, the ruler of the First Dynasty of Babylon has issued a new piece of prospective law in response to a single case, but in establishing the new statute as authoritative, all extraneous details (including details of time, place and person) have been expunged. Only the bare essentials necessary for understanding the relevant legal issues have been retained. The only feature of the new statute that might set it apart from the statutes in the Code of Hammurapi or other similar Mesopotamian law codes is the absence of the Akkadian conditional *šumma* 'if' at the beginning of the statute. Nonetheless, even in the absence of an explicitly marked protasis, the organization of the new statute into an 'if p, then q' statement is abundantly clear.²² From a literary or discourse analytical point of view, the key difference between the original case and the form that it takes in the royal rescript is the replacement of specific historical actors in the original case with non-specific placeholders like 'a *nadītu*-priestess' or 'creditor', yielding a generally applicable statute. The use of a form of codification that is often associated with Mesopotamian scientific texts was not meant to suggest that the ruler's statement is scientific or empirical *per se*, merely that it has all of the usual features of what I refer to as an 'infrastructural compendium'.

It must be emphasized, however, that the creation of a new statute via an imperial rescript – the process described in the previous paragraph – is only one of the ways in which individual statutes found their way into the Mesopotamian legal codes. Much of the material was simply inherited from earlier compendia such as the Code of Ur-Namma,²³ but Charpin also points to clear instances in which a set of hypothetical cases have been elaborated around a given theme or existing statute such as the statutes surrounding the capture of a runaway slave:

[Section 17] If someone has captured a fleeing slave, male or female, in the countryside and takes him or her back to the master, the master of the slave will have to give the person 2

²² There are significant grammatical issues that I am passing over here in near silence, notably that the rescript makes use of a construct relative construction in which a non-specific or indefinite noun is modified by a relative clause; see generally Johnson 2004. Samsu-iluna's statement is also a performative speech act, calling into existence the new statute, which presumably complicates the grammatical analysis of the passage. One might hypothesize that the initial promulgation of the statute had to conform to a narrowly defined set of grammatical parameters, while all subsequent references to the statute, as in the law codes, implicitly refer back to its original utterance.

²³ See now Civil's new edition in George 2011, 221–286.

shekels of silver. [Section 18] If that slave does not want to name the master, the person must bring him or her to the palace; the case will be the object of an investigation and the slave will be returned to the master. [Section 19] [But] if the person keeps that slave in his house, and if, subsequently, that slave is seized in his possession, that man will be put to death. [Section 20] If the slave flees from the house of the one who had seized him or her, that man will have to swear an oath to the slave's owner and will be acquitted.²⁴

Charpin then summarizes this series of entries as follows: "The general case ... is articulated in section 17. Section 18 stipulates the case of a slave who persists in his attitude, refusing to say to whom he belongs. Section 19 introduces another variant: the person who has taken in the fugitive slave keeps him for himself. Last case: the fugitive slave repeats the offense with the person who captured him."²⁵ While it is, one might say, theoretically possible that several distinct rescripts (all now lost, if they ever existed) led to the gradual accumulation of these closely related statutes, it is much more likely that these distinct provisions grew up around the question in section 17 through a process of scholarly discussion and elaboration by the leading jurists of the time. How precisely this type of academic elaboration was formally introduced into legal compendia remains, however, entirely unclear.

We see these same three processes (inheritance, promulgation and scholastic elaboration) in a number of different 'scientific' discourses in ancient Mesopotamia; chiefly, however, in the divinatory compendia. Of these three processes, the nature of promulgation may have been quite different for different compendia, depending on the status of the materials as official, semi-official or professional: a professional handbook, for instance, could presumably be authorized by the leading members of a profession without explicit authorization by the crown, although we might also expect that the status of these individuals as leading members of the profession was ratified by their role as, say, personal physician to the king. For our purposes here, however, the most important result of the recognition of these three distinct processes is that it makes the question of empiricism in these materials very nearly impenetrable. If there is no way of distinguishing between a statute that is promulgated in response to an imperial rescript and one that arises as a scholarly elaboration, how can we judge whether a concrete historical case lies in the background of a given statute? Rather than simply abandoning the question of empiricism in its entirety, I would like to turn at this point to the Babylonian therapeutic compendia. I would like to suggest that the literary structure, or perhaps better the narratological structure, of the therapeutic materials will allow us to distinguish between depersonalized case histories that are rooted in a given historically contingent situation and paradigmatic elaborations of the inherited nosology of the Babylonian medical tradition.

²⁴ Charpin 2010, 75; Roth 1997, 84–85.

²⁵ Charpin 2010, 75–76.

4 Depersonalized case histories in SUALU

The Babylonian therapeutic corpus is organized into a single series of subcorpora, each of which consists of a handful of distinct tablets; each of these tablets typically include approximately 200 lines (at least in the “library” editions from Ashurbanipal’s library), so the larger subcorpora can easily run to more than 1000 lines of text. The structure of the therapeutic corpus is partially visible in incipits, catch-lines and subcorpus summaries that describe a particular tablet as the “third tablet of [the subcorpus] SUALU”, but the only way of perceiving the broader outlines of the therapeutic materials is to look at a catalogue of incipits known as the Assur Therapeutic Catalogue.²⁶ While the catalogue as a whole is quite fragmentary (a new edition is currently being prepared by the BabMed team), to the degree that it can be reconstructed it conforms to the rubrics of the therapeutics materials, most of which stem from Ashurbanipal’s library in Nineveh.

In order to get some idea of how subcorpora are organized in the Babylonian therapeutic tradition, let’s have a quick look at two subcorpora (ATEMWEGE and SUALU) as they are described in the Assur Therapeutic Catalogue. The part of the catalogue that corresponds to ATEMWEGE and SUALU in the catalogue (YBC 7146 = Beckman and Foster no. 9b), obv. lines 8’–15’, can be reconstructed as follows:

Beckman and Foster no. 9b, obv. lines 8’–15’ (Translation)

ATEMWEGE ①②	8’	① ‘If a man has difficulty breathing’ ② ‘If a man’s chest is sick’
ATEMWEGE ③	9’	③ ‘If a man’s chest, epigastrium and shoulders hurt’
ATEMWEGE ④⑤	10’	④ ‘If a man has a low fever and spasms of coughing’ ⑤ ‘If a man is ill with <i>suālu</i> disease’
ATEMWEGE ⑥	11’	⑥ ‘If a man is ill with <i>suālu</i> , mucus] or constrictions in his lungs’
	12’	[Total: six tablets, from ‘if a man has difficulty breathing’ to ‘if a man’s windpipe and lungs are afflicted with <i>šiqu</i> disease’ and ‘if a baby is ill with <i>suālu</i> ’]
SUALU ①②	13’	① ‘If <i>suālu</i> disease turns into <i>kis libbi</i> dis]ease’ ② ‘If a man is sick to his stomach’
SUALU ③④⑤	14’	③ ‘If a man’s epigastrium hurts’ ④ ‘If a man has an acute fever’ ⑤ ‘If a man’s stomach is warm’
	15’	[Total: five tablets from ‘If <i>suālu</i> disease turns into <i>kis libbi</i> disease’ to ‘If wind seizes him’]

The SUALU compendium is named after its incipit, which describes the respiratory illness *suālu* turning into an illness of the digestive tract, viz. *kis libbi* ‘constriction in the internal organs (*libbu*)’. But since the incipit actually describes *suālu* turning into another class of diseases, no materials associated with this respiratory disease actually occur in the SUALU compendia and, in fact, it is almost entirely concerned

²⁶ Beckman and Foster 1988.

with illnesses of digestive tract, fevers and jaundice. The subcorpus that precedes SUALU, namely ATEMWEGE, is concerned almost entirely with respiratory illness. The total following each subcorpus gives the number of tablets in the subcorpus (6 in ATEMWEGE, 5 in SUALU), and then lists the first and last sections of the entire subcorpus. Since the incipit of the first section of a subcorpus is invariably identical to the incipit of the first tablet of the subseries, this is often treated as the name of the subcorpus as a whole.

The research history surrounding these two subcorpora could not be more different, and actually a brief look at these two subcorpora tells us a great deal about the special difficulties we face in attempting to make sense of Babylonian therapeutic materials. Whereas SUALU was the first major subcorpus to be identified and studied as a unit, largely because three (now four) of its five tablets were preserved to a great degree,²⁷ ATEMWEGE remains fragmentary and almost entirely unedited. Moreover, it should be kept in mind that since the incipit of SUALU refers to the respiratory disease known as *suālu* changing to *kis libbi*, a digestive disease, nearly all discussion of the disease itself occurs in ATEMWEGE rather than the subcorpus to which it gives its name. Since SUALU is one of the better preserved subcorpora within the therapeutic corpus (and I am also currently preparing a new edition of SUALU) I would like to use the SUALU materials as the primary group of material in attempting to identify depersonalized case histories within the therapeutic corpus.

Since we have no clear forerunners to the SUALU materials and no information on how the materials in the subcorpus came into being, we must depend entirely on the formal or narratological structure of the materials themselves. If we take as our point of departure the second column on the obverse of SUALU 2, the structure of this technical genre will hopefully become somewhat clearer. The first thirteen lines of SUALU 2, column 2, consist entirely of pharmacological descriptions; these are isolated therapeutic recipes that have no obvious connection with the materials that follow. Unfortunately the end of the preceding column is largely destroyed, so we cannot be sure what the function of these isolated prescriptions was. Then in line 14 we find a series of relatively simple diagnostic statements, culminating in what I would describe as a ‘depersonalized case history’ with four symptoms in line 38.

SUALU 2 (BAM 575), column ii, section headers 1–38 (Cadelli 2000, 129–132)

1–13 (isolated therapeutic prescriptions)

14 *diš-ma úh tuku.tuku ...* (recipe)

17 *diš na šà.meš-šú mú.mú it-te-né-bi-tu šà-šu ana pa-re-e e-ta-né-pa-đš ana ti-šú ...* (recipe)

19 *diš na ki.min ...* (recipe)

20 *diš na šà.meš-šú mú.mú it-te-né-bi-tu tumu ina šà-šú nigin-ur i-le-bu ...* (recipe)

22 *diš na šà.meš-šú mú.mú-hu it-te-né-bi-tu ...* (recipe)

²⁷ Küchler 1904.

- 24 diš na šà.meš-šú *it-te-nen-bi-tù* ... (recipe)
 26 diš na šà-šú *it-te-né-bi-tu* ... (recipe)
 28 diš-*ma* úh *tuku.tuku gan-ha u_a* 'da kur' ... (recipe)
 31 diš na sağ šà-šú kúm 'šà-šú mú'.mú-*hu* ... (recipe)
 35 'diš' na šà.meš-šú *ma-gal nap-hu* 'ninda'.meš kaš.meš *ina ka-šú gur.gur-ra* ... (recipe)
 38 diš na šà.meš-šú *nap-hu* 'šub'.šub.meš-šú *ninda u kaš lá úh tuku-ši ana ti-šú* ... (recipe)
- (14) If (a man) constantly has phlegm ...
 (17) If a man's innards are bloated, he continually has cramps and his stomach heaves constantly (but he does not vomit), in order to make him recover ...
 (19) If a man DITTO, ...
 (20) If a man's innards are bloated, he continually has cramps and gas churns around inside his belly, ...
 (22) If a man's innards are bloated and he continually has cramps, ...
 (24) If a man's innards continually suffer from cramps, ...
 (26) If a man's innards continually suffer from cramps, ...
 (28) If (a man) continually has phlegm, a spasm of coughing and *šēta kašid* fever, ...
 (31) If a man's epigastrium burns, his belly is continually bloated, ...
 (35) If a man's innards are extremely bloated (and) he vomits up bread and beer in his mouth,
 (38) If <symptom 1 a man's innards are bloated>, <symptom 2 he is continually struck down>, <symptom 3 he has no appetite for bread or beer>, (and) <symptom 4 he has phlegm>, in order to make him recover

First of all, it should be noted that the numerous, largely orthographic variants of the phrase diš na šà.meš-šú mú.mú 'if a man's innards are bloated' occur in lines 17, 20, 22 and 31. But then, after a series of relatively simple symptom descriptions, the entry in line 38 describes no less than *four* distinct symptoms. The remainder of the section then goes as follows:

- SUALU 2 (BAM 575), column ii, section headers 43–52 (Cadelli 2000, 132–133)
 43 diš na šà.meš-šú *nap-hu gu-ha u úh tuku.meš-ši ninda u kaš lá ana ti-šú* ... (recipe)
 45 diš na šà.meš-šú *nap-hu sag šà-šú ru-pu-ul-ta tuku.meš-ši ana ti-šú* ... (recipe)
 48 diš na šà.meš-šú *nap-hu* ... (recipe)
(new thematic section)
 50 diš na šà-šú *e-me-er* ... (recipe)
 51 diš ki.min ... (recipe)
 52 diš ki.min ... (recipe)

In the rest of the column, therefore, the last few entries in the diš na šà.meš-šú *nap-hu* 'if a man's innards are bloated' section each end with the same distinctive phrase; the last entry in the section containing the distinctive phrase (viz. diš na šà.meš-šú *nap-hu*) alone. Then a new thematic section begins with an equally simple, but distinct condition: diš na šà-šú *e-me-er* 'if a man's belly is warm'.

It should be clear from the foregoing example that the 'depersonalized case histories' that we are looking at in this paper can and should be defined not only in terms of the raw number of symptoms, but also in terms of their position within the overall structure of a given therapeutic subcorpus and even within a given subsection within the subcorpus. In the subsection running from line 14 through

line 48, for example, there is only one ‘depersonalized case history’ in line 38 and the rest of the therapeutic descriptions are much simpler and buttress the more complex ‘case history’ in line 38. In fact, nearly all of the individual symptoms listed before and after line 38 are included among the four symptoms in line 38 or are somehow semantically related to the content of this single entry. The first entry in the new section in line 50, however, has little in common with the preceding section: the syllabically written word *e-me-er* in line 50 could be equated with the corresponding logogram *kúm* in line 31, but in line 31 it is his epigastrium (*sag šà-šú*) that is warm rather than his belly (*šà-šú*). Moreover, if the editor had meant for a link between line 31 in this subsection and line 51 at the beginning of the next thematic subsection, one could reasonably expect that the entry in line 31 would have moved to the end of the subsection and that the same orthography for *emer* “it is warm” might have been used in both lines.

In line with the contrast between imperial rescript and scholarly elaboration as two methods of innovation in our earlier discussion of legal innovations, I would like to suggest that some additional criteria may be useful in evaluating whether particular entries represent depersonalized case histories or not. First of all we should pay attention to the paradigmatic character of a given entry. In the example of scholarly elaboration within the legal sphere that we look at earlier (LH §§17–20), each variation on the general theme in section 17 (“If someone has captured a fleeing slave, ... the master of the slave will have to give the person 2 shekels of silver”) added, as it were, a single additional contextual factor. In section 18, the slave refused to name his or her master, in section 19 the person who caught the slave does not turn him or her in, and in section 20 the slave escapes from his new captor as well. In contrast to this legal example, the depersonalized case history in question here exhibits thematic links to the surrounding, relatively simple collocations of symptoms (*šà.meš-šú nap-hu* also occurs in lines 35, 43, 45 and 48, *ninda u kaš lá* in line 43, and *úh tuku-ši* in lines 14, 28, and 43), but the paradigmatic character of these entries is weak at best. Instead of hypothesizing that the collocation of four symptoms in line 38 is a rather disorderly example of scholarly elaboration or invention, the more parsimonious explanation is that the symptoms mentioned in line 38 belonged to a depersonalized case history and the simpler elements that surround line 38 gravitated to it as a result of these thematic links.

5 Paradigmatic abbreviations

One piece of evidence in favor of my interpretation of line 38 as non-paradigmatic is that it does not participate in either of the two forms of paradigmatic abbreviation that are used to represent the repetition of symptoms in multiple entries in SUALU. The most common way in which symptoms are abbreviated in SUALU is to replace the entire set of symptoms with the DITTO marker *KI.MIN*, allowing for variation in the treatment that is recommended for the given symptoms. This form

of abbreviation occurs in at least a dozen different passages in SUALU (single occurrences of KI.MIN have been excluded).

SUALU I	i 8, 9, 10	(treatments for <i>kīs libbi</i>)
	i 13, 14, 17	(treatments for <i>kīs libbi</i>)
	i 31, 32, 33, 35, 36	(treatments for <i>kīs libbi</i> + other ailments)
	i 43, 44, 45, 46, 47, 48, 49	(treatments for <i>libbu kasi</i>)
SUALU II	i 7, 9, 10, 11	(treatments for <i>libbu maruṣ</i>)
	i 28, 31, 34	(treatments for <i>libbu maruṣ</i>)
	i 41, 44, 47	(treatments for <i>libbu maruṣ</i>)
	ii 51, 52, 53	(treatments for <i>libbu emer</i>)
	iv 17, 22, 25, 27, 30	(treatments for the symptoms in iv 11)
	iv 45, 46	(treatments for the symptoms in iv 43)
SUALU III	i 33, 34, 35, 36, 37	(treatments for the symptoms in i 27–30)
	ii 67a, 67b, 68a, 68b, 69a, 69b, 70a, 70b,	(treatments for gall bladder disease)
	iii 1a, 1b, 2, 3	
	iv 14, 15	(treatments for jaundiced eyes)
	iv 35, 38, 39, 40	(treatments for <i>ahhāzu</i> -jaundice)
	(NA MIN)	
SUALU IV	i 3', 4'	(symptoms unclear)
	i 17', 19'	(treatments for depression)
SUALU V	i 48, 49	(treatments for heat in the belly)

These different treatments of a single group of symptoms represent the *raison d'être* of the therapeutic corpus, so it is little wonder that they dominate the discursive structure of SUALU. It is noteworthy that these groups of divergent treatments follow (and thus reiterate) entries that include a single symptom. In many of these instances, the symptom can be matched up with the name of a known disease such as *kīs libbi* or *ahhāzu*.

The other form of paradigmatic abbreviation that we find in SUALU occurs in a single passage from SUALU IV, and interestingly enough this is the only passage for which we have substantial evidence of Middle Babylonian or Middle Assyrian manuscripts. In contrast to the usual form of paradigmatic abbreviation in the therapeutic texts, where the entire set of symptoms must be replaced as a unit, at least some manuscripts of SUALU IV allow for the replacement of just the lead symptom, while the remaining symptoms are written out. This peculiar form of paradigmatic abbreviation only occurs in the Middle Assyrian manuscript BAM 66 and in the first-millennium BCE sources; our lone Middle Babylonian manuscript, viz. BAM 174, does not make use of an abbreviation in agreement with the practice for this type of text elsewhere in the therapeutic corpus. A nice example of this

variation can be seen in lines 6–10 of SUALU IV (see Johnson 2014 for additional background).

SUALU IV i 3, 5, 7 and 9 (rulings and intervening lines omitted, see Johnson 2014 for background; manuscripts A and B are first-millennium manuscripts, while manuscript C is Middle Assyrian and manuscript D Middle Babylonian)

- 3 A_{obv₃} diš na min kúm 'tuku' [.....]
 B_{i₃} [.....] ina 'i.giš' šéš.meš-su
 'an.ki.nu.ti
 C_{rev₆} diš na min kúm tuku *ana* ti.bi 'ap-rù-šá [.....]
 D_{21'} diš na u₄.da kur-id kúm tuku-ši *ana* ti-šú 'ap-ru-šá ina i+giš šéš 'an.ki.nu.[ti]
- 5 A_{obv₅} diš na min ninda u kaš nu *i-le-em ana* 'ti'-[šú]
 B_{i₅} [.....] x i.giš šim^{sim}gúr.gúr šéš-su
 C_{rev_{8a'}} diš na min ninda u kaš nu *i-le-em ana* ti.bi i 'šim' [.....]
 D_{23'} diš na u₄.da kur-id ninda u kaš *la i-ma-har ana* 'ti'-[šú i].giš šim^{sim}gúr.gúr šéš-su
- 7 A_{obv₇} diš na min *ku-šú hur-ba-šú-u'* [.....]
 B_{i₇} [.....]-'su' *ana* ti-šú i.giš 'ap-rù-šá šéš-su
 C_{rev_{10'}} diš na min *ku-šú hur-ba-šu* šub.šub-su *ana* ti.bi i 'giš' [...]
- 9 A₉₋₁₀ diš na min kúm 'tuku' [.....]/šéš-su
 B_{i₉} [.....] *ana* 'ti'-šú i.giš šim^{sim}gúr.gúr i.giš šim^{sim}i šéš-[x]
 C_{rev_{12'}} diš na min kúm tuku *ha-tu* šub.šub-su *ana* ti.bi i šim^{sim}gúr.gúr i [.....]

As the underlined phrases in lines 3 and 5 of manuscript D show, the section consists of a small collection of cases organized around u₄.da kur-id (= Akk. *šēta kaš-id*), but in the Middle Babylonian sources the key phrase is repeated in each of the entries, while in the Middle Assyrian manuscript C and the first-millennium manuscripts A and B, this first symptom is replaced by MIN 'DITTO'. This is a rather unusual procedure and it demonstrates that distinct scribal practices existed in different times and places.

In fact, however, the repetition of lead entries in groups of complex cases such as these is the norm in SUALU, as we can see in the followed collection of depersonalized case histories, drawn from the next column, viz. column iii, in SUALU II.

SUALU II iii lines 49, 51–52, 55–56

- 49 diš na kaš.sag nag-*ma* suhuš.meš-šú *pa-al-qa di-ig-la ma-a-ṭi* (three symptoms)
ana ti-šú numun 'sikil numun 'aš numun 'išr^{šr} bī'-[ni] ...
 If a man drinks high quality beer, and subsequently his lower extremities become unsteady (?) and his eyesight is weak, in order to make him recover, seed of the 'pure' plant, seed of the 'lone' plant (*ēdu*), tamarisk ...
- 51 diš na kaš nag-*ma* sag.du-su dab.dab-su ka.meš-šú *im-ta-na-áš-ši ina du₁.du₁-šú u-pa-áš-šaṭ*
 52 *ṭe-en-šú la ša-biṭ* lú.bi iḡi^{ll}-šú gub-za (five symptoms) ana ti-šú 'iḡi-lim 'iḡi.niš 'tara-muš
 'har.har ...
 If a man drinks beer, and subsequently he has a constant headache, he constantly forgets words, he interrupts himself while he is speaking and cannot make a decision, that man (has) 'standing eyes', in order to make him recover, *imhur-lim, imhur-ešrā, tarmuš, hašú* ...

55 diš na gaba-su gig-ma gim ši-né-e-ti sahar tuku.tuku-ši ina da-ba-bi-šú ik-ka-šú ik-ta-nir-ru
 56 ù zé ip-te-nar-ru na.bi bi-šit ša gig (four symptoms) ana ti-šú ^úeme.ur.gi, ina kaš nu pa-tan nag-šú ...

If a man's chest hurts, and subsequently when he urinates, it contains sediment, he is irritable when he speaks, and he keeps vomiting up bile, that man suffers from *bišit libbi* disease, in order to make him recover, have him drink 'dog-tongue'-plant in beer on an empty stomach

...

Here we see three examples of depersonalized case histories written in sequence, each of which is followed by a specific treatment. The first two share the drinking of beer as their first element, while the third veers off in another direction, presumably brought into relation with each other through the co-occurrence of the phrase *ina dabābišu* "while he is speaking", in two purely orthographic variants: *ina du₁₁.du₁₁-šú* in line 51 and *ina da-ba-bi-šú* in line 55. Note in particular that two of the three cases are classified as exemplars of named diseases, viz. 'eyes standing still' and *bišit libbi* diseases. In other words, the traditional Babylonian nosology would not normally have juxtaposed these three case histories, yet the editor of this compendium chooses to do so.

Part of the reason for their juxtaposition (beyond the internal similarities mentioned above), may be that the editor sensed commonalities of symptomatology or treatment and wished to make the reader aware of these possibilities. This interpretation of this dossier of case histories seems to be further strengthened by the fact that immediately after the third of the three case histories we find three additional therapeutic procedures that omit symptomatology entirely (SUALU II iii 59–64), not even including a paradigmatic abbreviation such as *šumma* KI.MIN. Elsewhere in the SUALU subcorpus, individual cases are quite often followed by additional therapeutic alternatives (see the list above, but also note that no less than 11 alternative treatments occur in the first column of SUALU II), but crucially in all of these passages the additional therapies are clearly marked as such by *šumma* KI.MIN, literally 'if DITTO'. The fact that *šumma* KI.MIN is omitted from the symptomatology of the three therapies in SUALU II iii 59–64 may be an indication that they were meant as a set of possible treatments for the 'family' of conditions outlined in the preceding dossier, but only with the identification of similar textual configurations can such a hypothesis be properly evaluated. Even as textual structures such as paradigmatic abbreviations or dossiers of depersonalized case histories map out the broader topography of the Babylonian technical compendia, they also provide the primary context for evaluating the use of discursive elements such as *ana ti-šú*, to which we turn in the next section.

history, the text reports that *uzabbal-ma imât* “he will last a long time and then he will die”. Here *uzabbal-ma imât* fills the prognosis slot and, since it is negative, the treatment component is simply omitted. In a somewhat older generic form that may possibly occur in *Diagnostic Handbook* XXXI but certainly occurs in SUALU IV (see Johnson 2014 for background), Finkel identified a more complex form of prognosis that listed the number of days the patient would be sick, followed by the statement *ana gig-su nu gíd.da* “to avoid prolonging his sickness”. This more elaborate statement of prognosis occurs in the same slot as *ana ti-šú*, but represents an older moment in the history of the technical ‘speech genre’ under discussion here.

Although in principle any one of the four elements in this schema could be omitted if there were enough clues in the format of the overall text to allow for the reconstruction of the entire entry, one of my central aims in this paper is to suggest that the omission of particular elements from this generic form were often used to classify epistemological distinctions within the therapeutic corpus. To return briefly to some of the foregoing examples, if the symptom in a series of entries is reduced to little more than the DITTO mark, disease name and prognosis are omitted, and the therapeutic regime follows immediately after the DITTO, then obviously we are facing a situation in which the nosological entity is well defined and the text is presenting various options for the treatment of a usual suspect. On the other hand, a series of entries in which the symptoms are described in detail and are similar to the symptoms in neighboring entries, but no disease names (or a wide variety of disease names) are invoked, might suggest a situation in which the nosological classification of the disease remains unclear, but a treatment is advanced on the basis of commonalities among the symptoms of particular case histories. Within this admittedly indirect system for coding epistemological contexts, *ana ti-šú* plays an interesting role in that it frequently occurs in those entries that I would like to classify as depersonalized case histories.

In the SUALU material as currently reconstructed (Cadelli’s preliminary edition in combination with the new material for SUALU IV reported in Johnson 2014), there are 34 occurrences of *ana ti-šú*. Ten of these occurrences are in what we might call ‘full form’ therapeutic entries in which all four elements of the above mentioned schema are present (SUALU I i 27, ii 18, ii 29; SUALU II i 21, iii 44, iii 51, iii 55, iv 34; SUALU III i 1, i 27, i 38). In nearly all of these entries three or more symptoms are mentioned and in a few of these cases the symptomatology grows to astounding proportions: in SUALU I i 26–27 eight separate elements are included in the symptom section and in SUALU III i 27–30 at least a dozen distinct symptoms are enumerated. In SUALU II, the biggest set of symptomatology is to be found in the middle of the first column on the reverse (iii 30–32) and consists of only six or seven symptoms, depending on how it is reconstructed, and in SUALU V the biggest set occurs in the last column on the reverse (iv 33–35) and consists of five symptoms at most. These extra large sets of symptoms always seem to exhibit all four elements of the schema and thus necessarily include an *ana ti-šú* phrase. It is

presumably no accident that these highly involved full form cases histories usually occur in the center of a column, often preceded by a battery of pharmacological and incantatory alternatives that are appended to a simple, single-entry symptom description that is then repeated with KI.MIN in a paradigmatic abbreviation. Grosso modo we should probably see these contrasts between pharmacological alternatives and a single elaborate case history as a kind of theoretical introduction to a given subcorpora, laying out a range of possible treatments as well as a single case in which the possible set of symptoms is maximized.

In the middle range, however, we find a much larger group of entries in which three or four symptoms are mentioned, the name of a disease may or may not be present, but *ana ti-šú* is almost always there. Interestingly enough, these middle range case histories – in my view the best candidates for an analysis involving depersonalization rather than scholarly elaboration – tend to occur in clusters and, when disease names are introduced, the case histories within a cluster either do not belong to the same nosological category, or if they do belong to the same category, they usually have no symptoms in common. The most important examples of this type of clustering occur in SUALU II ii 17–21 (two cases, although only the first has *ana ti-šú*, no disease names), SUALU II ii 38–47 (three cases, all with *ana ti-šú*, no disease names), SUALU II iii 49–58 (three cases, all with *ana ti-šú*, one without disease name and the other two with different disease names), SUALU II iv 37–53 (three cases, all with *ana ti-šú*, no disease names), SUALU III i 46–52 (two cases, both with *ana ti-šú*, both also dealing with gall bladder disease, but no symptoms in common), SUALU III ii 18–22 (two cases, both with *ana ti-šú*, both dealing with forms of *pāšittu* disease, but again no symptoms in common), SUALU III iii 4–6 (two cases dealing with *amurriqānu*-jaundice, both with a negative prognosis), and SUALU IV i 3–10 (four cases, all with *ana ti-šú*, no disease names).²⁹ These eight clusters of depersonalized case histories are all clearly grappling with the problem of disease identification, not along the lines of the *Diagnostic Handbook* and its concern for ultimate causes, but rather in straightforward therapeutic terms. In my view, these dossiers made up of similar case histories represent a rare moment of empirical experimentation vis-à-vis disease classification, but within a distinctly therapeutic milieu.

The last use of the phrase *ana ti-šú* within the SUALU subcorpus is interesting in that it represents a borderline phenomenon, carefully distinguishing the problem of disease classification and the postulation of pharmacological alternatives. There are at least four places in the SUALU subcorpus where *ana ti-šú* qualifies a single symptom entry (SUALU I 43 and i 49, SUALU II iii 18, iii 25, and iv 34) and one might reasonably ask what differentiates these single symptom entries from

²⁹ SUALU II ii 57–65 shared all of the same formal features of the clusters of case histories mentioned here (three juxtaposed cases, no diseases named), but these entries do not include *ana ti-šú*, so they have not been included in the list.

the type of paradigmatic abbreviations involving KI.MIN. As mentioned earlier, paradigmatic abbreviations typically begin with a single symptom entry but then continue on with additional entries in which the symptomatology is reduced to *šumma* KI.MIN ‘if DITTO’ or eliminated altogether. Needless to say, *ana ti-šú* never occurs in this standard form of paradigmatic abbreviation. It is fairly clear that single symptom entries that include *ana ti-šú* often perform discursive functions within the overall structure of an entire text, and in nearly all of these passages the single symptom *ana ti-šú* entry marks a shift from one family of symptoms or diseases to another. In SUALU II iv 34, for example, the symptom of spitting up blood is associated with a disease known as *tašnīqu*, and this entry follows more than 30 lines of therapeutic alternatives for a type of fever known as *šēta kašid*. Spitting up blood is also a symptom of *šēta kašid*, one among many others, and this provides the link between the two subsections, but the single symptom *ana ti-šú* entry indicates that a new ‘topic’ is at hand and in fact the rest of the column consists of depersonalized case histories for digestive illnesses that do not involve fever. Earlier in SUALU II, the single symptom *ana ti-šú* entries in iii 18 and iii 25 act in very much the same way, setting up a new nosological topic that will be discussed in the following lines: the first part of column iii deals with digestive problems, in particular the inability to consume bread and beer, while SUALU II iii 18 introduces a small subsection that deals with a patient whose belly is full of *ḥaḥḥu* (*ša-šú ḥa-aḥ-ḥa diri*) and in iii 25 the topic shifts yet again to cases involving “wind roiling about in the belly” (*tumu ina ša-šú nigin-hur*).

Obviously these different uses of the phrase *ana ti-šú* will have to be further investigated in other therapeutic subcorpora, but its distribution within the SUALU materials already suggests that we may be able to use it as a diagnostic for distinguishing, say, subsections concerned with possible therapeutic alternatives from collections of depersonalized case histories that were meant to delineate common symptomatology relevant to treatment. As a discursive phenomenon, however, we should also keep in mind that the distribution of *ana ti-šú* may not have reached the level of self-conscious awareness. In other words, it may be operating under the categorical radar, below the level of metapragmatic awareness. If so, and if similar patterns can be identified in other therapeutic corpora, it may eventually offer a means of differentiating the purely formal structure of the therapeutic materials as text-artifact and the pedagogical contexts in which these materials presumably had their *Sitz im Leben*.

7 The infrastructural role of the Babylonian therapeutic compendia

In lieu of a conclusion, I would like to return to one of the major themes outlined in the *Introduction* to this volume, viz. the notion of an *infrastructural compendium*,

and in particular the role that this type of compendium plays in defining a 'common ground' of shared exempla and curriculum for a technical discipline. Even beyond the specific legal model for depersonalization that we looked at earlier, it can be argued that some form of depersonalization is also favored by the pragmatic goals of this kind of compendium.

As defined in the *Introduction* to this volume, an infrastructural compendium is a written text that is meant to be used as a skeleton for organizing a series of non-written discussions in a pedagogical context. The reason for focusing on the notion of infrastructure in the *Introduction* was to emphasize that the written skeleton in such a context was only meant to organize a set of possible themes and the sequence in which they ought to be tackled, while leaving the specific interpretations of specific points open to disputation. Such a text is *infrastructural* in that it merely forms a medium or common ground for the elaboration of distinct scholarly points of view. While nearly all technical compendia in early Mesopotamian contexts are infrastructural in precisely this sense, much later compendia such as the Babylonian Talmud or the Zand are *post-infrastructural* in the sense that they seek to document within the same written text one or more points of view with respect to the skeleton around which the text as a whole is organized, viz. the Mishnah and the Avesta respectively. Put somewhat differently, a post-infrastructural text moves the oral disputations that surrounded an infrastructural text into the written medium. Since this typology of written compendia is dealt with at greater length in the *Introduction*, I will not repeat that discussion here. Instead, I would like to suggest that depersonalization, as a general strategy for the processing of a case history, fits exceedingly well into an infrastructural model precisely because an infrastructural compendium only succeeds to the degree that it is able to erase the history of its own composition.

If the chief goal of an infrastructural compendium is to establish a common ground that can no longer be disputed within a given professional or subcultural group, with the distinctive points of view only encoded in an oral medium, then clearly this type of interaction between the written and the oral can only take place within a well-defined and long-lasting institutional framework. If the case histories incorporated into an infrastructural compendium were not depersonalized, if they provided us with short biographies of the patients, obviously the ability of such an compendium to persist and retain its authority within a particular institution could easily be compromised. What if a patient were the former king of Mari and, later on, Mari's reputation declines? This could easily lead to a devaluation of particular case histories and undermine the a- or transhistorical character of the infrastructural compendium. The occasional references to Hammurapi in Babylonian medicine are indeed the exception that proves the rule, for no other historical personage is mentioned in the entire corpus. Strangely enough, once we have shifted our perspective from the largely non-institutional authorial model of Graeco-Roman science to the heavily institutional model behind the idea of an infrastructural com-

pendium, the absence of biographical information from the depersonalized case histories in the Babylonian therapeutic texts no longer looks like a defect, but rather represents a clear effort to exclude extraneous information so as to focus the scholastic debates of the academies on the essential questions of the therapeutic discipline.

Acknowledgment

This work was supported by the DFG-funded SFB 980: Episteme in Bewegung as well as the ERC-funded BabMed Project. Thanks to Mark Geller and Ulrike Steinert for commenting on an earlier draft of this paper.

Bibliography

- Asper, M. 2007. *Griechische Wissenschaftstexte. Formen, Funktionen, Differenzierungsgeschichten*. Stuttgart.
- Balla, Ch. 2007. "Plato and Aristotle on Rhetorical Empiricism". In: *Rhetorica* 25(1), 73–85.
- Balla, Ch. forthcoming. "Plato's Criticism of Empiricism in the *Gorgias* and in the *Phaedrus*". In: M. Protopapa & E. Moutsopoulos (eds.), *Plato. Poet and Philosopher*.
- Beckman, G., & B. R. Foster. 1988. "Assyrian Scholarly Texts in the Yale Babylonian Collection". In: E. Leichty & M. deJ. Ellis (eds.), *A Scientific Humanist. Studies in Memory of Abraham Sachs*. Philadelphia, 1–26.
- Berrey, M. 2013. "Early Empiricism, Therapeutic Motivation, and the Asymmetrical Dispute Between the Hellenistic Medical Sects". Apeiron DOI 10.1515/apeiron-2013-0002
- Bottéro, J. 1974. "Symptômes, signes, écritures en Mésopotamie ancienne". In: J. P. Vernant et al. (eds.), *Divination et rationalité*. Paris, 70–196.
- Cadelli, D. S. 2000. *Recherche sur la médecine mésopotamienne. La série šumma amêlu suâlam maruṣ*. PhD dissertation, Université de Paris I Panthéon-Sorbonne.
- Charpin, D. 2010. *Writing, Law, and Kingship in Old Babylonian Mesopotamia*. Chicago.
- Crombie, A. C. 1994. *Styles of Scientific Thinking in European Tradition. The History of Argument and Explanation Especially in the Mathematical and Biomedical Sciences and Arts*, vol. 1. London.
- Cuomo, S. 2000. "Collecting Authority, Constructing Authority in Pappus of Alexandria's *Sunagôge*". In: W. Kullmann & J. Althoff (eds.), *Gattungen wissenschaftlicher Literatur in der Antike*. Tübingen, 217–238.
- Daston, L. 2009. "Science Studies and the History of Science". In: *Critical Inquiry* 35(4), 798–813.
- Daston, L. 2012. "The Sciences of the Archive". In: *Osiris* 27(1), 156–187.
- Dean-Jones, L. 2003. "Literacy and the Charlatan in Early Greek Medicine". In: H. Yunis (ed.), *Written Texts and the Rise of Literate Culture in Ancient Greece*. Cambridge, 97–121.
- Dear, P., & S. Jasanoff. 2010. "Dismantling Boundaries in Science and Technology Studies". In: *Isis* 101(4), 759–774.
- van der Eijk, P. 1997. "Galen's Use of the Concept of 'Qualified Experience' in his Dietetic and Pharmacological Works". In: A. Debru (ed.), *Galen on Pharmacology, Philosophy, History and Medicine*. Leiden, 35–57.

- van der Eijk, P. 2012. "Exegesis, Explanation and Epistemology in Galen's Commentaries on Epidemics, Books One and Two". In: P. E. Pormann (ed.), *Epidemics in Context. Greek Commentaries on Hippocrates in the Arabic Tradition*. Berlin, 25–49.
- Fincke, J. C. 2007. "Omina, die göttlichen "Gesetze" der Divination". In: *Jaarbericht Ex Oriente Lux* 40, 131–147.
- Fincke, J. C. 2009. "Ist die mesopotamische Opferschau ein nächtliches Ritual?". In: *Bibliotheca Orientalis* 66, 519–558.
- Finkel, I. L. 1994. "On TDP Tablets XXIX and XXXI, and the Nature of SA.GIG". In: *Journal of Cuneiform Studies* 46, 87–88.
- Forrester, J. 1996. "If P, Then What? Thinking in Cases". In: *History of the Human Sciences* 9(3), 1–25.
- Foucault, M. 1977. *Discipline and Punish*. London.
- Foucault, M. 1981. "Omnes et Singulatim: Towards a Critique of 'Political Reason'". In: S. McMurrin (ed.), *The Tanner Lectures on Human Values II*. Salt Lake City.
- Foucault, M. 1988. "Politics and Reason". In: L. D. Kritzman (ed.), *Michel Foucault. Politics, Philosophy, Culture. Interviews and Others Writings 1977–1984*. New York, 57–85.
- Foucault, M. 1994. *La vérité et les formes juridiques*. Paris.
- Foucault, M. 2003. *Die Wahrheit und die juristischen Formen*. Frankfurt am Main.
- Furth, C., J. T. Zeitlin & P. Hsiung (eds.) 2007. *Thinking With Cases. Specialist Knowledge in Chinese Cultural History*. Honolulu.
- Geller, M. J. 2004. "West Meets East: Early Greek and Babylonian Diagnosis". In: H. F. J. Horstmanshoff & M. Stol (eds.), *Magic and Rationality in Ancient Near Eastern and Graeco-Roman Medicine*. Leiden, 11–61.
- George, A. R. 2011. *Cuneiform and Royal Inscriptions and Related Texts in the Schøyen Collection*. CUSAS 17. Bethesda.
- Grasshoff, G. 2011. "Babylonian Meteorological Observations and the Empirical Basis of Ancient Science". In: G. J. Selz (ed.), *The Empirical Dimension of Ancient Near Eastern Studies*. Vienna, 33–48.
- Hacking, I. 1985. "Styles of Scientific Reasoning". In: J. Rajchman & C. West (eds.), *Post-Analytic Philosophy*. New York, 145–165.
- Holmes, B. 2010. *The Symptom and the Subject. The Emergence of the Physical Body in Ancient Greece*. Princeton.
- Horster, M., & C. Reitz. 2010. "'Condensation' of Literature and the Pragmatics of Literary Production". In: M. Horster & C. Reitz (eds.), *Condensing Texts – Condensed Texts*. Stuttgart, 3–14.
- Janssen, C. 1991. "Samsu-iluna and the Hungry Nadītums". In: *Northern Akkad Project Reports* 5, 3–39.
- Johnson, J. C. 2004. "Internally-Headed Relative Clauses in Akkadian: Identifying Weak Quantification in the Construct State". In: *Journal of Cuneiform Studies* 57, 85–98.
- Johnson, J. C. 2014. "Towards a Reconstruction of SUALU IV: Can We Localize K 2386+ in the Therapeutic Corpus?" In: *Le Journal des Médecines Cunéiformes* 24, 11–38.
- Kafka, B. 2012. *The Demon of Writing. Powers and Failures of Paperwork*. New York.
- König, J., & T. Whitmarsh (eds.) 2007. *Ordering Knowledge in the Roman Empire*. Cambridge.
- Kraus, F. R. 1960. "Ein zentrales Problem des altmesopotamischen Rechtes: Was ist der Codex Hammu-rabi?" In: *Genava* 9, 283–296.
- Langholf, V. 1990. *Medical Theories in Hippocrates. Early Texts and the 'Epidemics'*. Berlin.
- Latour, B. 1986. "Visualization and Cognition: Drawing Things Together". In: *Knowledge and Society. Studies in the Sociology of Culture and Present* 6, 1–40.
- Latour, B. 2010. *The Making of Law. An Ethnography of the Counsel d'État*. Cambridge.

- Ossendrijver, M. 2011. "Science in Action: Networks in Babylonian Astronomy". In: E. Cancik-Kirschbaum, M. van Ess, & J. Marzahn (eds.), *Babylon. Wissenskultur zwischen Orient und Okzident*. Berlin, 229–237.
- Robson, E. 2008. *Mathematics in Ancient Iraq. A Social History*. Princeton.
- Robson, E. 2011. "Empirical Scholarship in the Neo-Assyrian Court". In: G. J. Selz (ed.), *The Empirical Dimension of Ancient Near Eastern Studies*. Vienna, 603–629.
- Rochberg, F. 1999. "Continuity and Change in Omen Literature". In: B. Böck, E. Cancik-Kirschbaum, & T. Richter (eds.), *Munuscula Mesopotamica. Festschrift für Johannes Renger*. Münster, 415–425.
- Rochberg, F. 2004. *The Heavenly Writing. Divination, Horoscopy, and Astronomy in Mesopotamian Culture*. Cambridge.
- Rochberg, F. 2009. "Divine Causality and Babylonian Divination". In: G. Frame et al. (eds.), *Tablet and Torah. Mesopotamia and the Biblical World. Studies in Honor of Barry L. Eichler*. Bethesda, 279–294.
- Rochberg, F. 2011. "Natural Knowledge in Ancient Mesopotamia". In: P. Harrison, R. L. Numbers, & M. H. Shank (ed.), *Wrestling with Nature. From Omens to Science*. Chicago, 9–36.
- Roth, M. 1997. *Law Collections from Mesopotamia and Asia Minor*, second edition. Atlanta.
- Sachs, A., & H. Hunger. 1988. *Astronomical Diaries and Related Texts from Babylonia, volume 1. Diaries from 652 B.C. to 262 B.C.* Vienna.
- Sachs, A., & H. Hunger. 1989. *Astronomical Diaries and Related Texts from Babylonian, volume 2. Diaries from 261 B.C. to 165 B.C.* Vienna.
- Sachs, A., & H. Hunger. 1996. *Astronomical Diaries and Related Texts from Babylonian, volume 3. Diaries from 164 B.C. to 60 B.C.* Vienna.
- Spoerri, W. 1996. "Médecine et formes de connaissance chez Aristote, *Metaphysique A. I.*". In: R. Wittern & P. Pellegrin (eds.), *Hippokratische Medizin und antike Philosophie*. Hildesheim, 199–202.
- Steinkeller, P. 2005. "Of Stars and Men: The Conceptual and Mythological Setup of Babylonian Extispicy". In: A. Gianto (ed.), *Biblical and Oriental Essays in Memory of William L. Moran*. Rome, 11–47.
- Taub, L., & A. Doddy (eds.) 2009. *Authorial Voices in Greco-Roman Technical Writing*. Trier.
- Totelin, L. 2009. *Hippocratic Recipes. Oral and Written Transmission of Pharmacological Knowledge in Fifth- and Fourth-Century Greece*. Leiden.
- Westbrook, R. 1985. "Biblical and Cuneiform Law Codes". In: *Revue Biblique* 92, 247–65 [reprinted in B. Wells & R. Magdalene (eds.) 2009. *Law from the Tigris to the Tiber, vol 1: The Shared Tradition*. Winona Lake, 3–20].
- Westbrook, R. 1989. "Cuneiform Law Codes and the Origins of Legislation". In: *Zeitschrift für Assyriologie und Vorderasiatische Archäologie* 79, 201–222.