Mental Symptoms in the Akkadian *Diagnostic Handbook*: A study of patterns in the description of depression, anxiety, and madness

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Abstract

This study is concerned with reconstructing patterns in the description of mental distress, disturbance, and disorder in diagnostic descriptions from medical texts recorded in Akkadian from the first millennium BCE. In the service of this aim, the study also offers a theoretical framework for the approach to mental disorder in Akkadian medical diagnostic texts. With a few exceptions, previous studies of mental disorder in the Akkadian medical tradition have relied in large part on the method of retrospective diagnosis, which, for reasons to be set out, can be a problematic methodology. This study offers an alternative framework that defines objects of inquiry that can be meaningfully applied to the Akkadian sources. This framework incorporates principles from the fields of the history, philosophy, and anthropology of medicine and takes into account the type of information recorded in the Akkadian medical diagnostic texts. Organised around three core symptoms of *ašuštu* "Depression", *ḫīp libbi* "Heartbreak", and *ṭēmu šanû/nakāru* "The mind alters/changes", this study investigates the occurrences of these terms and expressions in the *Diagnostic Handbook* to determine an initial repertoire of symptoms that recur with these. These recurring symptoms are taken to reflect patterns in the description of mental symptoms and are supplemented with medical therapeutic texts, especially those for ghost- and witchcraft-induced illness. Mental symptoms organised with the core symptoms of this study are primarily expressed through the paradigms of change and somatisation. The recurrence of these patterns reveals native paradigms in the expression of mental symptoms that can be explained with intercultural parallels and that begin to reveal the ways in which disorders with a strong cognitive and affective component were made comprehensible in a clinical context.

Abbreviations

With few exceptions, abbreviations used in this study follow the *Chicago Assyrian Dictionary*. For ease of reference, those employed in this study are listed here with any additional abbreviations appearing at the start of this list:

DSM-5	*Diagnostic and Statistical Manual of Mental Disorders*, *Fifth Edition*, 2013.
ICD-10	The ICD-10 Classification of Mental and Behavioural Disorders: Clinical descriptions and diagnostic guidelines, 2004, Geneva.
Foxvog *Glossary*	Foxvog, D. (2014), *Elementary Sumerian Glossary*.
SA.GIG	Akkadian *Diagnostic Handbook*.
4 R^2	Rawlinson, H.C. (1891), *A Selection from the Miscellaneous Inscriptions of Assyria*. *Second Edition*, London.
ABoT	Balkan, K. (1948), *Ankara Arkeoloji Müzesinde Bulunan Boğazköy Tabletleri. Boğazköy-Tafeln im Archäologischen Museum zu Ankara*, Istanbul.
ABL	Harper, R. F., *Assyrian and Babylonian Letters*, Chicago.
ABRT	Craig, J.A. (1895-97), *Assyrian and Babylonian Religious Texts*, Leipzig.
AfO	*Archiv für Orientforschung*, Vienna.
AHw	*Akkadisches Handwörterbuch*, Wiesbaden.
AMT	Thompson, R. C. (1923), Assyrian Medical Texts.
AOAT	*Alter Orient und Altes Testament*, Münster.
ASJ	*Acta Sumerologica*, Hiroshima.
AUWE	*Ausgrabungen in Uruk-Warka. Endberichte*, Mainz.
BAM	Köcher, F. (1963-1980), *Die babylonisch-assyrische Medizin in Texten und Untersuchungen*, Berlin.
BID	Farber, W. (1977), *Beschwörungsrituale an Ištar und Dumuzi*, Wiesbaden.

BM	British Museum, London.
BMS	King, L. W., *Babylonian Magic and Sorcery*, London.
Borger Esarh.	Borger, R. (1956), *Die Inschriften Asarhaddons, Königs von Assyrien*, Graz.
BWL	Lambert, W.G. (1996), *Babylonian Wisdom Literature*, Winona Lake.
CAD	*The Assyrian Dictionary of the Oriental Institute of the University of Chicago*, Chicago.
CBS	University Museum in Philadelphia (Catalogue of the Babylonian Section).
CDLI	*Cuneiform Digital Library Initiative*, www.cdli.ucla.edu.
CMaWR	Abusch, T. and Schwemer, D. (2011), *Corpus of Mesopotamian Anti-Witchcraft Rituals*, Leiden.
CT	*Cuneiform Texts from Babylonian Tablets, &c., in the British Museum*, London.
FAOS	*Freiburger Altorientalische Studien*, Wiesbaden.
GAG	von Soden, W. (1995), *Grundriss der akkadischen Grammatik. 3., ergänzte Auflage*, Rome.
GCCI	Dougherty, R. P. (1923-33), *Goucher College Cuneiform Inscriptions*, New Haven.
Iraq	*Iraq*, London.
JCS	*Journal of Cuneiform Studies*, Cambridge.
JAOS	*Journal of the American Oriental Society*, Ann Arbor.
JRAS	*Journal of the Royal Asiatic Society*, Cambridge.
K.	British Museum in London (Kuyunjik).
KAL	*Keilschrifttexte aus Assur literarischen Inhalts*, Wiesbaden.

KAR	Ebeling, E. (1915-20), *Keilschrifttexte aus Assur religiösen Inhalts*, Leipzig.
KBo	*Keilschrifttexte aus Boghazköi*, Leipzig and Berlin.
KUB	*Keilschrifturkunden aus Boghazköi*, Berlin.
Küchler Beitr.	Küchler, F. (1904), *Beiträge zur Kenntnis der Assyrisch-Babylonischen Medizin: Texte mit Umschrift, Übersetzung und Kommentär.* Leipzig.
LB	Tablets in the de Liagre Bohl Collection (Leiden)
LBAT	Sachs, A., T. Pinches and J. Strassmaier (1955), *Late Babylonian Astronomical and Related Texts*
LTBA I	Matouš, L. (1933), *Die lexikalischen Tafelserien der Babylonier und Assyrer*, vol. I
LTBA II	von Soden, W. (1933), *Die lexikalischen Tafelserien der Babylonier und Assyrer*, vol. II.
LKA	Ebeling, E. (1953), *Literarische Keilschrifttexte aus Assur*, Berlin.
LKU	Falkenstein, A. (1931), *Literarische Keilschrifttexte aus Uruk*
MAD	*Materials for the Assyrian Dictionary*, Chicago.
MLC	Morgan Library Collection, New Haven.
MSL	*Materialien zum sumerischen Lexikon*, Rome.
OECT	*Oxford Editions of Cuneiform Texts*, Oxford.
OIP	*The University of Chicago Oriental Institute Publications*, Chicago.
OLZ	*Orientalistische Literaturzeitung*, Berlin.
OrNS	*Orientalia. Nova Series*, Rome.
PBS	*University of Pennsylvania Museum. Publications of the Babylonian Section*, Philadelphia.
RA	*Revue d'assyriologie et d'archéologie orientale*, Paris.

RIM	*The Royal Inscriptions of Mesopotamia*, Toronto.
RlA	*Reallexikon der Assyriologie und Vorderasiatischen Archäologie*, Berlin and New York.
RTC	Thureau-Dangin, F. (1903), *Recueil de tablettes chaldéennes*, Paris.
SKIZ	Römer, W. (1965) *Sumerische "Königshymnen" der Isin-Zeit* (= DMOA 13), Leiden.
SpBTU	*Spätbabylonische Texte aus Uruk*, Berlin.
STT	Gurney, O.R. and Finkelstein, J.J. (1957), *The Sultantepe Tablets I*, London. Gurney, O. R. and Hulin, P. (1964), *The Sultantepe Tablets II*, London.
TCL	*Textes cunéiformes du Louvre*, Paris.
TCS	*Texts from Cuneiform Sources*, New York.
TLB	Tabulae Cuneiformes a F.M.Th. de Liagre BöhI collectae (Leiden 1954 ff.)
TIM	*Texts in the Iraq Museum*, Baghdad.
UET	*Ur Excavations: Texts*, London.
VAB	*Vorderasiatische Bibliothek*, Leipzig.
VAT	*Vorderasiatisches Museum*, Berlin.
VS	*Vorderasiatische Schriftdenkmäler der staatlichen Museen zu Berlin*, Leipzig and Berlin.
YOS	*Yale Oriental Series, Babylonian Texts*
ZA	*Zeitschrift für Assyriologie*, Berlin and New York.

Introduction

Psychological problems, like physiological ones, have always existed, even if they have not been conceptualised as such. The ways in which mental distress was expressed and made comprehensible can tell us a lot about acceptable modes of experiencing this particular type of human suffering, patterns of help-seeking and treatment, and underlying theories on the mind and its relation to the body. A study of how the ancient Mesopotamians recognised and organised mental disorder and its symptoms contributes a key perspective to the concepts that informed their approach to illness and reveals paradigms for the expression of human suffering available to patient and physician alike.

Based on textual evidence, it is evident that the Mesopotamians recognised disturbances and disorders in mood and thought; however, the question of how these were interpreted and construed remains poorly understood. A number of studies have addressed psychology and mental disorder, conceptualised as psychiatry, in Mesopotamian medicine, but few address these topics directly or exclusively. Most of the studies that have investigated mental disorder in the cuneiform medical tradition have done so tangentially as part of a broader study. While all of these studies have provided invaluable perspectives and resources for a more systematic study in the future, none of them has proposed or attempted to provide a theoretical framework for an approach to the subject that would justify the interpretation of clinical descriptions or specific terminology as reflecting mental symptoms or disorder. This thesis aims, in part, to provide such a framework.

1.1. Review of the Literature

A full literature review on the conception of the mind and of mental disorder based on Akkadian textual sources must include studies that treat the subject tangentially and those that address it directly. While the approaches taken by scholars to date have employed the general methods of Assyriology, including the methods of philology and textual interpretation, none of the studies has proposed a theoretical framework that draws from the history, anthropology, or philosophy of medicine and psychiatry.

1.1.1. The Literature

1.1.1.1. General Studies

Scurlock and Andersen include a chapter on mental illness in their vital contribution to the study of medicine in ancient Mesopotamia, *Diagnoses in Assyrian and Babylonian Medicine* (2005). In the introduction to their work, they explain the methodology of the study as proceeding inductively, "finding modern equivalent descriptions to match as many ancient texts as possible, taking into consideration the possibility that the course of diseases might have altered…" (Scurlock and Andersen 2005: xviii). The chapter on mental illness includes a wealth of passages that describe mental symptoms, and the passages are organized according to the modern terminology for the symptoms and conditions to which they roughly correspond, such as anorexia, mood disorders, psychotic states, and others.

Stol also contributes a chapter on psychosomatic suffering in the volume *Mesopotamian Magic: Textual, Historical, and Interpretive Perspectives* (1999). A compilation of essays on magic in the ancient Near East, including later antiquity, this volume includes several chapters on aspects of the Mesopotamian medical tradition,

including Stol's essay. That essay discusses several conditions that might be blamed on psychological stresses, such as impotence, depression, rejection, and various descriptions of fear. In addition, Stol discusses some of the common or shared causes for various psychosomatic complaints, including divine anger and witchcraft. His work contributes to the study of certain recurring symptoms in therapeutic texts and offers a perspective on the overlap between physiological, psychological, and social complaints that are often organised together in therapeutic texts.

Geller includes a study of Tablet 22 of the *Diagnostic Handbook*[1] in his contribution to the volume *Magic and Rationality in Ancient Near Eastern and Graeco-Roman Medicine* (2004b). Although his essay deals more generally with parallels between the language and content of early Greek and Babylonian diagnosis, he includes a brief section on SA.GIG 22 and Greek parallels (Geller 2004b: 49-51). Geller describes SA.GIG 22 as "an unusual tablet", which "is concerned with mental problems associated with physical symptoms, usually fever or vomiting" (2004b: 49). He offers a considered summary of the different sections of the tablet, and makes the case for interpreting certain symptoms and conditions as psychological, despite their being organised with physiological symptoms.

In his most recent overview of the medical tradition, Geller also includes a section on psychosomatic illness, which in general refers to an illness with physiological symptoms that have an ultimate psychological origin but can also reflect a preference in the expression of psychological disturbance.[2] Geller makes the important observation

[1] Hereinafter referred to as SA.GIG when referencing a specific tablet and/or line(s) (e.g., SA.GIG 22). All tablet and line numberings for the *Diagnostic Handbook* follow Heeßel's edition, unless otherwise noted. Scurlock 2014 was released too late to be used in this thesis.
[2] This phenomenon is referred to as somatisation throughout this study, defined in §3.1.4.

that the Akkadian conceptual framework lacked the dualism that informs distinctions between "*soma* (body) and *psyche* (soul)" found in the Hippocratic corpus but that, nevertheless, "the distinction between physical and mental illness can be found in Babylonian medicine" (2010a: 33). Citing several therapeutic medical texts and magical texts, including parts of one of the core texts for this study (*Libbu* 4), he further suggests that this corpus seems to have been "designed to deal with a patient's anxieties" (Geller 2010a: 37) in an indirect way. His observations about the role of magical texts as providing relief against such anxieties raises important questions about the role of somatisation in the experience and eventual treatment of anxiety, and about disease aetiology more generally.

In his study of epilepsy in Akkadian medical texts, *Epilepsy in Babylonia* (1993), Stol includes a section on melancholy, which is observed to occur with terms that refer to different types of epilepsy, as well as with symptoms of epilepsy. The term that he interprets as melancholy is one of the core symptoms of this study: (*ḫūṣ/ḫuṣṣu*) *ḫīp libbi* "Heartbreak" (Stol 1993: 27-32). Stol cites numerous therapeutic texts for Heartbreak, including the unedited text *BAM* 316 obv. iii-iv, which is included in the present study as a core text for *ḫīp libbi* "Heartbreak". His study is relied upon throughout this thesis and is, in particular, taken into consideration in Chapter 5.

1.1.1.2. Studies of "Psychiatry"

Several studies take the approach of retrospective diagnosis, whereby modern disease concepts from psychiatry are projected onto descriptions of illness and disorder in the Akkadian medical texts. Among these, Kinnier Wilson has offered a number of useful

studies that deal both directly and indirectly with psychiatry in ancient Mesopotamia. His contribution to *Studies Landsberger* represents the seminal study and includes a number of examples of descriptions of mental symptoms and illness, which are then correlated to modern psychiatric categories and illnesses. For example, he interprets é-gal-tur-ra texts as providing a record of delusions that "suggest a diagnosis of early schizophrenia" (Kinnier Wilson 1965: 290). Such texts, in his view, provide a glimpse into a "mental subject" whose fears reflect delusions of persecution and whose perception of misfortune follows a logic of its own (Kinnier Wilson 1965: 290). He treats several incantation texts as referring to or describing delusions, including one magical text in which the supplicant complains of being treated unjustly by god, king, superiors, and elders (*KAR* 26 obv. 1-10 with *AMT* 96, 7; Kinnier Wilson 1964: 291-292).

However, a subject's complaints in texts such as incantations and the é-gal-tur-ra corpus should not be immediately dismissed as a delusion. As pointed out by Abusch in his interpretation of the term *šuškunu* "dismissal", as it appears in texts such as the one cited by Kinnier Wilson, the losses described present a situation frequently described in therapeutic texts (1985: 91-96).[3] Such texts reflect the ways members of the upper classes may have come into contact with the central administration (Abusch 1985: 95). Abusch further suggests that the text in question had undergone revision and adaptation that led to the grouping together of unrelated phenomena, rather than a cluster of related symptoms or a syndrome (1985: 95).[4]

[3] Abusch addresses texts in which witchcraft is blamed for a person's alienation from authority figures and society (1985: 91-92), as in *KAR* 26; *AMT* 87/1; *LKA* 119, *STT* 256. See Abusch 1985: 91-92, 96. See also his study on witchcraft literature (1987).
[4] See his study of *KAR* 26 and *BMS* 12 in *Babylonian Witchcraft Literature* (1987: 45-75), in which he notes the role of the scribal framework of witchcraft texts (Abusch 1987: 74).

This observation raises two possibilities that challenge the interpretation of such texts as symptomatologies. First, the texts may deal with culturally sanctioned behaviour considered to be "normal", rather than with "an individual psychopathology" (Abusch 1985: 95), and second, "whether we are dealing with a literary construct created by a learned author who has drawn together themes from various therapeutic texts and other genres in order to elaborate a story and convey a point, rather than with an accurate record of an individual case" (Abusch 1985: 95-96).[5] These possibilities must be taken into account before deeming any text a symptomatology of a single illness or condition that can be readily correlated to a modern illness concept.[6]

The study presented by Ritter and Kinnier Wilson that analyses *BAM* 234 as a description of anxiety confronts this particular methodological issue. The authors address the question of how to "look upon the text and the disease condition in modern terms" (Ritter and Kinnier Wilson 1980: 28). Based on the symptoms of anxiety set forth in a modern textbook on psychiatry, the authors conclude that the symptomatology of the text supports the interpretation of it as a description of an anxiety state (Ritter and Kinnier Wilson 1980: 29). It is clear that symptoms of anxiety are described in this particular text, which is excerpted and analysed in §7.1.1, but it is not clear that the description hangs together as a unified symptomatology. Questions about textual history, social context, and literary constructs that are raised by Abusch must be taken seriously, but these do not necessarily detract from the value of such texts as sources of information about mental symptoms and illness, if such passages are considered together with medical material.

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[5] *Ludlul bēl nēmeqi* provides an example of such a text that is often interpreted as a case study of mental illness, and Kinnier Wilson goes as far as to call the composition, "The autobiography of a paranoid schizophrenic" (1964: 296).

[6] Other scholars have criticised Kinnier Wilson's approach and conclusions, including Farber 1977: 39 and Bottéro 1983: 166. These studies are cited in Stol 1999: 57 n5.

The appearance of parallel descriptions in diagnostic texts provides valuable clues as to what the Mesopotamian medical tradition viewed as abnormal and pathological, including some behaviour addressed in magical texts.

Kinnier Wilson revisits *BAM* 234 with the neurologist E. H. Reynolds in a short article on depression and anxiety published in the *Journal of the Royal Society of Medicine* (2013). In the article, the authors amend earlier interpretations of the text as one of "an anxiety state" to a more general concept of a "behavioural disorder" for which no single name in Akkadian existed and which included aspects of depression, anxiety, and somatisation (Reynolds and Kinnier Wilson 2013: 479). Beginning with the observation that "Babylonian accounts of mental illness are notable for their objectivity and the absence of subjective feelings and thoughts", the article gives a brief overview of terminology for depressed and anxious states (Reynolds and Kinnier Wilson 2013: 478). Among terms that may represent subjective feelings, the article lists *ašuštu*, which is taken to refer to distress that may include depression, and *zikurudû* "cutting of the throat", a term thought to refer to suicide.[7] This section also mentions terms that describe fear, including *puluḫtu* "fear", *parādu* "to be afraid", and *ḫīp libbi*, which the authors interpret as "nervous breakdown" or "panic attack" (Reynolds and Kinnier Wilson 2013: 478). The authors recognise that it is unclear whether the clinical description presented in the text chronicles a single case, or represents "the complete clinical picture derived from observing many examples" (Reynolds and Kinnier Wilson 2013: 478).

Regardless of the source of the description of abnormal states and behaviours, they note a parallel with modern psychiatry: "agitated depression with biological features including insomnia, anorexia, weakness (and probably weight loss), impaired

[7] Absuch and Schwemer demonstrate that this in fact refers to a specific form of magic (*CMaWR*: 3).

concentration and memory" (Reynolds and Kinnier Wilson 2013: 479). At the same time, the text lacks references to "subjective thoughts and feelings", although some mental states are described, including depression, fear, agitation, and possibly panic attacks (Reynolds and Kinnier Wilson 2013: 479). The authors conclude that, despite this absence of references to subjective thoughts and feelings and the lack of knowledge about the brain as understood in biomedical models, the clinical description in *BAM* 234 closely corresponds to "modern views of a depressive illness" (Reynolds and Kinnier Wilson 2013: 480).

Similarly, the same authors have offered a study of the history of obsessive compulsive disorder as reconstructed from Akkadian incantation texts. Curiously, they label the canonical incantation series *Maqlû* and *Šurpu* as the "main but not exclusive sources" for the study of psychiatry in ancient Mesopotamia. In a substantial oversimplification of the content and context of these texts, the authors categorise them as corresponding "broadly and respectively with modern concepts of psychosis and neurosis and may represent the first awareness and documentation of what we call mental illness" (Reynolds and Kinnier Wilson 2014: 199). While *Maqlû* is "largely concerned with delusions of persecution" and procedures against this, *Šurpu* is "concerned with psychopathic compulsive and phobic behaviour" (Reynolds and Kinnier Wilson 2014: 199). To support this claim, the authors include excerpts from *Šurpu*, arguably out of context, and organised under modern labels of "psychopathic behaviour" and "obsessive compulsive disorder and phobias" (Reynolds and Kinnier Wilson 2014: 200).

It is possible to justify such an interpretation of certain behaviours described in these incantation texts as reflective of obsessive compulsive disorder and phobias based

on modern diagnostic criteria. However, the purpose of the lists of sins committed by the supplicant or fears suffered by him in various parts of *Šurpu* is not to offer a symptomatology of any disorder. Indeed, some of the behaviours or fears described may not have been considered abnormal. Rather, these entries form part of exhaustive lists of possible reasons for the abandonment of one's personal god or of universal complaints, including social, financial, and medical complaints. Absent detailed consideration of the context, textual history, the study is vulnerable to the same criticisms levelled by Abusch (1985).

Such descriptions as *BAM* 234 and those found in canonical incantation series, in which various misfortunes suffered by a supplicant are enumerated, including illness, can elucidate the way illnesses and their symptoms were experienced and expressed. While such descriptions do not constitute symptomatologies of a single disease or disorder, they do bring together stereotyped expressions of mental disturbance, and the related physical complaints and general adversities, which have been filtered from multiple sources or individual experiences and which are intended to accommodate the vicissitudes of individual cases. Past and recent studies of *BAM* 234 in particular highlight some of the key features of these experiences of depression and anxiety, including psychosomatic symptoms. These texts provide valuable sources for the study of psychiatry in the Akkadian medical tradition but can better be considered in their proper context.

1.1.1.3. Studies of Psychology and Psychoanalysis

The above studies of schizophrenia and anxiety disorders in medical therapeutic texts project modern psychiatric categories on the ancient material. Other approaches

view the texts from the perspective of psychoanalysis in order to identify psychologically significant behaviour apparent in therapeutic practices and evaluate the efficacy of therapies. Geller takes such an approach in his "Freud, Magic and Mesopotamia: How the Magic Works" (1997). The article seeks to show the ways in which incantations and magical texts express a form of "ancient psychology" and to offer explanations, derived from Freud's psychoanalysis, for why the magic may have worked (Geller 1997: 1). Briefly, Freud's structural conception of the mind divided the human psyche into three parts: the id, the ego, and the superego. The id contains innate instincts and is identified with the unconscious (Freud 1969: 35-36). On the other hand, the ego is defined as the "coherent organization of mental processes," to which "consciousness is attached" (Freud 1995: 630). It is responsible for balancing the demands of the external world and the internal world in the form of the id and super-ego, which represents the internalized authority from childhood, "a special agency in which this parental influence is prolonged" (Freud 1969: 15).

Instead of identifying symptoms or disorders of illness or dysfunction, Geller identifies the expression of elements of the psyche, such as the ego, superego, and id, in incantation literature and omen literature. Aspects of the id, for example, may be found in descriptions of dreams in dream omens. Although dreams in Mesopotamia are conceptualised as arising from external supernatural forces, rather than unconscious thoughts, the content of dream omens hint at the same kinds of psychic phenomena as they do today. Freud perceives dreams as a window onto the id,

> which is not guided by rules and regulations but is free to express repressed desires and activities which would otherwise be shockingly

> improper. Mesopotamian dream reports supply a rich source for such thoughts, presumably drawn from actual dreams which were reported to the scribes and carefully recorded as part of the science of omens. (Geller 1997: 4)

This overlap in the content allows for some insights into the Mesopotamian id or, more specifically, into the content of repressed thoughts and fears, such as those associated with sex or death.

In effect, Geller applies Freud's metapsychological theories to determine the ways that individual psychology can illuminate the cultural life of a society. His analysis provides insights into psychologically significant behaviour, as well as into social taboos and social norms based on the types of behaviours described in dream texts, omens, and incantations. The study also makes contributions to the study of the Mesopotamian psyche, or personality structure, based on Freudian considerations.

In a brief study, Guinan takes a similar approach. She interprets the types of behaviours described in the human behavioural omens of the omen compendium *Šumma ālu* as reflections of the peculiarities of human behaviour observed by man himself. The omens she analyses reveal some psychologically significant descriptions in sleep behaviour, mishaps and mannerisms, sexual behaviour, rituals, and man's conception of his place in the universe. In her view, an omen can be compared to a "Freudian symptom" in that "it attempts to negotiate hidden drives and desires by projecting on to the future a greatly diminished expression of exactly those ego-alien wishes that the conscious ego finds intolerable" (Guinan 1990: 13-14). These studies contribute a useful perspective to the study of psychology in ancient Mesopotamia.

1.1.1.4. Philological Studies

Philological approaches to the ancient material seek to determine the meaning of particular Akkadian expressions, idioms, and terms in the medical corpus that refer to disturbances in mood and mind. Such approaches tend to refrain from projecting modern concepts into the ancient material and, rather, analyse the terminology in context. Stol's article on "insanity" published in the *Journal de Médicines Cunéiformes* (2009) discusses the terminology for insanity in Sumerian and Akkadian sources and considers three expressions for madness that employ the concept of a change in a person's mental state: *šinīt ṭēmi*, *ṭēmu šanû/nakāru*, and *demmaku(r)rû*. He considers these expressions in context as they appear in the *Diagnostic Handbook*, magical texts, epistolary texts, royal inscriptions, and other sources to show that they refer to different degrees of insanity.[8] Stol examines the way the terms are used in the various genres to shed light on the characteristics of this medical concept. In addition, rather than equating these terms with modern terminology for mental illness, such as "schizophrenia", he opts for the more general concept of insanity. Although the paper is comparatively brief, it synthesizes information from wide spectrum of genres and provides a useful model for the study of terminology for signs and symptoms of mental disorders in the cuneiform texts.

The recent publication of Chalendar's edition of *BAM* 202 and study of the clinical and therapeutic aspects of this text provides a similarly useful model (Chalendar 2013). The introduction to this study makes the methodological point that psychiatry as a discipline relies fundamentally on the social and cultural milieu in which it is practiced and that, accordingly, the projection of modern notions must be avoided (Chalendar 2013: 1). The edition of *BAM* 202, which deals on the one hand with the same terms for

[8] This is discussed in detail in §6.1.

madness addressed in Stol's 2009 article, and on the other hand with descriptions of epilepsy, adds a valuable source to the available corpus of medical texts that address mental symptoms and illness. Furthermore, the detailed philological notes on specific terms as they appear in the text clarify the meaning and use of symptom and illness names and provide a terminological foundation for the study of symptom patterns and illness concepts.

A more recent study of madness, Schaudig's "'Wahnsinn' im Alten Orient" (2014), follows in the footsteps of Chalendar and Stol in that it considers the Akkadian expressions for madness – in particular *šinīt ṭēmi* and *ṭēmu šanû* – in various contexts in order to draw conclusions about Babylonian and Assyrian conceptions of this cognitive impairment. This study consults sources from a wide array of genres, including royal inscriptions and annals, in order to show how this behaviour figures in descriptions from different contexts. In Schaudig's view, the medical texts fail to elaborate the precise impairment described by *ṭēmu šanû* "the mind alters" and related expressions (Schaudig 2014: 399). Although certain symptoms that indicate a total physical and mental breakdown are observed with *ṭēmu šanû* "the mind alters" and *ṭēmu nakāru* "the mind changes" in diagnostic and therapeutic texts, he considers the medical sources to provide little information about the features of the specific cognitive failure itself. His overview of madness in non-medical texts provides a substantial contribution to the study of mental disorder outside of the medical tradition.

My approach draws heavily from these philological studies in that I focus on terms for mental symptoms used in context. Rather than projecting modern disease concepts onto these terms, I seek to identify patterns in the expression of mental

symptoms. This approach helps to shed light on *native* ways of organising the experience of mental distress into recognisable symptoms, and of organising these symptoms into useful and – from a practical perspective – treatable illness concepts and categories.

1.1.2 General Findings and Methodological Trends

These studies show that mental disturbance and disorder were recognised in Akkadian medical texts. Given that later medical texts, including both diagnostic and therapeutic texts, were based on earlier copies from the Old Babylonian period onward, it is reasonable to suggest that disorders with a strong mental component were recognised, treated, and recorded throughout Mesopotamian history.[9] Other than the philological studies undertaken by Stol, Chalendar, and Schaudig, the available secondary sources on mental disorder, usually phrased as studies of "psychiatry", in ancient Mesopotamia rely on the method of retrospective diagnosis. A common thread of these studies, and an observation used to justify the use of this method, is that the Assyrians and Babylonians were keen observers of medical phenomena (e.g., Scurlock and Andersen 2005: 1-2; Reynolds and Kinnier Wilson 2014: 199). The Akkadian texts offer an unparalleled glimpse not only into the medical tradition, but also into the illnesses from which Mesopotamians may have suffered.

The approach taken by Scurlock and Andersen is tailored to the goal of determining "which diseases still recognized by modern science were in fact suffered by ancient Mesopotamians" (Scurlock and Andersen 2005: xviii). This approach closely

[9] On the early origins of medical texts, see Attinger 2008.

approximates that of retrospective diagnosis, though formulated in a different chronological direction: rather than begin with modern diseases from which to "proceed deductively" by fitting ancient descriptions to modern equivalents, the authors "proceeded inductively" by fitting modern descriptions to the ancient texts. Deductive reasoning proceeds from general law to particular instances, while inductive reasoning involves the inference from particular instances to a general law.[10] However, in the study, the direction of inference might better be explained with reference to chronological, rather than logical,[11] considerations in that modern descriptions are fitted to ancient ones, rather than ancient ones being fitted to modern ones. It seems these two exercises would yield the same result: the identification of modern diseases in ancient symptom descriptions. As noted with respect to the *Diagnostic Handbook*, "it is not a question of retrospective diagnosis, since the illnesses described have already been diagnosed, but of attempting to correlate ancient and modern systems of classification" (Scurlock and Andersen 2005: xx).

Following on from this, the methodology takes into account the observation that more than one Akkadian word could be used to refer to a similar symptom. This terminological variation shows a subtle awareness in the type of symptom being described and the type of disease each one is thought to form a part of. Relying on the correlation of modern and ancient disease concepts, the authors refined their provisional translations of such nuanced terms (Scurlock and Andersen 2005: xviii). For example, the

[10] This deserves to be articulated more fully, but such a discussion lies well beyond the scope of the present study. Briefly, a deductive argument provides a guarantee of the truth of its conclusions if the premises are true (Tarski 1994: 110), whereas inductive reasoning establishes the probability of a conclusion by extrapolating from an open set of information, an "inference to a plausible explanation" (Hacking 2001: 16). See further Hacking 2001: 1-18.

[11] "Logical" here is used in the sense of propositional logic of which the types of logical inference include inductive, deductive, and abductive (Hacking 2001: 17).

Akkadian medical corpus employs several terms that denote or describe tremors or trembling, including *nâšu*, *raʾābu, tarāru*, and *ratātu*. The latter two seem to reflect an involuntary movement connected with descriptions that approximate Parkinson's, while *raʾābu* may be an "intention tremor" (Scurlock and Andersen 2005: xviii; 297-299).

The goals set out in Scurlock and Andersen's study of offering a history of certain disease concepts in Mesopotamia and of recognising the nuances in Akkadian symptom descriptions are both productive and worthwhile. Given the rich resources for the study of medicine in ancient Mesopotamia, the approach of seeking to identify modern diseases in the Akkadian material is tempting. In my view, however, the method used in their encyclopaedic work on Assyrian and Babylonian diagnoses, including psychiatric diagnoses, suffers the same difficulties as retrospective diagnosis, though the methodology is framed in different terms.

Beginning from the assumption that the same diseases were present,[12] such an analysis relies on matching modern symptom descriptions to ancient ones in order to justify "reasonable inferences from the ancient texts" about the presence of such modern diseases in ancient Mesopotamia (Scurlock and Andersen 2005: xviii). In terms of mental disorder, this strategy relies on the assumption that the ancient Mesopotamians considered abnormal the same signs and behaviours considered to be pathological today, and, further, that they grouped such signs together in the same way as they are grouped into modern disease concepts. However, the attempt to correlate modern and ancient disease concepts obscures the way that signs and symptoms are grouped together into native illness concepts and corresponding aetiologies. This is most prominently reflected

[12] They do, however, note that the course and frequency of a disease can differ between the ancient and modern contexts (Scurlock and Andersen 2005: xviii).

in the structure of the study, whereby descriptions from Akkadian medical texts are organised under modern rubrics.

Regarding retrospective diagnosis, Scurlock and Andersen write:

> In reading through the secondary literature on ancient medicine one sometimes encounters the argument that those who attempt to identify illnesses described in ancient texts are engaged in retrospective diagnosis, a reckless and false process. In fact, modern physicians have much to gain by attempting to understand the nature of a patient's past illnesses. If there is an adequate amount of good information, the possibility of achieving a correct diagnosis is excellent. (Scurlock and Andersen 2005: xx)

Their note on retrospective diagnosis is worth quoting in full because it sets forth three assumptions, which will be taken up in the theoretical discussion in Chapter 2: first, that disease concepts are stable across time periods and geographical regions such that modern concepts can be confidently identified in ancient sources; second, that the *perception* of disease concepts (i.e., "illness") is stable; and third, that there is an adequate amount of the right kind of information in the Akkadian sources to make such diagnoses.[13]

Reynolds and Kinnier Wilson employ similar approaches based on the same assumptions in their various studies of Babylonian psychiatry. The authors' 2013 study of *BAM* 234 notes that the ancient Babylonian scribes, scholars, and physicians would not have known the relatively modern concept of "depression" (Reynolds and Kinnier Wilson 2013: 478). The study further acknowledges that the text may not represent a single case or the fusion of multiple observed cases (Reynolds and Kinnier Wilson 2013: 478). However, the article goes on to identify the description in *BAM* 234 as an "accurate

[13] The problems with these assumptions are addressed in §§2.2-2.3.

description of an agitated depression with biological features including insomnia, anorexia, weakness (and probably weight loss), impaired concentration and memory" (Reynolds and Kinnier Wilson 2013: 479). The text may indeed describe the same symptoms as are associated with "agitated depression" in modern diagnostic manuals, and such an observation is informative. The diagnosis, however, risks over-interpretation: the same symptoms may have been recognised as those organised today under the label of agitated depression, but they may not have hung together as a single disease entity.

While these studies recognise some of the methodological problems with projecting modern disease concepts onto the ancient material, an alternative approach is not offered. It is hoped that the present study will fill this gap in the literature by offering an alternative theoretical framework for the study of mental symptoms and disorder based on principles from medical semiotics, especially as brought to bear in the concept of a "semantic illness framework" in medical anthropology. In applying the principles of this framework to the study of mental symptoms organised with *ašuštu* "Depression", *ḫīp libbi* "Heartbreak", and *ṭēmu šanû/nakāru* "The mind alters/changes", this study aims to shed light on the ways in which experiences of mental distress and disorder were organised into patterns that would have been meaningful and comprehensible to Mesopotamians (or, at least, to Mesopotamian scholars) in the Akkadian medical corpus.

1.2. Research Questions and Aims

1.2.1. Research Questions

The importance of existing studies of psychology and psychiatry in the Akkadian medical tradition must not be underestimated. The research introduces the subjects of

psychology and psychiatry in the Mesopotamian medical tradition and brings this discipline into the purview of the study of the history of medicine and mental disorder. Moreover, the studies include a wealth of references to descriptions of unusual mental states and symptoms, as well as insightful analyses of the terminology, that have laid the groundwork for a more systematic study of the subject. While the information and analyses offered in the available literature advances our knowledge of Akkadian medical culture, including its language and vocabulary, the need for a more systematic approach is clear.

Two research questions may be identified that can contribute to the study of mental disorder in the Akkadian medical texts and fill a gap in the existing literature. First, a theoretical framework for the study of mental disorder must be constructed that addresses the problematic assumptions inherent to retrospective diagnosis and that accommodate the type of information available in the Akkadian sources. The tools and methods of the history, anthropology, and even philosophy of psychiatry must be taken into account due to particular epistemological problems that arise in respect of the study, more generally, of disease concepts in the ancient world and, more specifically, of mental disorder. Thus, the first question concerns how these principles can be applied to construct a meaningful framework to provide an alternative to retrospective diagnosis, which offers at best a problematic approach to mental disorder.

Second, following from this framework, an investigation of mental symptoms must be undertaken to begin to better understand how these were organised into comprehensible patterns. More specifically, the ways in which symptoms of disorders with a strong mental component were organised and expressed can reveal salient

paradigms and metaphors that structured the experience of and approach to such disorders. What types of symptoms were conceptualised as a reflection of mental disturbance and disorder? How can these symptoms be identified in the sources if they do not directly describe abnormal or unusual emotional and cognitive states? It is possible to construct a framework that can account for descriptions that do not align with expected conceptions of mental disturbance and to determine dominant patterns in these descriptions.

1.2.2. Aims of the Study

This study has two aims that will directly address these questions and that will seek to contribute to the study of mental disorder in ancient Mesopotamia. First, and primarily, this study is concerned with reconstructing patterns in the expression of mental disturbance and disorder in diagnostic texts written in Akkadian from the first millennium BCE. In particular, this study focuses on three expressions known to describe mental symptoms in the Akkadian *Diagnostic Handbook*: *ašuštu* "Depression", *ḫīp libbi* "Heartbreak", and *ṭēmu šanû/nakāru* "The mind alters/changes". These are referred to as the "core symptoms" in this study. The occurrences of these core symptoms in the *Diagnostic Handbook* will be explored to identify patterns in the symptoms that regularly recur with them. These patterns are then used to reconstruct the ways in which mental disturbance and disorder was understood and experienced. Such patterns will also reveal nuances in the meaning of the three core symptoms.

The second aim of this study is to offer an alternative theoretical framework, which is better suited to the type of information contained in the *Diagnostic Handbook*

and other medical texts and which can accommodate the absence of a separate category of psychiatry in those texts, to be used in lieu of retrospective diagnoses. Psychiatry, at its most basic, is the study of phenomena associated with disturbances in the normal functioning of the brain that can affect a person's mood, thought processes, and behaviour. However, the Akkadian medical tradition did not conceptualise such mood-related ("affective") and cognitive disturbances as a separate category. Psychiatry is itself a modern conceptual model for understanding disturbances in mood ("affect") and cognition, and the Akkadian texts seem to make less of a sharp distinction between physical and psychological illness. To make sense of symptom descriptions in the *Diagnostic Handbook*, the mind-body dichotomy that underpins the distinction between the physiological and psychiatric illness in modern medicine need not be projected back into the Akkadian sources, in which conceptions of emotion and cognition are defined by an overlap in the mental and physical. The use of the terms "psychiatry" and "psychiatric disorder" will be limited accordingly to contexts where such terms are appropriate to the discussion.

Rather than offer a history of psychiatry in Mesopotamia, this study focuses on disorders with strong affective and cognitive components in the Mesopotamian medical tradition. It would be unwieldy to continually refer to the objects of this study in these terms. Therefore, for ease of reference, these will be referred to as "mental disorders" order disorders with "mental symptoms", terms that will be defined more precisely in Chapters 2 and 3 and whose application to this study will be explained and justified.

In particular, this study focuses on symptom descriptions, rather than on the more complex categories of disease and illness, terms that will be discussed and defined in

Chapter 2. The focus on the more elementary experience of symptoms, rather than on complex categories like disease and illness, will furthermore allow for parallels with other medical cultures to be drawn without having to rely on the problematic methodology of retrospective diagnosis.

1.2.3. Sources for the Study

This study relies on the *Diagnostic Handbook* as a source of information about the description and organisation of symptoms into comprehensible patterns with corresponding labels, aetiologies, and prognoses. It is possible that, like omen literature, medical texts are not based entirely on empirical observation.[14] The descriptions follow patterns of schematisation and expansion common to other disciplines in the scholarly context. Furthermore, the reliance on wordplay in aspects of illness descriptions, such as in aetiology, suggests that in some cases the connection between symptoms, on the one hand, and their causes and labels, on the other, originated not from empirical reality, but from intellectual exercises. Whether or not the source of symptom descriptions is empirical observation or scribal imagination – or both – the texts presumably record acceptable modes of expression of clinical phenomena and define symptom clusters in ways that would have been comprehensible to a scribe and scholar. The medical diagnostic tradition recorded in Akkadian is, therefore, a key source for the study of the Mesopotamian medical tradition and provides information about Akkadian medical language, which makes comprehensible the experience of illness and its symptoms.

Supplementary texts from the therapeutic corpus from the first millennium BCE

[14] On the role of imagination, deductive logic, and observation in medical texts, as well as the differences between omen literature and medical texts, see Geller 2010: 13-18.

will be used to provide further evidence of symptom clusters, and of idiom and topoi used to describe symptoms that appear in the core texts for this study from the *Diagnostic Handbook.* Questions about textual history and the social and literary context of the therapeutic material, which are addressed in Chapter 2, need to be considered; however, these factors do not detract from the value of such texts as sources of information about mental symptoms, particularly if such passages are considered together with the *Diagnostic Handbook*. The appearance of parallel descriptions in diagnostic and therapeutic texts provides valuable clues as to what was considered to be abnormal and pathological in the Akkadian medical tradition, and how these abnormalities were understood.

This study therefore assumes that the information contained in symptom descriptions in the *Diagnostic Handbook* and in supplementary medical texts are informative of the way that illness and its signs were understood. These texts provide a valuable source not only for the study of medical theories, medical practice, and conceptions of illness and health, but also for the *vocabulary* and *language* of suffering. Symptom descriptions in medical diagnostic and therapeutic texts reveal a consistent framework in which scholars, physicians, and patients could articulate the experience of illness.

1.3. Outline of the Study

Chapter 2 will discuss the problems with retrospective diagnosis in the history of medicine more broadly and in the history of Mesopotamian medicine more specifically, based on the type of information available in the Akkadian sources. This will entail

setting out the theoretical issues that must inform any approach to descriptions of disease, illness, and disorder and definitions of these three terms, which have represented the objects of inquiry in the study of mental disorder in Akkadian medical texts in the secondary literature so far. No attempt has been made in the secondary literature to construct a theoretical framework that takes into account the definitions of disease and illness, and of psychiatric disease and illness in particular. For this reason, the theoretical and methodological issues must be set forth in some detail before a framework can be attempted.

Based on these theoretical and methodological considerations, **Chapter 3** will narrow down and define the objects of inquiry of this study: namely, mental symptoms. In constructing a framework for approaching these objects, this chapter will introduce concepts from medical semiotics and medical anthropology in order to provide the heuristic tools for understanding mental symptoms in their linguistic and cultural context. It is hoped that the theoretical framework to be applied to the core texts outlined in Chapters 4, 5, and 6 will provide a first step in constructing a methodology for the study of mental disorder in ancient Mesopotamia that addresses theoretical issues with the study of the history of psychiatry and that takes into account cultural context.

Chapter 4, **Chapter 5**, and **Chapter 6** will set out the core texts for this study from the *Diagnostic Handbook* (with two exceptions that will be defined in due course). The purpose of these chapters is to provide a background on the core symptoms of this study as mental symptoms and to isolate a preliminary repertoire of symptoms to be studied and to show their use in context. Each of these chapters will include a

philological introduction to the core symptom in question in order to provide a background for the meaning and usage of the terms in their diagnostic contexts.

Chapter 4 will introduce the symptom of *ašuštu* "Depression" and its core texts from the *Diagnostic Handbook.* **Chapter 5** will introduce *ḫīp libbi* "Heartbreak" and its core texts. Because of the semantic range of *libbu*, which forms an integral part of the expression *ḫīp libbi* "Heartbreak"*,* the philological introduction for Chapter 5 will include an overview of the meaning and usage of the Akkadian word *libbu* as the seat of psychic life. **Chapter 6** will introduce the third and final core symptom of *ṭēmu šanû/nakāru* "The mind alters/changes" and the core texts that record these expressions in the *Diagnostic Handbook*. Although the expressions *ṭēmu šanû* "The mind alters" and *ṭēmu nakāru* "The mind changes" may reflect different types or levels of mental disturbance, the two are treated together in this study, as they employ a shared paradigm, that of change, and as they affect the same human faculty: the *ṭēmu*. As noted above, this study begins with the assumption that these three terms – *ašuštu* "Depression", *ḫīp libbi* "Heartbreak", and *ṭēmu šanû/nakāru* "The mind alters/changes" – reflect mental disturbances and, therefore, can be treated as terminological anchors for the study of symptoms organised with them in the diagnostic texts.

With the core texts set out and a repertoire of symptoms identified for analysis, **Chapter 7** will identify dominant patterns in the expression of mental disturbance based on three categories of mental symptoms: unusual mental states, abnormal behaviours, and somatic complaints. The aim of this final chapter is to identify salient paradigms in the expression of mental disturbance and to draw intercultural parallels that may shed light

on otherwise opaque expressions or seemingly bizarre patterns of expression in the Akkadian diagnostic material.

The human body provides a consistent and uniform domain of observation and inquiry common to all time periods and cultures in history. As such, the study of signs and symptoms on and within the body can provide information about the experience of illness and, moreover, the cognitive biases that shaped the interpretation of such illness experiences. Intercultural parallels will be drawn where they help to elucidate a particular idiom or topos that recurs with the core symptoms of this study. Such comparisons will also begin to place the Akkadian vocabulary for mental symptoms and recognition of mental disorder in a broader historical framework. Ultimately, this study aims to shed light on some of the earliest recorded ways of making sense of human suffering in a medical context.

Chapter 2: Methodological Problems for a Study of the Akkadian *Diagnostic Handbook*

The study of mental disorder in the ancient world has progressed more slowly than the study of physiological disorder, in part due to the epistemological and methodological problems intrinsic to the subject and in part due to the nature of information available in the sources. Part of the problem with the history of psychiatry is that the subject matter of "psychiatry" has itself "continuously shifted" (Micale and Porter 1994: 5). Psychiatry has been approached from a number of disciplinary perspectives, each one armed with its own preconceptions, categories, and ideals that shape interpretations of the subject.[15]

With respect to the study of the ancient world, these challenges to the history of psychiatry become even more pronounced. As with other societies in antiquity, in the surviving textual material for Mesopotamia, no special category of medicine was assigned to disturbances and disorders of a psychological nature. However, a rich inventory of terms, topoi, and idiom was available to scribes, physicians, and patients for the description of mental symptoms and disorders. In order to untangle the vocabulary for mental disturbance from the larger medical corpus and identify patterns in the description of such disturbance, we must, from the very start, strictly define the objects and parameters of the investigation.

The present chapter will identify the methodological problems that arise from the study of medicine in the ancient world and in ancient Mesopotamia in particular. Two categories of problems are identified. The first category concerns defining terms. Key to a structured consideration of the history of medicine are the definitions of "disease",

[15] See Wallace 2008: 6; Micale and Porter 1994: 3-5.

"illness", and "disorder". Each represents a separate object of inquiry in the history of medicine, and each presents an epistemological problem. The first part of this chapter will give an overview of the debate over the definition of disease in order to highlight problems with the application of this concept to the ancient sources, especially with regard to psychiatric disease. The concepts of illness and disorder will be introduced as alternative ways to frame the information in the Akkadian medical diagnostic corpus.

The second category of methodological problems concerns limitations on information available in the written sources for a reconstruction of these objects of inquiry. Specific features of the Akkadian medical diagnostic texts will be isolated in order to bring to the forefront the ways in which methodological problems in the history of medicine apply to this corpus.[16] Only those features relevant to the methodological problems addressed in this chapter will be highlighted. This discussion will seek to demonstrate the ineffectiveness of retrospective diagnosis as a method for approaching the Akkadian medical texts for the study of mental disorder, and will offer alternatives that are better suited to the type of information available in the sources and better equipped to deal with definitional problems in the history of medicine and mental disorder. Ultimately, these alternatives will narrow down the objects to be investigated in the Akkadian corpus for this study: namely, the vocabulary used to describe mental symptoms. Although the term "psychiatry" is anachronistic, principles from the history and anthropology of psychiatry provide helpful tools in understanding and approaching mental disorder and mental symptoms.

[16] An overview of the sources for the study of medicine in ancient Mesopotamia more generally will not be included, as several studies in recent years have adequately addressed this topic. See now Geller 2010; Attinger 2008; Scurlock and Andersen 2005, esp. 1-12. See also Verderame 2012 for a recent bibliography of Medicine in Ancient Mesopotamia.

2.1. Overview of Methodological Problems

Several features of the sources for the study of the history of medicine and the history of specific disease concepts in the ancient world pose methodological difficulties. The following table summarises the methodological problems within each category, epistemological and textual, that will be addressed in this chapter.

Table 1 Overview of methodological problems

Epistemological
1. Diseases that exist today may not have existed in the ancient world. 2. Diseases that existed in the ancient world may not exist today. 3. Perception of a disease (i.e., "illness") varies according to time period and cultural contexts.
Textual
4. Insufficient information is preserved in written sources for reliable diagnosis. 5. Insufficient information *of the right kind* is preserved in the written sources for reliable diagnosis. 6. Multiple concurrent diagnoses may be present.

For reasons to be elucidated below, these issues call into question the validity of retrospective diagnosis as a viable approach to the Akkadian medical texts. Because mental disorder in particular relies on cultural norms and values, these issues become more pronounced in a study of the history of mental disorder and must therefore be taken into account in constructing a theoretical framework for an approach to the diagnostic texts.

The epistemological problems pivot on definitions of disease and illness, which must be set forth in order to appreciate the significance of these issues, to show the precise failings of retrospective diagnosis, and to begin to narrow down the scope for alternative approaches. The textual problems primarily concern the type of information available in the sources. This will entail a look at the type of information available in the Akkadian sources in order to highlight the mismatch between ancient and modern conceptions of disease and illness, as well as between ancient and modern ways of organising symptoms into comprehensible patterns.

2.2. Epistemological Problems for the History of Medicine

The projection of modern disease concepts and diagnostic criteria onto past accounts of the signs and symptoms, and the attempt to identify modern disease entities in these accounts, relies on two untenable assumptions. First, this approach assumes an inherent continuity in a disease entity. Second, and related to this point, it assumes that the perceptions of a disease or illness remain constant across different cultures and different periods in history. This section will address the definitions of disease and illness in order to illustrate the untenability of these assumptions with respect to the investigation of historical sources.

2.2.1. Epistemological Problems

Conceptions of health and disease vary from culture to culture, as do the frameworks for the labelling of patterns or clusters of observed signs and reported symptoms as diseases. The identification of a disease and the interpretation of its signs

and symptoms pivot on the degree of deviation from the normal, defined by both biological processes and by the social and cultural milieu of both patient and physician. The physician must, furthermore, construct an explanatory framework on the "intellectual building elements available to their particular place and generation" (Rosenberg 1992: xviii). His "'philosophical' bias, and the structured cognitive guidelines which are his cultural and intellectual heritage" shape his assessment of signs, symptoms, and diseases (Staiano 1986: 28). The patient, in turn, relies, reinforces, and reproduces this framework.[17]

Epistemological problems arise in the conceptual move from signs and symptoms to disease and, therefore, in the concept of disease and the corresponding act of diagnosis. At the most basic level, a symptom is a phenomenon indicative of disease or condition (e.g., "fever"), while a disease is a disorder of structure or function that produces a specific set of symptoms (e.g., "malaria"). While a disease is in part defined by the group of symptoms used to make a diagnosis, a number of epistemological – and, indeed, metaphysical – distinctions divide the two concepts of symptoms and disease. L. King summarises the main distinction thus:

> Diseases are not *things* in the same sense as rocks, or trees, or rivers. Diseases represent patterns or relationships, which are not material. (L. King 1954: 199)

The principles that guide the recognition and naming of such patterns vary from one culture and time period to another. At the same time, a disease arises from an objective biological process. Kleinman makes the same observation of psychiatric diseases, which

[17] See also Wallace 2008: 58.

give convenient labels and form to mental processes, such as neurotransmitters and endocrine hormones, and to relatively stable thoughts, feelings, and behaviours. These diagnoses are not, however, *things* (Kleinman 1991: 12). Rather, psychiatric labels and categories

> underwrite the interpretation of phenomena which themselves are congeries of psychological, social, and biological processes. Categories are the outcomes of historical development, cultural influence, and political negotiation. Psychiatric categories…are no exception. (Kleinman 1991: 12)

The epistemological status of a disease – be it physiological or psychological – as both a social and biological construct and its metaphysical status as a pattern, rather than an elementary object, have generated much debate in the fields of medicine, philosophy, and discourse analysis to be explicated in the following section. This debate, in turn, has implications for the study of disease in the ancient world.

2.2.1.1. Definitions of Disease

At its most basic, a disease is an experience of *dis*-ease that gets manifested in external or internal symptoms, that has an underlying cause or causes, and that has a corresponding outcome. These three components of experience, symptoms, and cause are always present, regardless of how they are described. Cunningham offers a general definition in his study of disease identification in the past. Disease is

> (1) an *experience* – an experience of debilitation, pain, suffering, together with (2) the spontaneous *appearance of non-customary phenomena* with

> respect to the body, such as spots, vomiting, sweating, aches, and (3) with *outcomes* of recovery, death, or disability. (Cunningham 2002: 13)

Cunningham's preliminary definition focuses on the components of a disease without reference to notions of health or culture. Disease is an experience of unusual phenomena with an outcome or prognosis. With these fundamental components laid out, he then notes that "different societies, separated culturally by space or time, will have different views as to what states constitute disease and what its causes are" (Cunningham 2002: 14). Disease, therefore, in its various components is both a social and biological experience.

To return to L. King's classic study of the meaning of the concept of disease, his definition provides a useful starting point for a discussion of the objective and normative dimensions of the concept of disease. It introduces the dual nature of the objective biological aspect of disease and the normative dimension, which is determined in part by environmental and cultural factors:

> Disease is the aggregate of those conditions which, judged by the prevailing culture, are deemed painful, or disabling, and which, at the same time, deviate from either the statistical norm or from some idealized status. Health, the opposite, is the state of well-being conforming to the ideals of the prevailing culture, or to the statistical norm. (King 1954: 197)

According to this definition, a set of conditions is judged to be a disease based on statistical norms and values, and on environmental factors.[18] To what extent, then, is a disease objective, and to what extent does it reflect culturally and chronological variable

[18] See also C. King, "The Meaning of Normal" 1945 for a statistical epistemology of health and disease.

normative concepts? What definition of disease can form a meaningful object of study in the history of medicine and disease and, in particular, the history of ancient medicine?

2.2.1.1.1. Debate over Definition of Disease

The modern debate over the definition of disease has clustered around two opposing poles with median positions that combine aspects of both. At one end of the spectrum, the *objectivist* position seeks definitions based on biological theory and emphasise what is biologically natural or normal for human beings (Ereshefsky 2009: 221).[19] The main proponent of this view, Boorse, sets forth the following definition:

> In medical discourse, the name of a disease refers to the sum of the abnormal phenomena displayed by a group of living organisms in association with a specified common characteristic, or set of characteristics, by which they differ from the norm for their species in such a way as to place them at a biological disadvantage. (Boorse 1976: 243)

Central to Boorse's position is the notion of characteristics that are "the norm" for a particular species against which "abnormal" is defined.

This position is also known as naturalism due to the importance accorded to nature and biology, which are thought to be the basis of what "natural traits" and normal function in human beings are (Ereshefsky 2009: 221). Thus, according to the objectivist or naturalist position, a "*disease* is a type of internal state which is either an impairment of normal functional ability, i.e., a reduction of one or more functional abilities below typical efficiency, or a limitation on functional ability caused by the environment"

[19] Main proponents of this view are Kendell 1975; Boorse 1976, 1977, 1997; Scadding 1990.

(Ereshefsky 2009: 221; author's emphasis).[20] To call a phenomenon a disease thus involves two claims: first, that a bodily system is functioning abnormally, and second, that this abnormality limits a person's functionality. Boorse is a key proponent of the naturalist view, also called the medical model, in psychiatry.

At the other end of the spectrum lies the *constructivist* or normativist view, which treats all human disease as purely evaluative such that the biological processes that underlie disease categories cannot be identified independently of values.[21] Health is a continuum that is socially determined. Value judgments determine attributions of "health" and "disease": "[h]ealthy states are states we desire, and diseased states are those states we want to avoid" (Ereshefsky 2009: 221). Objective biological processes may result in bodily impairment or may interfere with normal functional ability, but these cannot be recognised or labelled independently of normative judgments. In this sense, the bodily processes are not objectively malfunctioning, but are simply judged by the prevailing social order to be unusual or abnormal by departing from a shared conception of what is natural for a human being (Murphy 2008). Whereas objectivists or naturalists focus on whether or not a bodily system is functioning normally and on the corresponding physiological or psychological state, constructivists or normativists focus on whether that state is valued or disvalued (Ereshefsky 2009: 221).

Neither of these polarised positions offers a definition of disease that can be meaningfully applied to the study of medicine in the ancient world. From the point of view of objectivism, medical records from the ancient world fail to provide the right kind

[20] See also Boorse 1976: 62; Boorse 1977: 562.
[21] Main proponents of this view include Engelhardt 1996; Goosens 1980. Goosens terms the naturalist position, "neutralist" (Goosens 1980: 100). See now also Maddux et al 2004, especially in relation to psychopathology.

of information about modern disease concepts: the intellectual paradigms and knowledge about biological processes available to the ancient scholar or physician fall far short of the standards of biomedicine.[22] Constructivism does not encounter the same limitations with respect to the sources. Indeed, it takes into account the influence of social and cultural milieu on what symptoms of physiological and psychological dysfunction take on importance, how those symptoms are organised into utilitarian categories, and what diseases are recognised and named.

However, a purely constructivist view would restrict the value of the Akkadian material as sources for the study of medicine. The inherent relativism would render comparison of the observed phenomena with those from later periods and cultures all but meaningless; the phenomena identified in the Akkadian sources would have value only within their own culture and time period. By discounting any objective status of symptoms and diseases, it would be impossible to chart the progression of human knowledge about physiological and psychological states, whether or not these match up to modern terminology and concepts. A useful definition of disease must therefore factor in aspects of both the objectivist and constructivist positions.

With respect to psychiatry, the concept of disease encounters additional problems. Framed within the objectivist-constructivist debate, the objectivist position sets forth a value-free account of mental disorder that relies on natural facts. Varga suggests the term *natural function objectivism* to reflect these priorities (Varga 2011: 1-2). In an early

[22] The term "biomedicine", throughout this study refers to the biomedical model of medicine, which focuses on the physical processes of disease wherein the science of biology is the standard (Lock and Nguyen 2008: 11). Sometimes referred to as "modern", "Western", or "cosmopolitan" medicine, biomedicine is "that body of knowledge and associated clinical and experimental practises grounded in the medical sciences that were gradually consolidated in Europe and North America from the 19th century on" (Lock and Nguyen 365 n1).

article on the problem of defining disease in psychiatry, Scadding proposes the criterion of "biological disadvantage" to demarcate defects of "function or structure" that lead to abnormal emotion or behaviour and that require medical treatment (Scadding 1990: 247). If disease is understood to be an abnormal biological process, or some other destructive process in a bodily system, then in psychiatric disease, this process must necessarily refer to the brain. Thus, a strict objectivist model of psychiatry would interpret all symptoms of psychiatric disorder as manifestations or consequences of dysfunction in the brain (Guze 1992: 44).

Due to the current state of knowledge about the brain and the constantly reconfigured relationship between neurobiology and psychiatry, however, a minimalist interpretation of this model is necessary. At the same time, two further problems complicate a reliance on the strict objectivist or naturalist model in psychiatry. First, the signs and symptoms of psychiatric disorders are more difficult to interpret than those of physical disorders because they may only in part – or only sometimes – be the result of a biological abnormality, and second, these signs and symptoms overlap with other kinds of complaints, such as social stresses (Kleinman 1991: 8). The constructivist articulation of psychiatric disease takes the opposite position, claiming that this category of disease is purely a social construct based on social norms intended to control disapproved behaviour. Szasz has traditionally been considered one of the strongest proponents of this view, following on the heels of Foucault's studies of madness and institutionalisation.[23]

[23] Szasz 1974, 1987; see also Foucault 1988, 2006.

2.2.1.1.2. Implications of Debate

This debate has important implications for the study of the history of medicine and the history of mental disorder. One of the objects of inquiry in the history of medicine is disease; therefore, problems in defining these objects of inquiry spill over into the study of historical medical texts. Questions surrounding the definition of disease make it difficult to determine what to look for in the texts, and how to fit these objects of inquiry into a broader historical narrative. If malaria is a social construct, then it should not be identifiable in the ancient sources, or in sources from any other culture and time period than modern biomedicine. If, on the other hand, malaria is an objective disease, then it is unlikely that the ancients would have had the intellectual tools to correctly identify all of its symptoms *as* symptoms of a single disease, malaria. Furthermore, the emphasis on fevers in the Akkadian sources would suggest different priorities in the experience and observation of this disease.

In terms of psychiatry and the study of mental disorder, if the ontological status of, for example, schizophrenia – that is, its status as a real *thing* in the world – is at stake, then how can it be identified in the ancient sources? If its ontological status relies purely on its social context, then how can a history of schizophrenia be attempted? Gilman's observations about schizophrenia bring this problem into sharp focus when he writes that his study aimed to give a "sketch of how a group of blind fakirs saw an elephant that they all agreed was called schizophrenia" and admits that ultimately, "no elephant can be constructed from the often contradictory views proposed and held" (Gilman 2008: 478).[24] The overlap between social stress, on the one hand, and complaints often identified as

[24] See Gilman 2008: 461-483.

part of psychological disturbance, on the other, further complicates these definitional problems vis-à-vis mental disorder (Kleinman 1991: 8).

Neither the objectivist nor the constructivist approaches furnishes an adequate model for understanding disease with a strong affective or cognitive component in the ancient world. The concept of psychiatric disease, such as schizophrenia, that relies on a neurobiological or "medical" model cannot meaningfully be applied to the Akkadian medical descriptions, which are couched in native paradigms and which rely on contemporary understandings of supernatural causation. At the same time, a purely constructivist definition renders disease as an object of inquiry meaningless outside of its culture and time period by removing the possibility for identifying any objective common ground in descriptions. This problem can be partly resolved by reference to the distinction between the term "disease" and another term that is used – indeed favoured – in discourse about mental disorder, especially in non-Western societies: that is, "illness".

2.2.1.2. Definition of Illness

The distinction between disease and illness, drawn in anthropological discourse, has offered one way out of this debate between objectivism and constructivism. In effect, this distinction separates the disease, on the one hand, from the perception of it, on the other. Drawn at the epistemological boundary between objective and subjective, disease refers to an objective biological state or event, while "illness is a social state created by human evaluation; it is a symbolic ordering of given events or states of affairs by application of a label" (Locker 1981: 4; Staiano 1986: 34 n5). The illness is not an entity, but a meaning conferred on a disease entity in order to explain and organise the

phenomena generated by that disease entity into socially recognised categories. The difference can also be phrased in terms of perspective. An illness constitutes "the patient's perception, experience, expression, and pattern of coping with symptoms", while a disease reflects "the way practitioners recast illness in terms of their theoretical models of pathology" (Kleinman 1991: 7).

In his study of the viability of retrospective diagnosis in the history of medicine and of specific diseases, Cunningham articulates the social constructionist aspect of disease that the concept of illness takes into account: "*the identity of any disease is made up of compound elements, of which the biological and medical is only one*" (Cunningham 2002: 16-17, author's emphasis). In effect, this reiterates the point that "disease is always experienced socially" (Cunningham 2002: 17). With respect to the study of Akkadian medicine, this distinction between disease and illness has important implications. In her study of Old Testament medicine and medical practitioners, Zucconi has articulated the implications for the disease/illness distinction:

> In this context, the definition of illness is culture bound. The cultural function of illness as a whole determines if a disease is reported as an illness. What modern medicine views as an illness may not be understood as such by the Israelites. (Zucconi 2005: 9)

The significance attributed to symptoms in a particular culture determines which ones get reported or advertised as illness. The notion of illness fits with the study of ancient medical texts, given the difficulty – in most cases, the impossibility – of determining objective disease entities associated with a group of symptoms and given variations in the way symptoms were organised.

2.2.1.3. Definitions of Disorder and Syndrome

The concepts of disorder and syndrome provide alternative frames of reference for a study of descriptions that include a strong affective or cognitive component in the Akkadian medical texts, in lieu of disease and illness. To review, the introduction of the concept of illness, rather than disease, shifts the focus from objective to subjective, from natural to normative, from reality to perspective. Kleinman's distinction between disease and illness focuses on the concept of perception: an illness is the (subjective) perception, experience, and interpretation of phenomena generated by an underlying (objective) disease process.

For mental disturbance, the concept of disorder may provide a further solution by shifting the focus onto observed phenomena, rather than on the underlying neurobiological processes that give rise to such phenomena. Although the concept of disorder acknowledges the idea that a set of symptoms can be accounted for by an underlying condition or cause, it implies no aetiology; it refers, rather, to a cluster of symptoms that signifies an alteration from the perceived healthy state of a body (Jablonski 1992: 323). Because it covers the type of phenomena recorded in the Akkadian medical sources and eliminates reference to an objective underlying cause, it can be applied more confidently to the ancient material.

A syndrome, similarly, refers to a cluster or constellation of symptoms that co-occur over time (Kleinman 1988: 16). The term has no implication of aetiology and can therefore also apply cross-culturally. The notion of a cluster of symptoms that defines

both concepts of disorders and syndromes takes into account the semiotic component of diagnosis:

> Diagnosis is a thoroughly semiotic activity: an analysis of one symbol system followed by its translation into another. Complaints are also interpreted as syndromes—clusters of symptoms which run together over time—that indicate through their relationship a discrete disorder. (Kleinman 1988: 16)

The concepts of disorder or syndrome separate observed symptoms from the underlying causes and focus on discerning more general patterns in the observation of symptoms. Instead of searching the Akkadian corpus for diseases or illnesses that can be successfully correlated to modern ones, it is more useful to think of the symptoms that are described together as reflecting disorders or syndromes in the native schema.

Clusters of co-occurring symptoms can tell the modern scholar of Mesopotamian medicine something about the kinds of clinical phenomena that were recognised together and how these phenomena were organised and experienced. This approach brings to light the ways these symptoms were organised into patterns comprehensible to the Akkadian scholar, physician, and perhaps even the patient (Gilman 2008: 462). The concepts of disorder and syndrome are therefore more useful in light of the type of information available in the Akkadian *Diagnostic Handbook* and the way this information is arranged in the protases. The category of mental disorder or of disorders and syndromes with a strong affective or cognitive component, rather than psychiatric disease or mental illness, provides more flexibility with respect to the ancient material by shifting the focus from discrete disease entities or causes, onto symptoms and perceived patterns in symptoms, and their local or native organisation.

2.3. Textual Problems

Some features of the ancient sources raise further methodological problems and, more specifically, call into question retrospective diagnosis, especially in connection with mental disorder. With respect to the type of information available in the sources, this information reflects contemporary understandings and presentations of disease and therefore provides insufficient, incorrect, or unexpected clinical details – or clinical details organised in unexpected ways – to make a retrospective diagnosis. Furthermore, cultural context heavily shapes the perception of a disease, illness, and disorder, as demonstrated above, and, therefore, the description of clinical phenomena in the sources. These methodological problems complicate the reading of ancient texts as if they presented modern diagnostic descriptions, especially with respect to mental disorder. These problems must be outlined in their general form before turning to specific aspects of the Akkadian diagnostic corpus that illustrate these difficulties.

2.3.1. General Problems Relating to Sources

The first problem concerns the type of information available in the sources and the way this information is organised. The sources tend to display a poverty of information, or a poverty of the right kind of information, about symptoms to make an accurate diagnosis based on modern criteria. At its most basic, this problem manifests itself when a source is not sufficiently detailed (Mitchell 2011: 83). However, especially in the case of the Akkadian diagnostic and therapeutic texts, the type of detail in a text

may display an excess of information about clinical phenomena that are not organised or grouped in such a way as to correspond to any single modern disease or illness concept.

It should be noted here that in some cases, the textual sources do provide the right kind of information to allow for a reasonably accurate retrospective diagnosis to be made. Some parallels in the description of gynaecological ailments, such as excess blood flow, can be reasonably correlated to those in other medical cultures, including biomedicine.[25] Descriptions of stroke and epilepsy can in most cases be identified in the diagnostic material.[26] However, even these diagnoses cannot be made with certainty in all descriptions. For example, the Akkadian word for "stroke" has been identified as *mišittu* or *šipir mišitti* (Kinnier Wilson and Reynolds 2007: 68-72). Symptoms typically identified with these two terms appear in several entries in the *Diagnostic Handbook*, such as a seized mouth and paralysis of the limbs; however, the apodosis in each entry specifies that the illness is *ul mišitti* "not stroke" (SA.GIG 17, 29-31).

Similarly, descriptions of symptoms typically labelled with epilepsy may in fact correspond to a pseudo-epileptic fit.[27] Such distinctions made in the diagnostic corpus suggest a native awareness of nuances in clinical phenomena that complicate retrospective diagnosis; these nuances may not correspond to modern distinctions within diseases whose symptoms otherwise have ready analogues in modern medicine. At the same time, retrospective diagnosis can provide convenient labels for symptom descriptions that roughly correspond to symptoms recognised in biomedicine as part of a

[25] See Steinert 2013.
[26] For epilepsy, see for example Stol 1993; Avalos 2007; Kinnier Wilson and Reynolds 1990. For stroke, see Kinnier Wilson and Reynolds 2007.
[27] Some entries describe patients as experiencing episodes that looked like epileptic seizures but that include several features atypical of seizures. These may perhaps be compared with dissociative seizures or psychogenic non-epileptic seizures (Abubakr et al 2003). For pseudo-seizures in Akkadian diagnostic and therapeutic texts, see Scurlock and Andersen 2005: 433; Reynolds and Kinnier Wilson 2008.

particular disease concept. For this reason, terms like “epilepsy” are retained throughout this study.

In many cases, however, the list of symptoms given in an ancient text do not match up to a modern disease concept, or may match up to multiple diagnoses (Mitchell 2011: 84). Furthermore, the line between symptoms and diagnoses is blurred. What may be considered a symptom in modern biomedicine can serve as a disease or illness concept in the Akkadian corpus, such as fevers (Stol 2007: 1). One way to account for this lack of correspondence is to acknowledge that the author of a medical text may have combined the symptoms of multiple diseases. The author “may not have appreciated that more than one disease was present”, given that such symptoms may have in fact “represented the illness his society faced at the time” (Mitchell 2011: 84). Factors such as cultural context, observational and measuring instruments, and intellectual tools shape the way symptoms would have been recognised and organised, as well as why they are recorded in a particular instance.

Another way to account for this mismatch is to accept that a disease that existed in the past may no longer exist today (Mitchell 2011: 84). To borrow a label used by Cunningham, “the array of available diseases”, defined as “what set of diseases is thought to exist at a given time in a particular society”, differs from one society and time period to the next (Cunningham 2002: 21). The lack of correspondence between the information in modern and ancient sources often leads to pitfalls in interpretation, such as emphasizing aspects of the evidence to fit a pre-conceived theory. Similarly, this feature of texts may lead modern scholars to ignore “inconvenient symptoms to fit the modern

understanding of the disease", and to fail to "to consider that multiple concurrent diagnoses were present" (Mitchell 2011: 84).

The mismatch between information in the ancient sources and those available in modern biomedical textbooks is particularly apparent in descriptions of mental disorder. Several modern studies, including foundational studies from the anthropology of medicine and psychiatry, have shown that mental disorder is experienced and expressed in different ways according to cultural norms and values.[28] As Kleinman notes, psychiatric illness may only in some cases result from underlying biological abnormalities and, furthermore, often overlap with other types of complaints, including social stress (Kleinman 1991: 8). In fact, the diagnostic introduction to a therapeutic text interpreted as a symptomatology of "agitated depression" by its modern editors (Reynolds and Kinnier Wilson 2013), begins with a host of complaints unrelated to illness, including suffering financial problems, being ignored in the household, and being overwhelmed with responsibility (*BAM* 234, 1-5). Thus, the study of *BAM* 234 as a description of agitated depression assumes that the entries in the therapeutic text hang together as a single case that can be matched to modern conceptions of agitated depression or anxiety. It further, assumes that a concept identical to agitated depression would have been a recognised disease concept in ancient Mesopotamia.

This raises a further problem with textual sources for the study of the history of medicine that returns to the question of epistemology: the sources were written from the perspective of another time period and culture. Authors of medical texts – or perhaps, in the cuneiform context, one might argue the compilers and editors of medical compendia based on earlier tradition – approach physiological and psychological phenomena from

[28] See especially Kleinman 1980, 1988, 1991; Brown and Barrett 2010.

an intellectual and cultural framework vastly different from that of biomedicine. With respect to the intellectual framework, the type and amount of medical knowledge available and the causal accounts of disease differed vastly from present-day biomedical models. With respect to the cultural framework, the types of physiological conditions, behaviours, and mental states considered to be abnormal or harmful vary according to social norms and cultural context, which strongly inform the way illness in general is conceptualised. The boundaries between normal and abnormal, ordered and disordered, vary from one society and time period to another.

As Mitchell writes in his evaluation of retrospective diagnosis as a viable approach to texts in the history of medicine: "The social and cultural context in which an individual chose to write in the past would have guided what they wrote and how they wrote it" (Mitchell 2011: 83).[29] Heeßel has recently articulated the relevance of cultural context to disease and illness in the Akkadian medical tradition. The attempt to identify modern diseases in the Akkadian clinical descriptions "presupposes that the Mesopotamians had the same concept of disease as we have today and defined along the same lines, which they did not as disease and illness are culturally determined" (Heeßel 2004b: 7). Without understanding or taking into account that context, the contents of the texts will remain irretrievable (Mitchell 2011: 83).

In light of these considerations, texts ought not be read as if they presented clinical descriptions that can successfully be correlated to modern diseases or classifications. By positing equivalences between ancient and modern diseases, retrospective diagnosis tends to obscure native explanatory frameworks and illness concepts. Such frameworks and concepts are based on contemporary understandings of

[29] See Patterson 1998.

how symptoms are grouped into patterns intelligible to patients and healers in a particular cultural context.

2.3.2. Features of the Akkadian Sources

Several recently published books and articles have provided thorough overviews of medical theory and practice in ancient Mesopotamia, and of the sources for the study of cuneiform medicine, both textual and archaeological.[30] Therefore, such an overview need not be repeated here. Instead, the relevant aspects of these sources and of the medical theories that can be reconstructed from them will be emphasised in order to illustrate the methodological problems introduced above. These features will, in turn, be addressed by the theoretical framework to be introduced in Chapter 3.

2.3.2.1. Form and Content of the Sources

The core sources used for this study of mental symptoms and disorder in the Akkadian medical tradition are confined to the medical corpus and are restricted to entries from Akkadian diagnostic texts as compiled in the *Diagnostic Handbook*, SA.GIG, with two exceptions: one therapeutic text (*BAM* 316) and one Middle Babylonian diagnostic text (2N-T 336).[31] The core texts are further defined in Chapter 3, which sets out the theoretical framework for this study. The purpose of the present section is to identify the kinds of information available in the diagnostic texts and the

[30] Recent overviews include Attinger 2008; Biggs 2006: 39-42; Geller 2010a; Robson 2008; Scurlock and Anderson 2005. Recent compilations of studies on medicine in ancient Mesopotamia include Attia and Buisson (eds.) 2006; Finkel and Geller (eds.) 2007; Horstmanshoff and Stol (eds.) 2004.
[31] Rutz notes this MB text, 2N-T 336 (IM 57947), is incorrectly cited as 2 NB 336 by Labat in his original publication of the tablet (Rutz 2011: 295).

way this information is organised in order to reconstruct medical theories and, eventually, to shed light on methodological problems that arise from the type of information recorded in the Akkadian texts. The structure of individual entries, the overall arrangement of entries, as well as the type of information recorded in entries in the *Diagnostic Handbook* demonstrate the presence of native frameworks for understanding sickness and health and shed light on underlying medical theories.

Diagnostic texts and the diagnostic introductions to therapeutic texts share several features in language and content that are common to many genres of the scholarly tradition, including omen literature, astronomical texts, and law collections. Indeed, Stol's study of medical texts concludes that the *Diagnostic Handbook* "was available to the compiler of the therapeutic texts" (Stol 1990-91: 64), which suggests that both should be used in the reconstruction of medical knowledge, theories, and practice in Mesopotamia.[32] While this study's core texts are limited to the *Diagnostic Handbook* so as to narrow the focus of the investigation of symptom patterns, both categories of medical texts formed part of the medical tradition and share important features in form and content. The ways in which symptoms and illnesses are observed, described, and arranged in the medical texts reflect the methods and priorities of Mesopotamian sciences more generally.

In terms of the form and language of medical diagnostic texts, descriptions of symptoms and naming of diseases are cast in the casuistic formula. In the *Diagnostic Handbook*, the protasis of an entry presents the symptoms and, in some cases, other information about the features of the overall disease or specific symptoms, such as their timing in the unfolding of the disease. The apodosis then provides the appropriate label

[32] See Heeßel 2007: 128-129 on the link between therapeutic and diagnostic texts.

associated with the symptom grouping, which may be a disease name, a "Hand", or some other label, such as the name of a demon. At times, both a Hand label and an illness or disease name are included, which may suggest that one provides information about aetiology while the other gives a diagnosis; a third alternative is that both the illness label and Hand label represent diagnoses, which may be compared to the modern diagnostic practice of grouping together a cold and flu, or a slipped disc and pinched spinal nerve. Further, the apodosis usually includes information about the prognosis (e.g., TIN "he will live", GAM "he will die"). This structure defines what will be called a "typical entry" in the *Diagnostic Handbook* throughout this study.

This general pattern of symptom description and diagnosis or prognosis structures the majority of entries in the *Diagnostic Handbook*. Departing from this general pattern, entries in SA.GIG 33, 103-123 list disease names alongside the Hands of various deities. For example, the labels of *sāmānu*, *ašû*, *ṣītu*, *ṣarrišu,* and *ṣinnaḫtiri* are all listed with "Hand of Gula" (SA.GIG 33, 103-106). The disease *šadânu* is listed with both "Hand of Gula" and "Hand of Ninurta", the latter of which is also associated with *tākaltu*.[33] Another exception includes entries where the protasis opens not with a symptom but with a Hand label or with a known disease label, such as *antašubba*-epilepsy (e.g., SA.GIG 28, 4, 7). However, all of the core texts for this study from the *Diagnostic Handbook* follow the structure of a typical entry, which will therefore be the focus of the present section.

To reiterate the observations above, the protasis can include information about certain features, symptoms, and course of the illness, while the apodosis can include further information about features and the course of the illness, as well as a prognosis and

[33] SA.GIG 33 is discussed in more detail in Geller 2004b: 28-38 and Heeßel 2007: 128. See also Stol 2006 on *tākaltu*.

diagnosis. The structure and content of a typical entry provides information about the organisation of symptoms and about disease aetiology (causation). A short entry might only include a minimal number of symptoms in the protasis and one in the apodosis. For example, an entry from SA.GIG 26 that describes an epileptic fit reads:

> **15'**: DIŠ LAL-*šú* LAL-*šum-ma ina* KA-*šú* ÚḪ DU-*ak* AN.TA.ŠUB.BA
>
> **15'**: If his fit overwhelms him and spittle runs from his mouth, (it is) *antašubba*-epilepsy.
>
> (SA.GIG 26, 15')[34]

In the protasis, the entry includes a primary symptom of fit and a secondary symptom of spittle. The apodosis gives only a diagnosis of epilepsy but no prognosis. An entry that includes both a diagnosis and information about the prognosis is found in the same tablet in another description of epilepsy:

> **71'**: DIŠ UB.NÍGIN.NA-*šú i-tar-ru-ra i-ṭa-ma-a u* IGI.MEŠ-*šú* NIGIN.MEŠ-*du* AN.TA.ŠUB.BA *ina ma-šal* u_4-*mi* DUGUD-*su*
>
> **71'**: If his limbs tremble and move uncontrollably, and he continually has vertigo (lit. his face continually spins); (it is) *antašubba*-epilepsy; at noon, it will be difficult for him.
>
> (SA.GIG 26, 71')[35]

An example of an entry that includes information in the protasis about not only symptoms, but also the course and unfolding of the illness, comes from SA.GIG 16, which forms part of the Chapter, "If on the first day he is sick".

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[34] Following Heeßel 2000: 279; Scurlock and Andersen 2005: 13.171. All translations in this study are my own unless otherwise noted, and "following" indicates the source of the transliteration consulted and followed.

[35] Following Heeßel 2000: 284; Scurlock and Andersen 2005: 13.198, 20.14.

65'. DIŠ U_4 6-KÁM GIG-*ma ina* U_4 7-KÁM *ḫur-ba-šú* ŠUB.ŠUB-*su* EGIR *ḫur-ba-šú* IR TA SAG.DU-*šú*
66'. EN DÚR-*šú* ZÉ-*šú* GÁL GIG-*su* DU_8-*ár-ma* TIN[36]

65'. If he is sick for six days and on the seventh day, chills continually befall him, after the chills, sweat is present from his head
66'. to his anus, his gallbladder; his illness will be resolved, he will live.
(SA.GIG 16, 65'-66')[37]

The phrase, "If he is sick for six days and on the seventh day", introduces two features of the disease that specify the timing of the symptoms, which are then elaborated as chills and sweats. Another feature about the course of illness is included: that it will be resolved. This is followed by the prognosis of "he will live" (TIN), though no diagnosis is offered.

Sometimes, additional features introduced in the protasis may compare the symptoms to another diagnosis, label, or symptom. For example, a tablet dealing with symptoms that affect babies describes:

26. DIŠ ^{lú}TUR *ki-ma al-du* U_4 2-KÁM U_4 3-KÁM GIN-*ma* GA *la i-maḫ-ḫar mi-iq-tu ki-ma* ŠU.DINGIR.RA
27. ŠUB.ŠUB-*su* ŠU ^{d}XV *ek-ke-em-tu*$_4$ *šum-šu* BA.ÚŠ

26. If the baby, (after) two or three days have passed after it is born, does not accept milk, (and) *miqtu*-disease like the Hand of God
27. continually befalls him, (it is) Hand of Ištar, its name is "the snatcher"; he will die.
(SA.GIG 40, 26-27)[38]

[36] var. GAM "he will die" (*LKU* 68c, 18′). Following Heeßel 2000: 178.
[37] Following Heeßel 2000: 178.
[38] Following Heeßel 2007: 123; Scurlock and Andersen 2005: 13.178.

The protasis includes information about the patient, the course of illness, and the symptoms, as well as a comparison to another illness ("Hand of God", or possibly "Hand of God"-disease). In the apodosis, both a Hand label and an additional illness label of "the snatcher" appear, as well as a prognosis of death. The inclusion of both a Hand label and an illness name may suggest one of these provides information about aetiology, while the other functions as the diagnosis.

Thus, the structure of a typical entry in the *Diagnostic Handbook* can be summarised as follows:

> If $[F_1] + S_1 [+ \ S_2 \ldots] [+F_2]$, then $D_1 [+ D_2]$; P_1 [or, alternatively, P_2]
>
> where F=Feature, S=Symptom, D=Diagnosis, and P=Prognosis.

In the protasis, the F stands for some feature of the disease. F_1 can include one of the following when preceding the symptoms:

1. The general nature of the disease (e.g., "If the disease is of his mouth and…"
2. The timing or course of the symptoms (e.g., "If he is sick for one day and…", "If he is sick for six days and on the seventh day…");
3. Information about the patient (e.g., age with respect to epilepsy,[39] designation of sex with respect to gynaecological ailments).

A further feature, F_2, can also follow and modify the symptoms before the apodosis. Typically, this F_2 provides information about the timing of the symptoms or course of the illness. In general, F_1 and F_2 provide information about the course of the disease and characteristics of the patient.

[39] See Heeßel 2004: 103.

At least one symptom, S_1, is given in a typical protasis, and additional symptoms are usually added to form a distinct group or cluster. In some chapters, these symptoms are arranged according to certain criteria, such as their location on the body or their colour. Chapter 2 of the *Diagnostic Handbook*, entitled *ina marṣi ṭeḫêka* "When you approach the sick man", organises symptoms *a capite ad calcem*, or to use Esagil-kīn-apli's words, *ištu muḫḫi adi šēpē* "from head to feet" (Finkel 1988: 148-149).[40] Heeßel notes further patterns in the arrangement of entries within the tablets of Chapter 2, *ana marṣi ṭeḫêka* "When you approach the sick man". With respect to symptoms observed on the parts of the body, these are recorded in the following order: colour; shadings; followed by "the symptoms of 'swelling', 'collapsing', 'moving jerkily', and 'being loose'" (Heeßel 2004a: 104). These may then be followed by other symptoms and, finally, by the symptom of "being hit" (Heeßel 2004a: 104). As Heeßel notes, all of these symptoms do not have to appear with each part of the body, "but if they do occur their arrangement follows these rules" (Heeßel 2004a: 104). These rules suggest the presence of certain organising principles that structure the observed signs and symptoms recorded for the different entries.

The apodosis may include one diagnosis, represented by D_1, which may be a noun that presumably represents a disease name (e.g., *lubāṭu*, *liʾbu*), a Hand label, the name of a supernatural entity, or some combination of these, as well as a prognosis P_1 (Heeßel 2007: 121). In some cases, only one or the other of diagnosis or prognosis appears. There is no reason to assume the Hand label or supernatural entity does not serve as an illness label.[41] Whether or not these carry the same epistemological status as an illness label,

[40] TA *muḫ-ḫi* EN GÌR.MEŠ (ND 4358 + ND 4366, 61-62; BM 41273+ rev. 25′); following Finkel 1988: 148.
[41] See Heeßel 2007; Geller 2004b: 42-47.

they may have served to provide information about the general cause of the illness or to localise the cause in the supernatural realm.

Thus, the typical entry in the *Diagnostic Handbook* provides information about the way symptoms were organised together, the label assigned to such clusters, the cause associated with such clusters or labels, and a corresponding prognosis. In addition, these entries show that the observation of clinical phenomena in the form of the symptoms and course of illness was recorded in systematic ways with keen attention to detail. The principles that structured the diagnostic entries and the order in which symptoms and diseases were presented reveal information about the way symptoms and illness were perceived and organised. The structure of individual entries and of the *Diagnostic Handbook* as a whole, as well as the type of information recorded in these entries, demonstrates the presence of native frameworks for understanding sickness and health. More consistently recorded in the entries is information about symptoms, rather than diagnosis, cause, and prognosis; the contents of the apodosis vary, whereas the protasis always contains some information about symptoms. Symptoms, therefore, provide the most consistently recorded objects of study.

2.3.2.2. Medical Theories in the Sources

As with other genres of the scholarly tradition, no theories are written or explained; however, the information provided in a diagnostic entry allows for some aspects of medical theory and rationale to be reconstructed. While medical texts should be considered in the context of other genres of the scholarly tradition, the acts of diagnosis and prognosis suggest that different types of reasoning underpin the

organisation of medical and clinical phenomena.[42] This section will introduce the medical theories implicit in the act of diagnosis and in the character of disease and illness naming conventions before turning to the theories that can be reconstructed from disease aetiology. Aspects of these theories will highlight the problems with retrospective diagnosis in Akkadian medical texts. At the same time, the way in which clinical phenomena are organised in the *Diagnostic Handbook* brings symptoms to the forefront and begins to narrow the field of inquiry from disease and illness to symptoms, which are the defining objects of this dissertation.

2.3.2.2.1. Symptoms and Diagnosis

The first aspect of the sources that suggest the presence of medical theory is fundamental, if basic: the Babylonians carried out the act of diagnosis. Individual units of discomfort – i.e., signs and symptoms – were organised into comprehensible patterns and labelled accordingly. These patterns and their corresponding labels (diagnoses) were associated with a level of predictability in their future progress (prognoses) and were assigned causes (aetiology). At its most basic, the act of diagnosis involves a level of abstraction from symptom pattern to disease entity: a disease or illness, after all, is not an object but a pattern (King 1954: 199). Furthermore, diagnosis is a social act that sanctions an experience of disease as illness; in terms of mental disorder, a "diagnosis implies a tacit categorization of some forms of human misery as medical problems" (Kleinman 1991: 8). With the exception of the first chapter of the *Diagnostic Handbook*, entries in

[42] In particular, medical texts differ in important ways from divination. See Heeßel 2004: 100, 105f..

this diagnostic series show an awareness that signs and symptoms in an illness experience can hang together as a single entity with a definitive cause and predictable outcome.

In his study of the rationale of Mesopotamian medical diagnostic texts, Heeßel summarises this underlying belief of medical theory:

> The most important basis of Babylonian diagnosis is the belief that by inspecting the symptoms on the body of a patient it is possible to determine the disease, its future development, its aetiology and the chances of the sick person's recovery. This is the same concept as the one we believe in today with one important exception: for the Babylonians the aetiology of disease and sickness was situated in the realm of the gods. (Heeßel 2004a: 99)

The inseparability of diagnosis, aetiology, and prognosis finds expression in the apodosis of entries in the *Diagnostic Handbook*. A diagnosis carries with it a judgment about cause, as well as expectations about the future. Heeßel's statement of these fundamental principles also identifies a further feature of medical knowledge and theory: the rationale of disease labels and aetiology reflect the interconnectedness of natural and supernatural forces that defined the Mesopotamian worldview.

The approach by ancient Mesopotamian physicians to identifying and naming patterns of symptoms presupposes a theory of disease evident in the predisposition to explain illness in terms of the influence of various supernatural forces. As set out above, in an entry in the *Diagnostic Handbook*, in place of or alongside a disease name, there is sometimes a "Hand" label, including Hands of deities, ghosts, and demons. Witchcraft can also appear in the apodosis where a diagnosis or aetiology is expected (e.g., SA.GIG 22, 5). The Hand labels in particular have often been used to argue for the distinctly

supernatural element in Mesopotamian medicine,[43] but the way the labels are used suggests that they served a practical function as a disease name. These labels can be expressed as ŠU DN (=divine name),[44] to be read as an Akkadian genitive *qāt* DN "Hand of DN", such as ŠU GIDIM "Hand of Ghost". Alternatively, the label can be expressed with the Sumerian postposition in the form ŠU.DN.A(K), such as ŠU.GIDIM.MA. The latter designation type seems more clearly to be used to represent disease names (van der Toorn 1985: 199 n304; Heeßel 2007: 121).[45]

One obstacle to our understanding of the use of Hand labels as disease names, however, becomes immediately apparent: often, different clusters of symptoms are attributed to the same Hand. Van der Toorn accounts for this observation by construing such labels as intending "to localize the source of the signs rather than to give a definite answer concerning the nature and cause of the disease" (1985: 78). Patterns in this localisation can be discerned. For example, according to Scurlock and Andersen, the attribution of multiple illnesses with a strong mental component, often signalled by abnormal behaviour or unusual mental states, to Šamaš may relate to his capacity as the god of justice (2005: 431). Suffering and misfortune, including illness, in ancient Mesopotamia were often, though not always, understood as the consequence of divine disfavour.[46] Mental disturbance in particular lends itself to this explanation because of its association with abnormal behaviour. For example, the Hand of Šamaš appears in the apodosis of an entry for one of the core symptoms of this study: DIŠ UŠ$_4$-*šú* KÚR.KÚR-*šú*

[43] See for example Kinnier Wilson 1982; Avalos 1995.
[44] Here, "divine name" includes the names of ghosts, demons, and other supernatural entities that appear in the medical texts.
[45] Heeßel has studied the distribution of these types of labels in diagnostic and therapeutic texts in an effort to determine their precise function in diagnostic descriptions (2007: 121-125).
[46] See van der Toorn 1985: 58-79, 91-93.

ŠU ^{d}UTU AZAG GU$_7$ "If his mind continually changes, Hand of Šamaš, he has committed (lit. consumed) a taboo" (SA.GIG 22: 55).[47] Šamaš, then, would be the appropriate deity to punish misbehaviour by altering an individual's state of mind to the point of mental imbalance (Scurlock and Andersen 2005: 431).

Other patterns of the linkage of symptoms to certain deities may be noted, such as colour. Red symptoms are regularly, though not exclusively, associated with Sîn:

> [DIŠ TA SAG.D]U-*šú* EN GÌR.II-*šú* U$_4$.BU.BU.UL SA$_5$ SI.A *u* SU-*šú* BABBAR KI MUNUS *ina* KI.NÁ KUR ŠU XXX
>
> "[If, from] his [hea]d to his feet, he is covered in red boils, and his body is *pale*, he was infected (while) in bed with a woman, Hand of Sîn.
> (SA.GIG 3, 98)[48]

> DIŠ IGI.MEŠ-*šú* U$_4$.BU.BU.UL SA$_5$ SI.A.MEŠ ŠU ^{d}XXX TIN
> If his face is covered in red boils, Hand of Sîn; he will live.
> (SA.GIG 9, 47)[49]

Symptoms with the colour white are organised with Šamaš (Stol 1991-92: 45). For example:

> DIŠ IGI.MEŠ-*šú* BU.BU.UL BABBAR SI.A.MEŠ ŠU ^{d}UTU TIN
> If his face is covered in white boils, Hand of Šamaš; he will live.
> (SA.GIG 9, 48)[50]

> Ù.BU.BU.ʿULʾ BABBAR ŠU ^{d}UTU TI-*uṭ*
> White boils, Hand of Šamaš; he will live.
> (SA.GIG 33: 113)[51]

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[47] Following Heeßel 2000: 256. The suffix attached to the verb, KÚR.KÚR-*šú* (*ittanakaršu*), should be understood as an emphatic. The dative and accusative suffixes appear in similar contexts throughout the *Diagnostic Handbook* and are, in general, treated as emphatic, rather than as resuming an object or indirect object. For this interpretation, see Worthington 2010: 130.
[48] Following Labat 1951: 28, l. 91; Scurlock and Andersen 2005: 3.233, 4.18, 10.85
[49] Following Labat 1951: 74, l. 47; Scurlock and Andersen 2005: 3.232, 4.16, 10.82.
[50] Following Labat 1951: 74, l. 48; Scurlock and Andersen 2005: 10.83.
[51] Following Heeßel 2000: 358; Scurlock and Andersen 2005: 19.105.

Šamaš's capacity as god of justice might account for his responsibility for mental disturbances; might this association with white relate to his role as the sun god?

The medical professional's metaphysical system, wherein supernatural forces influence the natural world, provided him with a "flexible system for the assignment of diseases to causal agents" (Scurlock and Andersen 2005: 429). At the same time, a form of Occam's Razor seems to have been at work: "As an intellectual, the *āšipu* will have been inclined to try to make things uncomplicated and with the fewest number of causal agents possible" (Scurlock and Andersen 2005: 430). This might help to account for the attribution of multiple illnesses to the same Hand.

Does the Hand label correspond to a disease name, or does it merely provide information to the physician consulting the text about disease causation? In my view, the best answer is that the Hand label does both: in the Mesopotamian approach to disease and in medical procedure, these two aspects seem to share equal footing. I agree with Geller that the Hands of the gods refer to diseases with a remote connection to the religious character of the gods invoked (Geller 2004b: 26). The terminology appears to refer to the disease itself, associated with its symptoms, rather than a religious idea.

The use of these labels in SA.GIG 33 demonstrates a removed religious component. The tablet in question provides 70 entries of symptoms with corresponding disease names (ll. 1-70; Geller 2004b: 19).[52] A different set of symptoms appears in each case where a disease name is given. At the end of the tablet, a further 20 entries give disease names with the corresponding "Hand of the god" labels (ll. 103-123; Geller

[52] Expressed as MU.NI: for example, ll. 16 and 17: *ni-piš-tu*$_4$ MU.NI "*nipištu* is its name" (following Heeßel 2000: 354).

2004b: 19), and these seem to reflect a fixed relationship between a disease and divine sender (Heeßel 2004a: 108).[53] Thus, the Hand served to label the disease and localise its cause, and the causal relationship was not arbitrary. Heeßel concludes in his study of the Hand labels in both diagnostic and therapeutic texts:

> This elaborate and well-thought-out system aimed at using all available means to further the recovery of the sick person. The symptoms of the disease were viewed as containing vital information about the divine anger that led to the sickness. By using this information to determine the name of the god involved, the exorcist gained the means by which to reconcile the patient with the angered god and thereby eliminate the source of the disease. (Heeßel 2007: 129)

Heeßel calls this system "holistic" (Heeßel 2007: 129). To reduce the Hand label to a mythological one neglects its meaning and function as a disease name, and obscures the ways that certain symptoms or types of symptoms were organised and causally explained. These explanations rely on a native medical system, which in accordance with the dominant worldview, viewed supernatural causes to be as real as natural causes.

2.3.2.2.2. Symptoms and Diagnosis in Therapeutic Texts

A word must be said about symptom descriptions in therapeutic texts, particularly those against divine anger and witchcraft. Abusch has pointed out the complex textual histories of the narratives that comprise the diagnostic introductions to therapeutic texts, which are constructed from a multitude of sources transmitted over long periods of time (1985: 95). These complex textual histories must temper the temptation to treat them as

[53] Heeßel has argued that the Hand label more frequently refers to a disease name in therapeutic texts, whereas in diagnostic texts more often identifies the divine sender (2007: 122).

symptomatologies of a single disease or illness (Abusch 1985: 95). Many of the medical therapeutic texts written in Akkadian have undergone revision and adaptation that led to the grouping together of clinical and non-clinical phenomena that, in some cases, may reflect a cluster of related symptoms and experience, rather than a unified illness or disease (Abusch 1985: 95). Van der Toorn also points out this caveat in connection with *BAM* 315 (iii 1ff.) when he characterizes the text as "a picture of a complete collapse which can hardly be taken for an unembroidered record of an actual 'case'" (1985: 66).

Such descriptions may not constitute symptomatologies of a single disease or disorder. However, they do bring together paradigmatic expressions of distress and, in the case of those supplementary therapeutic texts in this study, of mental disturbances and the related physical complaints and general adversities, that have been filtered from multiple sources.[54] A diagnostic introduction may record not an individual psychopathology, but rather a stereotyped description of a psychopathology that accommodates the vicissitudes of individual cases. This study is concerned with analysing, in context, the vocabulary used to describe behaviour and physiological complaints associated with unusual mental states, in order to determine how signs and symptoms were organised into comprehensible patterns and labelled accordingly, and how these patterns relate to the articulation of misfortune more generally. As such, even if these descriptions do not present single cases, they provide useful information about these patterns in the expression of mental distress, disturbance, and disorder.

[54] See further van der Toorn 1985: 65-66.

2.3.2.2.3. Aetiology and Treatment

As noted, the approach to identifying and naming patterns of symptoms in the diagnostic texts presupposes a preconceived theory of disease apparent from the consistent reliance on supernatural explanations. When the cause of a disease or set of symptoms is specified, that aetiology further bears out a theory characterised by supernatural explanations. However, alongside these explanations, there is evidence that supernatural forces were not the only available explanation for disease.

This is first evident by absence. In some entries, a cause is not named. It is possible that by not specifying a supernatural cause, the sources implicitly classify a phenomenon as having an alternative cause. In the introduction to his study of natural illness in Babylonian medical incantations, Collins articulates this point in writing that if an illness or set of symptoms was thought to occur "naturally", the sources may not need to articulate this explicitly:

> a supernatural phenomenon is 'marked,' in that it is caused by a suprahuman being; a natural phenomenon is 'unmarked,' in that it is *not* caused by a suprahuman being. A phenomenon is natural only by default of not being supernatural. (Collins 1999: 10-11)

In his analysis, a source classifies a phenomenon as supernatural in "attributing it to a suprahuman being" and as natural "only implicitly, by *not* attributing it to a suprahuman being" (Collins 1999: 11). To understand Collins's point, it is necessary to first understand what exactly is meant by "natural".

According to Collins, natural illness refers to an illness "so normal and ordinary" that it was not necessary to assign it a cause or any special significance (1999: 11 n26).

This is not the same as an illness occurring according to processes of nature, or caused by a natural external force, such as heat. Van der Toorn uses the term "natural" with reference to illness to refer to those whose causes are both normal and perceivable by the senses.[55] He suggests that the dual level of illness causality mitigates the idea that illness was automatically interpreted as a sign of divine reproval. As an objective reality, nature had the power to affect human health, and like other living creatures, man was subject to the contingencies of nature, such as weakness, decay, and eventually death. According to this view, natural means normal, such that only "the extraordinary was directly reduced to the 'supernatural', and even then sorcerers and spirits disputed the authorship of the gods" (van der Toorn 1985: 72).

A definition of "natural" general enough to accommodate the vicissitudes of this concept as it may have been understood in the Mesopotamian worldview must make room for all three of these possibilities. Natural may therefore include an external force or process of nature, a process perceivable by the senses, or a process that may be too ordinary to write down. Although Collins's study focuses on medical incantations, his observations may extend to the diagnostic corpus. One way to account for entries in which the apodosis gives only a diagnosis and prognosis, but no cause, is to suggest that the cause was implicitly thought to be a natural one. This seems plausible in descriptions of specific types of fevers.

The second form of evidence for the recognition of causes other than supernatural ones may be adduced from the content of some of the diagnoses. In lieu of a disease name or label, entries in the *Diagnostic Handbook* may include a brief explanation. For example, in an entry that gives a diagnosis of *di'u/diḫu*, which is thought to be an early

[55] See Collins 1999: 11 n26.

form of malaria, a further explanation in the apodosis attributes the illness to "Sun-Heat": *di-ḫu e-ri-bu wa-ṣú-ú* UD.DA TAB.BA "it is the in- and out-going *diḫu*; he is inflamed by Sun-Heat" (SA.GIG 17, 7).[56] Although this study is concerned with diagnostic texts, it is necessary to note that therapeutic texts bear out this causal picture by including both natural remedies in the form of herbs, plants, salves, and decoctions, as well as magical remedies in the form of rituals and incantations. While some of the labelling conventions for diagnoses and explanations for disease causality show awareness of the supernatural element – the ultimate cause of the observed signs and symptoms – symptom descriptions and aspects of treatment focus on the immediate causes of an illness that are identifiable through observation and deduction.

An analysis of disease aetiology in the *Diagnostic Handbook* therefore reveals at least two levels of causation.[57] A "natural" illness can have a "supernatural" cause, "a *causa remota* looming behind the *causae proximae*", but at the same time, "causes of 'natural' diseases retain a certain independence and can only secondarily be considered as part of a larger concatenation of 'supernatural' cause and effect" (van der Toorn 1985: 70).[58] The ultimate causes of disease lie in the supernatural realm, and the first task of the medical practitioner – often the *āšipu* in the available evidence – was to determine the cause of the illness.[59] Three ultimate causes are discernable in the literature: an irritated god or goddess who may be punishing the patient, a demon that causes certain illnesses

[56] On *diḫu/diʾu*, see Stol 2007. See also §3.2.1.1.1.
[57] On parallels for this causal system, see Foster 1976: 778; Avalos 1995: 128-139; Garro 2000: 306-309.
[58] See also Collins 1999; Scurlock 1999: 73-79; Scurlock 2006: 77; Heeßel 2007: 120-130, esp. 121-122. On the relationship between this system of explanation and the Mesopotamian worldview, see now Geller 2010: 14-15.
[59] The *āšipu* has traditionally been understood in the secondary literature as the medical professional responsible for the supernatural cause and treatment of illness. However, recent evidence complicates this view and has led to a reassessment of his role and that of the *asû*. See for example, Worthington 2010; Scurlock 1999.

as part of its *modus operandi*, or the use of a curse or witchcraft by another person (Geller 2004b: 25). These appear regularly in the apodoses of medical texts in the Hand labels. Here, the relationship between cause and treatment of diseases captures the role of magic, "which uses incantations and rituals to alleviate or prevent disease resulting from these causes" (Geller 2004b: 25). In order to administer the relevant treatment, the *āšipu* had to distinguish between causal entities.[60]

As seen in the analysis of diagnostic entries, symptoms are elaborated according to established patterns in the observation and organisation of symptoms. Disease aetiology as recorded in the diagnostic and therapeutic medical texts largely relies on supernatural causation, even though the overall system makes room for natural causes. With respect to the Akkadian medical tradition as reconstructed from textual evidence, Heeßel notes that the texts "show a cultural awareness of disease, sickness, and suffering and, therefore, the special Babylo-Assyrian way to come to terms with this fundamental human problem" (2004b: 7). Thus, the content and the form or presentation of clinical phenomena, their groupings and labels, and their assigned causes do not readily lend themselves to correlation with disease and illness concepts in modern biomedical models.

This analysis of the type of information available in the *Diagnostic Handbook* about symptoms, diagnoses, prognoses, and causality, and the medical theories that may be reconstructed from them, highlights those features of the Akkadian medical corpus that make it ill-disposed to methods thus far used to study mental disorder in these texts: namely, retrospective diagnosis.

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[60] This is illustrated in the diagnosis and treatment of descriptions that have been correlated to epilepsy. Kinnier Wilson and Reynolds suggest that the Hands served as "the 'labels' of the time; to differentiate between one aspect of epilepsy and another the *āšipu* had little option but to find differences in causing entities" (Kinnier Wilson and Reynolds 1990: 188).

2.3.2.3. Textual Problems in Akkadian Sources

Having identified the type of information available in the Akkadian diagnostic texts and the basic features of underlying medical theories, including patterns of diagnosis and accounts of disease causation, this discussion may now evaluate the methodological problems detailed above for the history of medicine as they apply to the corpus. The type of information available in the Akkadian medical texts and the theories about disease naming and aetiology as reconstructed from these texts set constraints on methodology. In particular, aspects of the form and content of the sources highlight the methodological problems outlined above for the history of medicine and show the failure of retrospective diagnosis as an approach to Akkadian medical texts.

With respect to limitations on the type of information available in the sources for retrospective diagnosis, the Akkadian material suffers the same failings as other sources for the study of the history of medicine. The ways in which symptoms were organised into disease conditions, and the types of symptoms observed together follow a different rationale than that of biomedicine. In general, symptoms are combined into disease entities to which a diagnosis, discernable cause, and prognosis are assigned, based on contemporary knowledge and intellectual tools. In the Akkadian diagnostic corpus, this manifests in both the content of medical theories and the form in which these are expressed. With respect to form, a symptom or group of symptoms may appear and reappear in various contexts, and there was a tendency "to treat each set of symptoms as a separate disease, rather than recognizing common characteristics that could be grouped together" (Geller 2004b: 19). Thus, the ways in which clinical information was organised

and the type of information given differs significantly from that which would be required to make a modern diagnosis.

With respect to the medical theories themselves, the notion of supernatural causation restricts the validity of correlating Akkadian disease concepts with modern ones, given that biomedicine has excised all non-biological processes from explanations. Causation in modern disease concepts is generally framed as a dysfunction in an underlying biological process – an internal dysfunction – that generates or otherwise leads to signs and symptoms.[61] An analogy may perhaps be drawn between micro-organisms and supernatural forces as external influences on an individual that lead to a diseased state. As a micro-organism infects a human body, a deity, demon, ghost, or witchcraft strikes, seizes, or otherwise comes into contact with a person. Following this analogy, the personal god may be compared with an immune system that, when compromised, leaves an individual open to attack from microbes in the biomedical model, or supernatural forces in Akkadian aetiological accounts. Despite these analogical similarities, the type of information about disease causation and about how a disease cause is sustained in an individual in Akkadian diagnostic texts differs vastly in content from that available in modern medical texts. For mental disorder, in lieu of neurotransmitters, we find Hand of Šamaš. For the possible analogue to malarial fever, *diʾu/diḫu*, we find "Sun-Heat" instead of a sporozoite delivered by mosquito bite.[62] Indeed, there is almost no information about the internal processes that sustain a disease condition in the Akkadian corpus.

[61] See §2.2.1.
[62] See Gill and Beeching 2011: 55.

Medical theories, and accordingly the content of medical texts, are a function of cultural context, which defines the intellectual tools, social values, and religion or mythology that shape medical knowledge and practice. Zucconi notes the methodological problems with retrospective diagnosis for a study of medicine in the Hebrew Bible, and her observations extend to the Akkadian context:

> Which symptoms are reported in the text is determined by the significance the culture attributes to them. The description of a symptom or disease may rely on the society's perception of how it should be reported. (Zucconi 2005: 8)

Signs, symptoms, and their organisation into patterns labelled as diseases, illnesses, or disorders take on meaning within a particular setting. Thus, the ways in which clinical information was organised and the type of information given differs significantly from that which would be required to make a modern diagnosis.

2.4. Summary

To conclude, the ways in which symptoms were organised, the types of symptoms organised together, and accounts of disease causality in Akkadian medical diagnostic texts provide information that cannot readily be correlated to modern disease concepts. Akkadian medical texts, therefore, suffer from the same methodological problem as other medical texts in ancient traditions that render retrospective diagnosis problematic: the sources do not contain enough information, or enough of the right kind of information, to allow for reliable diagnoses to be made based on modern criteria. The information recorded in the texts is context-dependent.

This chapter has set forth the methodological problems that confront the study of medicine in Akkadian diagnostic texts. Retrospective diagnosis does not present an ideal approach to these sources in light of the cultural constraints on concepts of disease and illness, the type of information available in the Akkadian sources, and the way this information is organised. Notably, a disease is not stable across time and space and, more importantly, its perception varies according to available knowledge, cultural values, and social norms. Although the concept of illness offers a useful alternative to disease, an illness as a set pattern with a sustaining cause remains too abstract an entity to be applied successfully to the Akkadian sources in light of the type of information available in them. With respect to mental illness and disorder, the difficulties in finding modern analogues to the ancient descriptions of illness are even more pronounced due to the overlap of psychological with social concerns.

While these methodological problems and epistemological considerations have consequences for the identification of objective disease and even subjective illness in the sources, they at the same time narrow the scope of viable objects of inquiry down to more elementary aspects of disease and illness that show commonality across time and space: namely, symptoms. Part of the challenge in undertaking a history of psychiatric disorder is to identify categories of clinical observation that are basic enough to form the object of historical and cross-cultural analysis. Such objects can be expressed in culturally conditioned ways, but are sufficiently elementary to provide opportunities to draw parallels. What categories or objects of experience can be considered the lowest common denominator of clinical observation? What categories or objects are accessible to the

senses but still “elementary” in that they cannot be perceptibly broken down into items or combinations of items?

The next chapter will introduce the concept of symptoms as a more fruitful object of historical and cross-cultural inquiry, especially in relation to the study of mental disorder in Akkadian diagnostic texts. It will also set forth the theoretical framework for the objects of this study: patterns in the description of mental symptoms, exemplified by passages that refer to the three main mental symptoms of *ašuštu* “Depression”*, ḫīp libbi* “Heartbreak”, and *ṭēmu šanû/nakāru* “The mind alters/changes”.

Chapter 3: Theoretical Framework for the Study of Mental Symptoms in the *Diagnostic Handbook*

The previous chapter identified methodological problems with the study of the history of Akkadian medicine and showed the failings of retrospective diagnosis, particularly in the study of mental disorder. The purpose of the present chapter is to offer an alternative to retrospective diagnosis while still ensuring the texts a place in the history of medicine and, in particular, in the history of mental disorders. The framework proposed seeks to fill a theoretical gap in the secondary literature thus far, and will rely upon the definitions of mental symptoms and mental disorder. In order to construct definitions of these phenomena that can be extended to the Akkadian diagnostic material in light of the methodological problems outlined in the previous chapter, the present discussion will draw on principles from medical semiotics as applied in medical anthropology and psychological anthropology. Drawing from these fields helps to generate more constructive definitions of mental disorder and mental symptoms to guide the study of descriptions in Akkadian medical texts, as these fields provide the heuristic tools for understanding the meaning of signs, symptoms, and disorder in different cultural contexts.

The first part of this chapter will provide an overview of current definitions of mental disorder and mental symptoms. With these considerations in mind, the second part will propose a terminological framework for the study of the terminology that will guide the approach to the Akkadian material. The final section will define the specific objects and sources for this study from the *Diagnostic Handbook*. In particular, the specific terms under investigation, the core symptoms of *ašuštu* "Depression"*, ḫīp libbi* "Heartbreak",

and *ṭēmu šanû/nakāru* “The mind alters/changes”, will be defined and criteria for their inclusion will be justified. These symptoms as they occur in the *Diagnostic Handbook* provide instructive terminological anchors for the study of symptom patterns in the description of disorders with a strong mental component in the Akkadian medical diagnostic tradition.

3.1. Mental Disorder

3.1.1. Definition of Mental Disorder

In the previous chapter, the epistemological difficulties with the concept of disease, and the distinctions between disease, illness, and disorder were set forth. The median, or hybrid, positions between objectivism and constructivism as they apply to disorder can now be addressed for their utility to the present study. Between objectivism and constructivism, a number of views have emerged that, to varying degrees, incorporate aspects of both poles in definitions of disease and, in particular, of mental disease and disorder. This section will consider two definitions offered in this middle ground, one of which gives priority to the concept of disorder over disease. From elements of these definitions, this section will offer a philosophically consistent model of mental disorder that can be applied to the Akkadian sources. Although, as noted in the Introduction to this study, the discipline and concept of psychiatry is anachronistic, principles from this field are informative in constructing a definition of mental disorder that can guide the approach to Akkadian descriptions.

3.1.1.1. Wakefield's Definition

In psychiatry, J. Wakefield proposed one "mixed model" that sought a compromise between the objectivist and constructivist views of disease and disorder:

> I propose a hybrid account of disorder as harmful dysfunction, wherein *dysfunction* is a scientific and factual term based in evolutionary biology that refers to the failure of an internal mechanism to perform a natural function for which it was designed, and *harmful* is a value term referring to the consequences that occur to the person because of the dysfunction and are deemed negative by socio-cultural standards. (Wakefield 1992: 374)[63]

The two components of his claim must be isolated before assessing the overall validity and applicability of his definition to the ancient sources:

> C1: Dysfunction is defined with reference to objective biological processes and framed as the failure of a biological mechanism to perform a function for which it was designed. This constitutes the objective criterion.
>
> C2: The harmfulness predicated of dysfunction depends on socio-cultural standards, which may or may not deem negative a particular dysfunction and its consequences on the sufferer. This constitutes the normative criterion.

With respect to C1, critics have focused on the concepts of evolution and of natural design for underlying biological mechanisms. The objectivist dimension in Wakefield's account as expressed in C1 relies on the assumption that "psychological sub-systems that constitute a human being were naturally selected to perform certain functions and that such natural functions are objectively discoverable" (Varga 2011: 2). As Radden notes in her chapter on defining mental disorder in the *Handbook of Psychiatry*, every dysfunction

[63] On the implications of this hybrid definition and the emphasis on "harmful dysfunction" for psychiatric diagnosis today, see also Wakefield 2007.

need not reflect, nor be understood as, "a failure of nature's design" (2004: 418). Indeed, the notion of nature's design presupposes that evolution has reached an apex wherein nature's design has no flaws such that the only way to account for disease is to frame it as a failure (Radden 2004: 418). Another part of this criticism addresses limits in the current state of knowledge in the fields of medicine and psychiatry, whereby "we do not know with any certainty what is evolutionarily natural, because our scientific studies are still in their early stages or highly programmatic" (Perring 2010).

The Akkadian sources do not provide information about the underlying biological processes; the sources frame disease largely as the consequence of *external* dysfunction (especially supernatural forces). Therefore, this component of Wakefield's definition – that of an underlying biological mechanism understood to be the unifying cause – of psychiatric diagnosis is not discoverable in the Akkadian medical texts and is not useful to this study.

Critics of Wakefield's attempted compromise have also found fault with the notion in C2 of harmfulness as dependent on socio-cultural standards. The account risks the kind of relativism that defines the constructivist view. Some argue that certain basic harms, such as death, disability, and pain, are universal (Fleischman 2004: 421-422). This second component of Wakefield's definition should therefore be retained, but modified. It is not the harmfulness that varies according to socio-cultural norms, but the point at which a basic harm becomes problematic and the aspects of this harm that get emphasised and recast in medical language.

3.1.1.2. DSM-5 Definition

As has been emphasised, it is problematic to project modern disease concepts onto the ancient material; however, some general principles and definitions can be useful in constructing a framework to approach the sources and in narrowing down the objects of inquiry in the rich Akkadian medical corpus. Another definition of mental disorder that emphasises different features from those in Wakefield's definition appears in the DSM-5, the *Diagnostic and Statistical Manual of Mental Disorders* (5th edition). This diagnostic manual acknowledges in its introduction that no single definition can cover all aspects of the range of disorders that it describes and classifies. Nevertheless, it does offer a definition that sets forth the elements required in making a diagnosis:

> A mental disorder is a syndrome characterized by clinically significant disturbance in an individual's cognition, emotion regulation, or behavior that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning. Mental disorders are usually associated with significant distress or disability in social, occupational, or other important activities. (DSM-5: 20)

This dense definition requires some unpacking to clarify its elements and to determine its usefulness to the present investigation. The definition can be broken down into four basic claims, with the first one summarised as follows:

> C1: A mental disorder is a syndrome whose symptoms reflect a psychological, biological, or developmental dysfunction.

The notion of disorder as a syndrome, rather than a disease or illness, shifts the focus from underlying biological processes or mechanisms that need to be

identified, to the external manifestations of those processes. Although C1 acknowledges that the syndrome's signs and symptoms have an underlying causal mechanism, the latter is left vague.

Three further claims can be isolated from the DSM-5 definition:

> C2: The syndrome is characterised by clinically significant disturbances.
>
> C3: Mental disorders interfere sufficiently with a person's life as to cause distress or disability in social, occupational, and other contexts.
>
> C4: These disturbances can be in a person's cognition, emotion regulation, or behaviour: a person's thoughts, thought processes, or perception; unusual moods or inability to regulate changes in mood; and abnormal behaviour. These categories in effect isolate the types of symptoms that can be interpreted as mental symptoms: cognitive, affective, and behavioural.

C2 and C3 set forth criteria that are deducible from the Akkadian sources: in order to warrant recording in the medical texts, a symptom or disorder must have interfered sufficiently with a patient's life and must not have been an expectable response to events. C4 sets forth the categories of disturbances, which will be resumed in the discussion below of mental symptoms. The categories of symptoms identified in C4 can be viewed as guidelines for what to look for in the Akkadian sources.

The DSM-5's definition, especially as articulated in C1, is better suited to an application to Akkadian texts due to the nature of the information given in the sources. Methodologically, this definition offers a much more useful model in light of the sources. The *Diagnostic Handbook* provides information about symptoms and a corresponding diagnosis and/or prognosis. At times, the language of the diagnosis carries information

about a disease's cause, but these follow a different rationale than those in biomedicine, as discussed in §2.3.2.2.

3.1.1.3. Constructing a Definition of Mental Disorder for Akkadian Sources

In both the DSM-5 and Wakefield's definition, two layers may be discerned: an internal dysfunction, whatever its source or nature; and an external consequence manifested in observable signs or reportable symptoms. Because the type of information available in the Akkadian sources furnishes little information about internal or underlying causes, as opposed to external and supernatural causes, the notion of "dysfunction" in these definitions does not readily transfer to the Akkadian context. Conversely, the observable or reportable consequences in the form of signs and symptoms find detailed expression in the sources.

The definition of mental disorder used for the present study must therefore draw from and refine this descriptivist component that appears in the both Wakefield's and the DSM-5 accounts of mental disorder and, further, clarify what counts as a mental symptom in order to define the objects and parameters of the investigation. The notion of a phenomenology of signs and symptoms must be retained. A descriptive ontology whereby the observable and reportable signs and symptoms of mental disorder form the basis of psychiatric categories, will guide the approach to the sources.

This component of the definitions can be refined in two ways. First, it is necessary to address cultural variation in the expression of mental symptoms and disorder. In recent years, psychological research has taken seriously the impact of contexts shaped by persons, location, gender, status, and other aspects of society on the way stimuli are

perceived (Rosenhan 1975: 463). Human behaviour is one such stimulus and, as such, is susceptible to context-dependent interpretation (Rosenhan 1975: 464). For the present study, Wakefield's notion that harmfulness varies according to social norms must be retained but refined further to avoid the counterargument of relativism. In her criticism of Wakefield's definition, Radden points out that certain basic harms are universally recognized as such: pain, disability, and death: hence, the objective concept of *dis*-ease or disorder (2004: 421-422).[64] However, the manifestations of these basic harms in different social contexts can vary; norms and values determine what experiences cross the boundary from normal to pathological and thereby get classified as symptoms of disease. Some conditions may be more "pronounced or elaborated" depending on the cultural setting (Brown and Barrett 2010: 221). Understanding mental disorder means factoring in both objective biological and constructed socio-cultural factors.

Second, the notion of harmful consequences or manifestations of the underlying dysfunction must be retained: that is, Wakefield's harmfulness criterion and its parallel in the DSM-5 stated with respect to "cultural, social, and familial norms and values" (DSM-5: 14). With respect to the experience of the sufferer, the disorder must have interfered sufficiently with the sufferer's life – his occupation, relationship to the family and community – to warrant being recorded. The point at which a behaviour, mood, or somatic symptom is deemed negative and disabling, the *harmfulness* criterion, does indeed vary. The relativism that results from this claim can be solved for the present purposes with reference to the notions of extent and expressibility, rather than essence. The superordinate category of *harm* or *disability* is universal, and certain basic harms are also recognised universally, such as pain and death. The subordinate categories of harm

[64] Even this claim, however, is contentious. See Scarry 1985.

are those expressions of harmfulness that are recognised at different points on a spectrum. These subordinate categories, further, are expressed through different medical language, relying on metaphor and idiom suited to a particular cultural and linguistic context, and are organised in different ways.

Based on these considerations, for the purposes of this study, a mental disorder is:

> **D1**: A syndrome with a strong mental component visible in descriptions of states of mind, including disturbances in both mood and cognition, abnormal behaviour, and somatic complaints; whose objective biological processes remain necessarily unknown to us and whose features interfere sufficiently with a patient's life as to warrant being recorded in a medical text.

This definition emphasises the importance of observed symptoms, which are the object of study in the present dissertation.

3.1.2. Definition of Mental Symptom

Symptoms are a means of communication that allow a patient to express his illness as felt by him, as shared by others, and as presented to medical professionals (Wilbush 1984: 769). The meaning of a symptom implicitly contains accepted forms of knowledge about the body and self, and the relationship of these to each other and to a wider community (Kleinman 1989: 12). A symptom can thus be understood in relation to two aspects of the illness experience. On an individual or personal level, the symptom reflects an interpretation of one's experience of discomfort and *dis*-ease or illness, and on a cultural level, a symptom reflects a local world of meaning or semantic framework from which it derives meaning.

In modern biomedicine, symptoms are distinguished from signs, defined as the changes discerned on the physical examination of the patient that are measurable and observable (Wilbush 1984: 767). The sign and symptom denote different orders of the reality. As an objective phenomenon, a sign is "characteristically a part of a natural and self-evident reality which, like the tip of an iceberg, only enter the domain of semiosis (signification) to the extent that they are interpreted" by the medical practitioner who may, for example, infer a specific disease from the presence of a fever (Martinez-Hernáez 2000: 4). As a subjective phenomenon, the symptom reflects the patient's interpretation and presentation of a perceived state (Staiano 1986: 2) or a series of physical and emotional sensations (Martinez-Hernáez 2000: 4). Together, observed signs and reported symptoms can be used to make a diagnosis. They are the units of analysis of a disease.

Mental symptoms, more specifically, have been defined as "the 'units of analysis' of psychopathology" (Marková and Berrios 2009: 767). In other words, they are the individual components of a patient's experience from which mental disorder may be inferred: "the collection of clinical phenomena which need to be identified to make a case for a psychiatric diagnosis" (Marková and Berrios 2009: 323). Such units of analysis include the subjective complaints of the patient, such as feeling depressed, and signs and behaviours determined through observation and instruments (Marková and Berrios 2009: 323). Following Marková and Berrios, the term "mental symptom" as used in this study will include both (objective) signs and (subjective) symptoms. It is impossible to tell whether or not the Akkadian diagnostic texts reflect a distinction between objective signs observed by the physician and subjective reports offered by the patient. These appear alongside each other in symptomatologies and seem to carry equal status or weight in the

protases of a diagnostic entry; therefore, for the purposes of this study, both signs and symptoms will be classed as mental symptoms.

The types of symptoms that are identified and the way they are expressed and grouped depend heavily upon the intellectual and cultural framework of the patients and medical practitioners. To put it more bluntly, but clearly, "Culture defines normality, and cultural rules determine who is crazy" (Brown and Barrett 2010: 221). This framework, in turn, determines the vocabulary of descriptions for illness experiences, including those with a mental component. The field of medical semiotics provides some useful theoretical tools for understanding the significance of cultural context to the recognition, labelling, and organising of symptoms and, therefore, the need to account for cultural variation in an approach to medical texts from a time period, culture, and language that differs from modern Western biomedicine. Signs and symptoms of illness derive meaning from the interpretive system in which they inhere; their meaning depends on its inclusion within a system of signs (Staiano 1986: 2).

In order to investigate symptom descriptions so far removed from familiar ones and to reconstruct native models for mental disorder, features of medical language must be discussed and extended to the Akkadian context. This section will introduce some general principles of medical semiotics that contribute to our understanding of the cultural significance of the symptom and the importance of interpreting the language and patterns in symptom descriptions with reference to culture. These principles will then be discussed in relation to two features of medical language. On a macro level, medical semiotics can be refined for the cuneiform medical texts through the concept of a "semantic illness network", a useful framework for understanding symptoms in non-

Western cultures. On a micro level, the role of metaphor in medical language will be discussed as a way of understanding aspects of the Akkadian medical language and reconstructing the theories that underpin that language.

Robson has suggested the possibility of applying some of these frameworks from the history and anthropology of medicine to the study of Akkadian medical texts in a concise overview of the state of the field of Mesopotamian medicine (Robson 2008: 456).[65] It is hoped that the present theoretical discussion will highlight some of the principles that can be applied to the Akkadian texts in order to bring out nuances in certain medical descriptions, to shed light on the social context for these descriptions, and to fit these primary sources into the larger narrative of the history of medicine.

3.1.2.1. Medical Semiotics

Staiano's overview of medical semiotics introduces the communicative aspect of signs and symptoms, as well as their relationship to the objects they signify and to an overarching interpretive framework. In her introduction to the study of the interpretation of signs in illness, Staiano organizes the experience of disease or illness into a tripartite structure: the *object*, which is the objective underlying disease reality or physiological event framed as a cause; the *representamen* or sign, which is the symptom effected by the object; and the *interpretant*, or disease label inferred from the *representamen*(*s*) that is "ruled by cultural conventions" (Staiano 1986: 20). Her analysis is based on Peirce's theory of signs (used in the technical semiotic sense), whereby a sign can only signify an

[65] Before suggesting some possible avenues of research, she writes: "Recent work in the anthropology and history of medicine has had little impact on Assyriologists, although it has much to offer" (Robson 2008: 456).

object by being interpreted.[66] In the medical context, a medical sign or symptom derives meaning from its place within a collection of signs: the meaning of a sign "becomes dependent upon its inclusion within a system of signs (syndrome, symptom complex), produced synchronically or diachronically, which point to a 'disease' or labeled disorder" (Staiano 1986: 2).

Within an interpretive system, not all possible signs or symptoms of disorder are used, nor are they distributed in the same way when used (Staiano 1986: 9).[67] For example, fevers are universally recognised as a physiological symptom but are distributed differently within certain syndromes. To give an example from the Akkadian diagnostic texts, a fever is a *representamen* of *diʾu/diḫu* "malaria" but is not included in all descriptions of this illness. On the other hand, fever is a necessary component of descriptions of malaria in biomedical models of this disease.[68] Both *natural* and *cultural* constraints define the parameters within which aetiological or diagnostic signs derive meaning. Culture determines the denotation and classification of a symptom, such as back pain or heart palpitations, as disability or distress (Kleinman1988: 10). Despite the tendency to view such signification of symptoms as "natural", Kleinman notes,

> what is natural depends on shared understandings in particular cultures and not infrequently diverges among different social groups. The meanings of

[66] Peirce's definition is as follows: "I define a sign as anything which is so determined by something else, called its Object, and so determines an effect upon a person, which effect I call its interpretant, that the latter is thereby mediately determined by the former" (1988: vol 2, 478). An in-depth discussion of Peirce's theories falls outside the present scope. However, it should be noted that his introduction of a third relationship to the otherwise dyadic relationship of sign (i.e., word, utterance) and object (i.e., referent) is useful to the present context; the introduction of an interpreter and, by extension, a code in which a sign is interpreted, has important implications for the study of language and, more specifically, medical language in different cultural contexts. See §3.2.1.

[67] On the ways in which the signs and symptoms that get emphasised in a particular medical system reflect cultural patterns and theories of illness, see Fabrega 1979.

[68] See §3.2.1.1.1.

> symptoms are standardized 'truths' in a local cultural system, inasmuch as the groups' categories are projected onto the world, then called natural because they are found there. (Kleinman 1988: 10)

Cultural values and practices constrain the presentation of objective signs and the experience of subjective symptoms. These are "described by the patient according to a culturally mediated code"; in other words, signs and symptoms are expressed through language and in terms of existing categories (Staiano 1986: 10).

In the cuneiform context, the way that cultural context constrains the language of medical description is visible on two levels. In terms of form, symptom descriptions must adhere to the strict casuistic formula. In terms of content, categories of description are established by other genres of the scholarly tradition, such as wisdom literature and prayers, in which disturbance is expressed in stereotyped ways (the direction of borrowing is less important than the fact of overlap).[69] Descriptions of emotional disturbance in diagnostic texts and in the diagnostic introductions to therapeutic texts, for example, employ bodily metaphors and non-verbal expressions of emotion. These descriptions rely on or incorporate stereotyped ways of expressing emotional disturbance.

The history of medicine and, in particular, of mental disorder should focus not on the "semiotics of an 'objective' set of symptoms", but rather, on the conceptual structures used in different cultures to organise their "understanding of signs into comprehensible patterns" (Gilman 2008: 462). One corollary to this thesis, which in fact forms part of the definition of mental disorder offered above for this study (D1), is that symptoms that find their way into the written record are reported because of the significance attributed to them by the people writing the texts and the culture in which they are writing. The way in

[69] See van der Toorn 1985: 66.

which medical language is reified into a medical model can be understood through the heuristic framework of a semantic illness network.

3.1.2.2. Semantic Networks

Data from the field of medical anthropology shows that symptoms take on meaning and significance based on local semantic illness networks. This heuristic framework for understanding ideas around illness was first introduced by Good in his 1977 study of "heart distress" in Iran, and later refined by Kleinman (1980). According to this framework, a disease category is "a 'syndrome' of typical experiences, a set of words, experiences, and feelings which typically 'run together' for the members of society" (Good 1977: 26). Rather than expressing symptoms linked together in natural reality, the category expresses those that get associated through "networks of meaning" in society.

> This conception of medical semantics directs our attention to the use of medical discourse to articulate the experience of distinctive patterns of social stress, to the use of illness language to negotiate relief for the sufferer, and thus to the constitution of the meaning of medical language in its use in a variety of communicative contexts. (Good 1977: 26-27)

A semantic illness network is a network of words, symbols, feelings, subjective experience, and other modes of description that shape the way a patient may narrate his illness. Such an analysis directs attention to the "patterns of associations" that give meaning to elements of the medical lexicon (Good 1977: 25).[70]

[70] I am indebted to Iain Perdue (MSt, University of Oxford) for his kind assistance in explaining these concepts to me.

In effect, the semantic illness network provides one articulation and application of the principles of medical semiotics as set out above, in which a physiological or psychological sign or symptom, combined with its various labels "functions as a symbol, a 'semantic unit' in a total semantic system" (Staiano 1986: 16).[71] Experiential phenomena must be assigned to socially available categories (Staiano 1986: 22; cf. Locker 1982). Symptoms and the illnesses, disorders, or syndromes into which they are organised are not established natural realities but, rather, are a function of the interaction between the personal experience of natural phenomena, on the one hand, and symbolic meanings determined by cultural context, on the other.

Kleinman frames the symbolism and signification of signs and symptoms of mental disorder within a semantic network as a dialectic. The forms that mental symptoms take "emerge from a dialectic connecting – and changing – social structure and experience" (Kleinman 1991: 3). In his formulation, the fundamental questions of psychiatry, which include questions of how to distinguish the normal from the abnormal and how disorder is perceived, experienced, and expressed, are caught up in a reciprocal relationship between the social and individual world of a person (Kleinman 1991: 3).

A look at Good's study of *narahatiye qalb* "heart distress" in Maragheh, Iran may clarify some of the principles that define the concept of a semantic network and the dialectic that Kleinman designates.[72] The patients in Good's study describe their hearts as pounding, trembling, fluttering, beating rapidly, and feeling bored (Good 1977: 31). Each of these descriptions falls within a category of sensations described as *narahatiye qalb* "heart distress" or "malaise of the heart", which ranges along a continuum from mild

[71] See also Maranda 1972; Staiano 1979b.
[72] This example is revisited in §7.4.2.1.1.

excitation to chronic irregularities or even heart attacks, leading Good to identify it as "a complex of physical sensations associated with a particular feeling of anxiety" (Good 1977: 32).

How can the ascription of such diverse anxieties and, indeed, a diverse range of physiological symptoms, to the heart, which in the Western biomedical model is simply the organ responsible for circulation, be accounted for? To "gloss" heart distress as "mild anxiety or depression with tachycardia" fails to take into account the explanatory models and theories of disease causation and treatment that comprise popular medicine in Maragheh where this label is used (Good 1977: 27, 29). These models are influenced by three high traditions of medicine: Galenic-Islamic, sacred, and cosmopolitan medicine (i.e., biomedicine) (Good 1977: 29). These traditions, in turn, furnish a conception of the heart as an organ with both physical and mental capacities that allow for diverse conditions – both physiological and psycho-social – to be attributed to it.

This multi-faceted conception of the heart that is embedded into popular beliefs about medicine and the body in Maragheh provides a framework for focusing on the heartbeat, for labelling symptoms, and for establishing a link between irregularities in heartbeat and specific personal and social conditions. This framework allows for the heart to serve as an idiom for emotions, as well as the site of physical sensations associated with them (Good 1977: 38). The presentation of symptoms is thus constrained by socially available categories of signs and symptoms, interpretive models of illness, and the boundaries of language. Heart distress in Iran "condenses various sources of frustration and distress into a culturally sanctioned mode of expression" (Kleinman 1991: 26).

Although the semantic illness framework is no longer heavily used in the field of medical anthropology, it furnishes a useful heuristic device for the study of ancient medicine, especially those cultures that deviate from the Western narrative.[73] The medical language – that is, the technical vocabulary, metaphors, and idioms of distress – of Akkadian diagnostic descriptions in both diagnostic and therapeutic texts employ terms and expressions that may seem bizarre in translation, such as limbs being "poured out" or ears "roaring". Similarly, symptoms that seem unrelated to one another, when compared with biomedical models as attempted through retrospective diagnosis, are described and grouped together, such as "roaring" ears and "poured out" limbs with fear and anxiety. Because the nature of the Akkadian sources does not allow further questioning of its authors or of the individuals whose experiences are recorded in them, the concept of a semantic illness network provides a sufficiently general framework to help structure a nuanced approach to the sources and to help guide interpretations of the medical language, including the use of metaphors, recorded in these sources.

3.1.2.3. Metaphor in Semantic Networks

As seen in the example of heart distress in Iran, metaphors play an important role in semantic frameworks. The reliance on metaphors in the description of symptoms provides one way of conceptually organising the illness experience and illustrates the way an interpretive framework can mediate the communicative aspects of illness. Metaphors provide information about the experience of mental symptoms and disorder, and the way these are structured according to bodily concepts; metaphors reflect

[73] For current summary of the variety of theoretical and analytical approaches used by medical anthropologists in different contexts and for different categories of illness, see Brown and Barrett 2010.

acceptable modes of expression and their content is tailored to conventional modes of therapy. This feature of medical language therefore enters into the theoretical approach to the texts.

The function of metaphor in language and in relation to real objects has occupied philosophers since Aristotle.[74] Recent scholarship on the subject has highlighted the cognitive features of metaphorical concepts and extends their function beyond poetic and rhetorical devices. Lakoff and Johnson's study of metaphor define its essence as "understanding and experiencing one kind of thing in terms of another" (Lakoff and Johnson 2003: 5). The metaphorical structure of fundamental concepts within a culture coheres with its values and conventions (Lakoff and Johnson 2003: 22). In other words, metaphorical language reveals ways of structuring reality that reflect social values and conventions.

Examples of orientational metaphors – or metaphors that organise a system of concepts in relation to one another – that illustrate this coherence are those of "Happy is up, sad is down", which are founded on "physical and cultural experience" (Lakoff and Johnson 2003: 14). The physical basis for this metaphor in English finds a drooping posture typically associated with feelings of sadness and depression while an erect posture typically associated with a "positive emotional state" (Lakoff and Johnson 2003: 15). Perhaps, this physical basis can account for symptoms in the Akkadian medical corpus that orient sadness in a downward direction (e.g., *libbu šapil* "the heart is low", *pānu quddud* "the countenance is fallen").[75] In Lakoff and Johnson's view, metaphor is not simply a trope but a cognitive device: "Since metaphorical expressions in our

[74] For this foundational definition, see Aristotle, *Poetics* 21, 1457b9-16, 20-22.
[75] On the latter idiom, see Gruber 1980: 356-358.

language are tied to metaphorical concepts in a systematic way, we can use metaphorical linguistic expressions to study the nature of metaphorical concepts and to gain an understanding of the nature of our activities" (Lakoff and Johnson 2003: 7).

This expanded view of metaphor recognises its role in scientific discourse, including medicine. Metaphors play a key role in scientific language. As van Rijn-van Tongeren observes in her study of medical language, they can fill the gaps in knowledge or bridge the known and unknown: we try to understand "the unknown or not clearly delineated aspects of life on the basis of what is already familiar to us" (1997: 14). With respect to medical language, metaphors can be understood as "surface representations of an underlying conceptual system" (van Rijn-van Tongeren 1997: 15; Fleishman 2003: 484). Two features of metaphor should be distinguished for their instrumentality in the reconstruction of medical theories and concepts and in clarifying, by extension, the expression of these in symptom descriptions.

First, metaphors determine which aspects of a phenomenon are highlighted and which get obscured. Because metaphors partially structure thinking and experience, they bring certain aspects of a phenomenon to the foreground while leaving others in the background (Diekema 1989: 18; van Rijn-van Tongeren 1997: 90; Fleischman 2003: 484). This echoes Lakoff and Johnson's observation that a metaphorical concept, in bringing into focus one aspect of a concept, can prevent the focus on other aspects of the same concept that are inconsistent with that metaphor (Lakoff and Johnson 2003: 10). In general terms, the language of argument, for example, is structured according to battle concepts (one *wins* or *loses* an argument, *shoots down* an opponent's argument, offers *indefensible* premises, *defends* a position, etc.), which are emphasised at the expense of

the cooperative aspects of arguing, such as contributing one's time and effort to achieve mutual understanding (Lakoff and Johnson 2003: 10).

In medical terms, battle concepts also structure the approach to illness. Descriptions of cancer, for example, employ the language of warfare: cancer cells are "invasive" and "colonise", while the body's "defences" are insufficient to "combat" the disease (Sontag 1991: 66). This is especially apparent in language used to describe the metastasis of tumours, whereby tumour cells are "seen as human beings in their role as aggressive invaders of territories" (van Rijn-van Tongeren 1997: 71). Underlying these expressions, the conceptual metaphor can be formulated as "TUMOUR CELLS ARE ENEMIES, which is a subcategory of the basic conceptual metaphor: CANCER IS WAR" (van Rijn-van Tongeren 1997: 71).[76]

The Akkadian medical texts furnish examples of metaphors that may have structured the concepts of symptoms, illness, and treatment. A limited repertoire of verbs is employed in descriptions of how a patient comes into contact with a symptom or illness, such as *ṣabātu* "to seize". One verb that consistently describes the way *ašuštu* "Depression" is experienced is *maqātu* "to fall", which is however a verb that is regularly used to describe the way in which a symptom comes into contact – or befalls – a patient (*ašuštu* 1). Although the precise meaning of *maqātu* can vary depending on context, it is nevertheless the verb used to describe the act of falling.[77] Perhaps, this captures the orientational metaphor of SAD IS DOWN, also evidenced in the use of *šapālu* "to become low" (CAD Š I 422f.) to describe depressed states. Thus, metaphors in Akkadian

[76] Capitalisation of the conceptual metaphors is, following Lakoff and Johnson (2003), common practice in the study of metaphors and here follows that present in van Rijn-van Tongeren's analysis (1997).
[77] For example, *maqātu* is used to mean "to arrive". However, in some of its other meanings and usages, the metaphor of "falling" plays a structuring role. Defeat in battle can be phrased with *maqātu* as a downfall (CAD M I 243).

medical texts can be used to elucidate priorities in how symptoms were experienced, organised, expressed, and explained, as well as more concretely how they were treated.

Secondly, the kinds of metaphors used to structure medical phenomena show evidence of explanatory models for illness. One feature of medical language is the use of body parts as metaphors whereby associative meanings attach to respective body parts, a phenomenon recognised in nearly all languages and cultures (Fleischman 2003: 486-487).[78] On the apparent universality of bodily metaphors in idioms of distress, Kleinman notes that in all societies, the body can "represent a rich source of symbols for communicating about the social group or the individual person and a way to express the brute materiality of the experience of many forms of misery, much of it socially caused" (Kleinman 1991: 27). Body parts acquire meaning in the context of culture, and the expression or representation of an illness experience evokes those symbolic meanings (Fleischman 2003: 487). The use of bodily metaphor, therefore, derives meaning as a category of mental distress from the interpretive context.

The metaphoric process of somatising makes reference to and use of body parts (Fleischman 2003: 486; Staiano 1986: 27). As metaphors, body parts "stand for perceived bodily or mental states or symbolize some changed internal or external relationship" (Staiano 1986: 27). This observation about the reduction of psychological complaints to body parts is especially relevant to the Akkadian sources. Consideration of the role and type of metaphors in Akkadian medical language and consciousness of a semantic illness network into which this language fits and from which it derives meaning,

[78] Outside of the medical context, see Steinert 2012 for the ways in which certain body parts can stand for the person, such as the *qaqqadu* "head", *rēšu* "head", *pūtu* "forehead", *qātu* "hand", etc.

will aid this investigation of patterns in the expression of mental distress and disorder in the diagnostic texts.

3.1.3. Definition and Categories of Mental Symptoms

With these principles of medical language – philosophical, anthropological, and linguistic – in place, a definition of mental symptoms can be proposed to better handle the medical language of Akkadian diagnostic texts. What general categories of clinical phenomena, physiological and psychological, fall within the scope of this definition? What language – more specifically, what metaphors and categories of description – structure the observed phenomena of mental distress and psychopathology in the interpretive framework of the Akkadian medical texts? This definition takes as a guideline the definition of mental disorder given above (D1), which recognises descriptions of states of mind, abnormal behaviour, and somatic complaints as indications of a strong mental component to a syndrome or collection of clinical phenomena.

> **D2**: A mental symptom is a sign or symptom that has a mental (affective or cognitive) component that can be deduced from a directly described mental state, a somatic symptom, or abnormal behaviour, and as such can be considered a unit of analysis of psychopathology. A symptom does not have to form part of an overall mental disorder to be classed as a mental symptom.

Based on this definition, this section will introduce three categories of symptoms to be resumed in the section below that sets out the theoretical framework, as these three types of mental symptoms will guide the approach to the sources: disturbances in mood and cognition, abnormal behaviour, and somatisation. This definition will be used to aid in

the construction of a framework that will allow for some flexibility in the interpretation of symptoms but with reference to consistent theoretical principles and definitions.

The most obvious type of symptom that indicates a mental disturbance and forms a basic "unit of analysis" of psychopathology is one that directly describes an unusual mental state, or a disturbance in mood or cognition. Terms that describe emotions, such as melancholy, sadness, or fear, but have no physiological referent, fall within this category. In Akkadian, examples of these include the core symptom of *ašuštu* "depression, dejection", and other nouns that describe sorrow, such as *nissatu* "grief, wailing", or that describe states that evoke fear and anxiety, such as *pirittu* "fear, terror" and *ḫayattu* "terror, fit of terror or fear". Descriptions of cognitive disturbances also fall within this category, including the core symptom of *ṭēmu šanû/nakāru* "The mind alters/changes", which describes a disruption in thought or thought processes.

However, such direct representations are not always used to describe mental states, which may be reflected in physiological disturbances or transferred onto body parts in both metaphorical and literal descriptions. The phenomenon of somatisation, discussed above as one aspect of medical language/semiotics, is observed in both Western biomedical and non-Western medical cultures. Three definitions of somatisation may be distinguished in the literature, which are matched to greater degrees of inference about observed behaviour. The feature shared by all of these definitions is that psychological concerns and disturbances find expression in physical, rather than mental, terms. The most basic definition is the "presentation of physical symptoms in the absence of organic pathology, or the amplification of physical complaints accompanying organic disease beyond what can be accounted for by physiology" (Kirmayer 1984a: 160).

A second and more specific definition of somatisation explains it as the presentation of physical symptoms *in lieu of* personal or social problems (Kleinman 1980; Kirmayer 1984a: 160). Those who follow this definition also view somatisation as "a way of speaking that gives pre-eminence to the body as a metaphor for social and emotional experience", whereby the body and its ills replace verbal and social communication (Kirmayer 1984a: 160). This may be associated with a "tendency to avoid psychological or emotional language in speaking about distress in favour of descriptions of bodily sensations" (Kirmayer 1984a: 160). This can also be seen as a "selective perception and focus" on somatic manifestations of mood while at the same time denying the presence of "affective and cognitive changes" (Katon et al 1982: 127).

Finally, somatisation can be viewed as an effect of psychological distress, which by some hypothetical mechanism "can give rise to somatic signs and symptoms of illness" (Kirmayer 1984a: 160; cf. Hunter 1979). Such symptoms vary according to different types of disturbances in mood. For example, with depression, "vegetative symptoms" may be observed (Kirmayer 1984a: 160; Katon et al 1982: 130). This third type of somatisation also includes the processes responsible for the physiological symptoms experienced as part of "hysteria" or conversion disorder, and can even include disorders in which a "physical lesion" exists even if the ultimate cause is thought to be psychological distress or stress (Kirmayer 1984a: 160; Katon et al 1982: 127).

Because the Akkadian corpus does not allow us to determine the presence or absence of a physiological disease process underlying somatic complaints, the first definition cannot be relied upon. The third definition, inversely, assumes the presence of an underlying psychological cause for somatic signs, which cannot be confirmed or

denied based on the type of information available in the sources. Both the first and third definitions rely on causal explanations that have no clear parallels in the Akkadian sources. Therefore, somatisation will be understood in its second sense, in which bodily metaphor *replaces* emotional language. The preference for presenting physiological symptoms and expressing bodily sensations over psychological experience is a key component in patterns for the expression of mental distress and disorder in Akkadian medical diagnostic texts and in the diagnostic introductions to therapeutic texts.

This preference may reflect the fact that patients and healers understood psychological experiences, such as anxiety or depression, in physical terms. By extension, this may reveal important aspects of the connection between, rather than the separation of, mind and body implicit in Akkadian medical theories. Cultural determinants pattern the experience of an underlying disease and yield "characteristic types of somatization" (Kleinman 1980: 140). Alternatively, or perhaps additionally, this preference may provide information about available treatments for illness in general. As Kirmayer notes, treatment of illness is, in many cultures, "organized around the presentation of bodily complaints rather than explicit mention of emotional disturbance or family conflict" (1984a: 159). Thus, the tendency toward somatisation may further reflect the types of treatments available. Staiano acknowledges both the expressive and therapeutic elements of somatisation: a patient may "find that only by talking about or symptomatizing his bodily or mental state can he express, or attempt to express…the personal and social concerns which may have provoked the production of signs" (Staiano 1986: 29). Somatisation represents an important category of mental symptoms because it

offers an alternative way to interpret physical symptoms that appear in diagnostic descriptions that also include unusual mental states.

The third category of symptoms that can be classed as mental includes abnormal behaviour. Psychiatric disturbance often includes a behavioural component, which represents the directly observable element in the phenomenology of mental disorder. Unlike mental states, behaviour can be observed and assessed (Oyebode 2014: 4). Such external phenomena can be used to infer underlying subjective thoughts or feelings, which become available "for examination and exploration" not only through verbal communication, but also through "meaningful gestures, bodily stance, behaviour and actions" (Oyebode 2014: 6). In the Akkadian context, some paradigms of abnormal behaviour that appear in literature, prayers, and incantations are also found in the medical context to express emotional disturbance. Medical texts also include a repertoire of unusual behaviours associated with different types of disorders.

3.2. Theoretical Framework

The definitions of mental disorder (D1) and mental symptoms (D2) offered above are arrived at through analysis of the epistemological problems associated with the concepts of disease, illness, and disorder; an overview of principles of medical semiotics, especially as brought to bear in the concept of a semantic illness network and in tropes in medical language; and a classification of the types of phenomena that count as a mental symptom. The conceptual thread that links these is the role of culture in the interpretation of clinical phenomena of a psychiatric nature. This section will now set forth a framework based on these definitions and considerations that can account for the nature

of the sources and the type of information available in the sources. Further, this framework aims to address the methodological problems that the sources give rise to by offering an alternative approach to that which has been thus far used in studies of mental disorder, previously phrased as studies of "psychiatry", in Akkadian sources.

3.2.1. Statement of the Framework

The language of medical observation, the metaphors that structure these observations, the semantic framework from which these observations derive meaning, and the disease concepts into which they are organised may differ from one culture and time period to the next. At the same time, medicine is concerned with a limited domain of human experience, the human body, and the signs and symptoms observed within that domain, to an extent, remain common across all time periods and cultures. The most fruitful ground for cross-cultural comparison lies on the level of the individual units of disease and illness: the symptoms, and the behaviours, somatic complaints, and descriptions of mood that they describe. The overall patterns that were recognised and labelled – disease and illness – may have a problematic epistemological status *as patterns* and therefore pose methodological problems. The individual units of illness – the symptoms – are real. They represent elementary objects, and the language used to describe them can tell us about how they were experienced and understood. These components of the illness experience furnish variables for cross-cultural and cross-temporal comparison. If clinical descriptions from different time periods and cultures are reduced to their lowest common denominators – that is, the referents of the signs and

symptoms – meaningful cross-cultural and historical comparison remains possible. This presents a fruitful alternative to retrospective diagnosis.

3.2.1.1. Illustration of Symptoms as Objects of Study

Two examples will illustrate how the isolation of symptoms from Akkadian diagnostic descriptions can generate objects for comparison with symptoms described in other medical cultures, including that of biomedicine. The first example will look at a physiological disorder, while the second will apply the same principles to a psychological disorder. In both cases, symptoms may be isolated from the overall disorder being described, thus allowing for parallels to be drawn.

3.2.1.1.1. Example 1: Malaria and *diʾu/diḫu*

Stol suggests the Akkadian disease *diʾu/diḫu* to be an early, and perhaps milder strain, of malaria (2007: 15-18). A modern manual for tropical disease groups the following signs and symptoms together under the label of malaria: a progression from chills to fever to sweats, headaches, stupor, delirium vomiting, diarrhoea, and muscle pain (Gill and Beeching 2011: 57-59). The disease *diʾu/diḫu* is described thus in the *Diagnostic Handbook*:

> **4.** DIŠ *ina taš-rit* GIG-*šú* TA TAG-*šú* EN *ik-lu-ú* 1-*is-su* KÚM 1-*is-su* SED
> **5.** *a-ḫu ma-la a-ḫi* TUK.MEŠ-*ši* EGIR KÚM *u* IR *ip-ṭú-ru* UB.NÍGIN.NA-*šú um-ma*
> **6.** *ub-la-nim-ma um-ma ma-la um-mi maḫ-ri-i ir-ši-ma ip-ta-ṭar*
> **7.** EGIR-*nu* ˹SED˺ *u* IR *ir-ta-ši di-ḫu e-ri-bu wa-ṣú-ú* UD.DA TAB.BA U_4 7-KÁM LÍL-*ma* TIN

> **4.** If at the onset of his illness, after it has touched him until it stops, he continually gets fever once, chills once,
> **5.** in equal measure; after he has shaken off fever and sweat, his limbs
> **6.** bring fever, and he gets fever as much as the former fever, and he continually shakes it off,
> **7.** afterwards, he has chills and sweat; it is the in- and out-going *diḫu*; he is inflamed by Sun-Heat. He is unwell for seven days, and he will live.
> (SA.GIG 17, 4-7)[79]

The symptoms are fever, chills, intermittent fever, and sweats, and the cause or aetiology is "Sun-Heat". The label or diagnosis is *diḫu*, which may refer to a mild form of malaria and, based on these entries, may be linked to the Hippocratic "seven-day fever".[80] In the same tablet of the *Diagnostic Handbook* appears another entry whose apodosis gives *diḫu* as the diagnosis, but the patient is described as healthy other than a lack of appetite (SA.GIG 17, 41-42). Echoing symptoms present in both of these entries from SA.GIG 17, a description of *diʾu/diḫu* that appears in the diagnostic introduction to a therapeutic text describes vertigo, knee pain, and stomach discomfort upon eating and drinking with a diagnosis of the man being ill with *diʾu*-illness (GIG *di-ʾ* GIG) (*BAM* 106, 1-4).[81]

Whether or not *diʾu/diḫu* in the diagnostic texts represents an earlier or milder form of malaria, the description of fevers offers an instructive example for why symptoms provide a more informative object of study in Akkadian medical texts. In order to illustrate the cross-cultural and cross-temporal potential of the analysis of symptoms, rather than disease concepts, it will help to fit the symptoms of each description – ancient and modern – into semiotic diagrams based on Peirce's "triadic" theory of the sign and Staiano's extension of this model to medical examples, both of which were explained and

[79] Following Heeßel 2000: 195; Scurlock and Andersen 2005: 3.163, 20.90.
[80] See Stol 2007: 17.
[81] Cited with parallels in Stol 2007: 17-18.

discussed above.[82] A physiological event, such as a fever, can be a sign or *representamen* of an underlying object. In modern Western biomedicine, that object might take the form of an antigen:

antigen ═══ fever, chills, sweats, vomiting
Object (O) ═══ Representamen (R)

The object provokes the *representamen*. Based on Akkadian medical texts and the theories of causation that can be reconstructed from them, this diagram might appear as follows:

'Sun-Heat' ═══ fever, chills, sweats, vomiting
Object (O) ═══ Representamen (R)

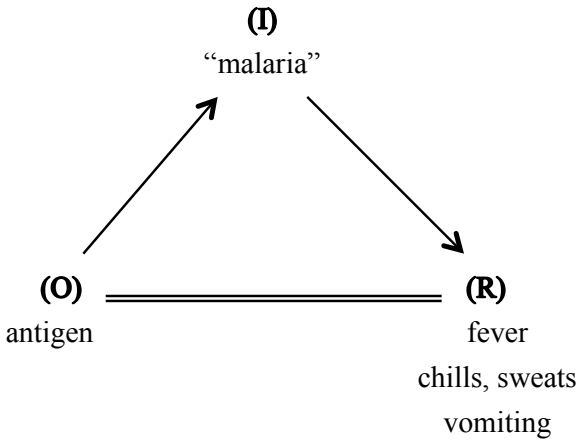
Already, the objects of overlap and disagreement are apparent. In Akkadian medical knowledge and concepts of disease aetiology, the cause of disease, be it supernatural and ostensibly natural, comes from outside of the individual: here, "Sun-heat". In biomedical models, the cause is understood to be an antigen in the form of a sporozoite delivered by the bite of an infected female mosquito (Gill and Beeching 2011: 55).

The diagnosis of an illness or disease is the *interpretant* of the object and *representamens*; it refers to the effect of the *representamen* on the interpreter of the illness who must make a diagnosis. Expanding these diagrams to include the *interpretant* or diagnosis, as the sociomedical interpretation of the object and *representamen*, further

[82] §3.1.3.1. The diagrams in this section are based on Staiano 1986: 19-22.

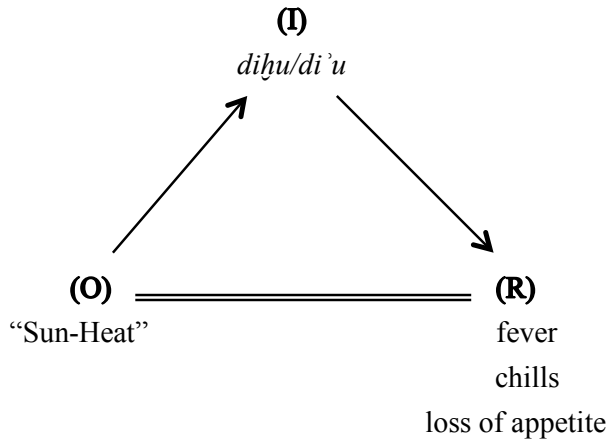
illustrates the areas of overlap and disagreement.[83] The symptom (*representamen* R) serves as one representation of the perceived objective disease cause (*object* O), which provokes the symptoms or *representamens*, and their interpretation as a diagnosis (*interpretant* I); R thus has a relationship to this objective agent of the disease, as well as to an overarching *interpretant*, or diagnosis.

Figure 1. *Representamens* of malaria in biomedicine



[83] The following diagrams depart slightly from those employed by Staiano. In her analysis, the interpretant disease label can also serve as a representamen, which can therefore also be a complaint or symptom, such as "I am feverish" (Staiano 1986: 20). However, the aim of this discussion is to show how a symptom, as one representation (often among others) of a disease and its cause, can be consistent over time, even if disease conceptions and the diseases themselves may differ. For this reason, this aspect of her analysis is left out. See Staiano 1986: 20-22 for a more nuanced discussion of this application of Peircian semiotics to disease, symptoms, and aetiology.

Figure 2. *Representamens* of *diʾu/diḫu* in the *Diagnostic Handbook*



The diagrams show that there are some areas of overlap, such as the reliance on the *representamen* of “fever”, as well as abdominal symptoms in the form of “vomiting” (biomedical) and loss of appetite (Akkadian). Even if the disease *diʾu/diḫu* can be successfully correlated to malaria, the disease concept differs in terms of the precise set of *representamens* defined under that label, and in the causal explanations used to account for it.

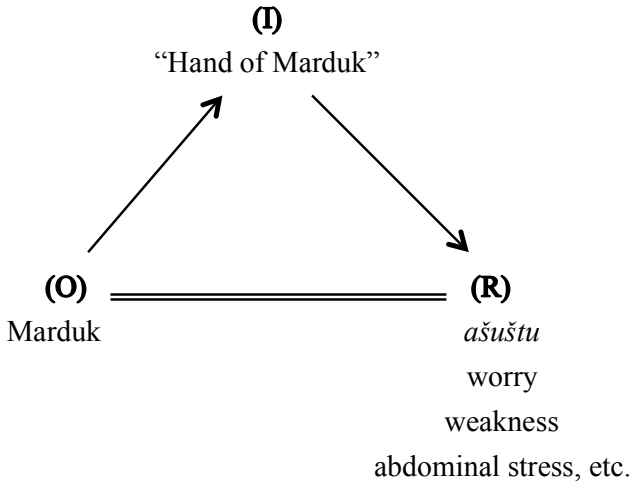
In SA.GIG 17, 4-7, cited above, the symptoms are fever, chills, intermittent fever, and sweats. In SA.GIG 17, 41-42, the only symptom is a loss of appetite. In the therapeutic text cited, the symptoms include vertigo, knee pain, and stomach discomfort. Can *diʾu/diḫu* perhaps refer to some other type of disease than malaria, for which a fever is not a necessary component and stomach discomfort is a more consistent *representamen*? Or if *diʾu/diḫu* is ancient malaria, is it possible that the scholars and scribes composing the diagnostic and therapeutic texts chose to emphasize stomach complaints over other symptoms for reasons unknown to us? Perhaps, stomach ailments

were more easily treatable with available remedies, or perhaps the stomach was considered a more important or central part of the body such that complaints centred on it would have received more attention.

3.2.1.1.2. Example 2: Generalised Anxiety Disorder and "Hand of Marduk"

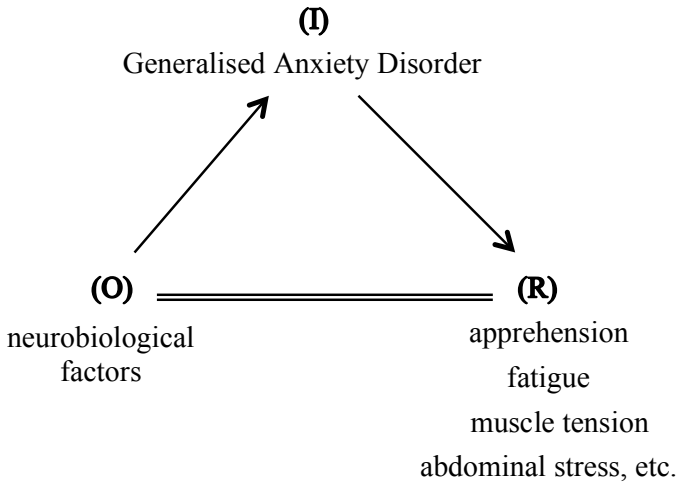
An example of a diagnostic description in SA.GIG that has a strong mental component may further clarify the necessity of focusing on symptoms, rather than disease or illness. One of the core texts for this study in which *ašuštu* "Depression" is described gives a diagnosis of Hand of Marduk, which includes symptoms of depressed and worried mental states, along with weakness and abdominal pain (SA.GIG 22, 34-35 = *ašuštu* 4).

Figure 3 *Representamens* of "Hand of Marduk" in the *Diagnostic Handbook*



As an analogue from modern Western biomedicine, some symptoms of Generalised Anxiety Disorder are filled into the next diagram (DSM-5: 222; ICD-10: 140f.).

Figure 4 *Representamens* of Generalised Anxiety Disorder in biomedicine



In the *Diagnostic Handbook*, abdominal stress is expressed as "piercing pain" in the epigastrium. Weakness is described with the figure of loose limbs and weak arms. Bloodshot eyes may perhaps be the result of weeping, which goes well with the dejected state represented by *ašuštu*. In Generalised Anxiety Disorder, as described in the DSM-5, the patient is described as experiencing excessive "apprehensive expectation" in the form of anxiety or worry, as well as three or more of the following symptoms: restlessness, being easily fatigued, difficulty concentrating or mind going blank, irritability, muscle tension, sleep disturbance (DSM-5: 222f.). The ICD-10 includes epigastric discomfort, dizziness, sweating, and other somatic symptoms (ICD-10: 140). Although this study does not propose to equate Hand of Marduk to Generalised Anxiety Disorder, some of

the symptoms grouped under each of these labels show overlap. The Akkadian disease label of "Hand of Marduk" may have referred to something entirely unrelated to the modern Generalised Anxiety Disorder, and at any rate, unlike the modern disorder, was certainly not understood to have had a neurobiological cause. Indeed, Hand of Marduk may have referred to some physiological illness without fever. Nevertheless, patterns in the description of symptoms for Hand of Marduk have some parallels in modern groupings of symptoms for anxiety.

3.2.1.1.3. Implications of Symptoms as *Representamens*

These diagrams illustrate that signs may provoke different diagnoses or interpretations, depending on the interpreter and his intellectual context, and may be accounted for with different causes. However, the signs themselves show some stability across interpretive frameworks. They are simply grouped differently and accordingly assigned different labels, and may be expressed using different metaphors (e.g., epigastric pain for abdominal stress, bloodshot eyes for weeping). Indeed, the tendency in Akkadian diagnostic texts, noted above, "to treat each set of symptoms as a separate disease, rather than recognising common characteristics that could be grouped together" (Geller 2004b: 19) makes it necessary to focus on the signs and symptoms, rather than on the diagnoses.

Some of these signs as the individual units of psychopathology can be clarified with or compared to similar signs observed in other medical cultures from other periods of history. In this study, such comparisons are made where they may help to clarify the behaviour or discomfort described by the Akkadian medical vocabulary. For example, various types of speech disturbances are organised with all three of the core symptoms,

and the meaning of the various Akkadian expressions used to describe these disturbances will be clarified with reference to similar disturbances in early and modern conceptions of schizophrenia. However, no attempt will be made to retrospectively diagnose schizophrenia in the Akkadian sources. Retrospective diagnosis should not be applied to these signs and symptoms to bring ancient disorders into alignment with modern ones, given that the latter are couched in a biomedical model that relies on vastly differing accounts of disease and causation, and that draws from cognitive resources not available to the Akkadian scholars, medical practitioners, and patients.

3.2.1.2. Outline of the Framework

The theoretical framework for the approach to mental symptoms will rely on the principles laid out above, which can be summarised as follows:

1. This study assumes that the core symptoms of *ašuštu* "Depression", *ḫīp libbi* "Heartbreak", and *ṭēmu šanû/nakāru* "The mind alters/changes" are mental symptoms (D2).

2. A mental symptom (D2) is understood to be the smallest unit of psychopathology and can include descriptions of mental states, abnormal behaviour, and somatic complaints. Clinical phenomena organised with the core symptoms will be viewed through these three frames of description.

3. Identifying patterns in the description of mental symptoms organised with the core symptoms of *ašuštu* "Depression", *ḫīp libbi* "Heartbreak", and *ṭēmu šanû/nakāru* "The mind alters/changes" in the *Diagnostic Handbook* is the primary aim of this study.

4. A symptom is understood to describe the smallest unit of discomfort in the illness experience, or the lowest common denominator of illness insofar as can be assessed from the Akkadian medical diagnostic texts. Because it is unclear whether the symptoms in the diagnostic texts refer to subjective descriptions of the illness as advertised by the patient or objective signs of illness as observed by a medical professional, the terms "sign" and "symptom" will be used interchangeably throughout this study.

5. Because the units of analysis are thus reduced, the meaning of certain mental symptoms will be clarified with reference to parallel symptoms from Western biomedical models and non-Western medicine to further contribute to understanding the nuances in the meaning of terminology in the medical texts, and to the reconstruction of patterns in descriptions of mental distress and of disorders with a strong cognitive and affective component.

These patterns provide information about how psychological distress and disturbance was understood, experienced, and organised, and rely on an established vocabulary of mental distress. These patterns also reveal nuances in the meanings of the three core symptoms

that will further clarify aspects of the Akkadian semantic framework for understanding and organising mental distress. Finally, patterns in the description of mental symptoms can reveal aspects of the semantic framework for the understanding of psychological disorder. These definitions, principles, and aims will guide the approach to the Akkadian diagnostic material and will help to define the objects and parameters of the investigation.

3.3. Definition of the Objects: Core Symptoms

Chapters 4, 5, and 6 set out the core diagnostic texts for each of these three terms and will open with a philological introduction in order to establish the meaning and usage of the terms and to provide a backdrop for their usage in the diagnostic material. Therefore, this section will not discuss the meanings of the three core symptoms but will rather summarise the reasons for their selection and the criteria for the selection of texts. Each of these terms is translated in the available dictionaries as an emotional or mental disturbance. An investigation of their distribution in diagnostic texts and the symptoms with which they are organised allows for a more nuanced interpretation of each term.

3.3.1. Criteria for Selection of Terms

The three core terms that will organise this study's discussion of symptom patterns in Akkadian medical diagnostic texts are *ašuštu* "Depression",[84] *ḫīp libbi* "Heartbreak", and *ṭēmu šanû/nakāru* "The mind alters/changes". These three terms were chosen primarily due to their recognised and recognisable mental dimension, which is the

[84] The use of the word "Depression" to translate the core symptom of *ašuštu* and any other substantives in Akkadian that refer to a depressed or dejected state does not refer to the modern diagnostic category of Major Depressive Disorder or to any modern disorder.

first criterion for their selection. Although the precise nuances in the type of disturbance represented by each are not fully understood, it is agreed that they represent mental disturbances. Some of these nuances are clarified in this study in the context of symptom patterns. Thus, this study assumes that the core symptoms of *ašuštu* "Depression", *ḫīp libbi* "Heartbreak", and *ṭēmu šanû/nakāru* "The mind alters/changes" are mental symptoms, and each of these terms and their translations will be discussed in detail in Chapters 4, 5, and 6. A few preliminary comments ought be made to explain their inclusion in the study.

The Akkadian noun *ašuštu* "worry, dejection, depression" refers to a depressed or dejected state (CAD A 479). As such, it represents a disturbance in mood or emotion, as opposed to thought or thought processes, of a depressed type. The compound expression *ḫīp libbi* "Heartbreak" (Stol 1993: 27-32) encounters some difficulties in translation and has been interpreted in numerous ways. In this study, it is understood to refer to disturbance in mood akin to anxiety that is predicated of the heart as the organ of thought and emotion, or whose physiological effects are localised in the torso.[85] Like *ašuštu* "Depression", it represents another disturbance in mood or emotion, but rather than a depression in mood, it represents a general dysphoric affect organised around anxiety. Finally, the verbal phrase *ṭēmu šanû/nakāru,* lit. "the mind alters/changes" – from *ṭēmu* "mind, reason" and *šanû* "to alter, change", or *nakāru* "to change, become strange" – refers to a disturbance in cognition, a "change" in mind, thinking, mentation, reasoning, or thoughts. As such, it seems to represent a disturbance in thought processes, rather than mood. Throughout this study, the terms will be written in both Akkadian and translation for clarity when referring to the core symptoms, except where a philological discussion of

[85] This view is explicated in the philological introduction to *ḫīp libbi* "Heartbreak" (§5.1.2.1).

a term requires it to be left in the original Akkadian; however, in excerpts from the core texts and supplementary material, the expression will be translated.

In the case of two of the terms – *ḫīp libbi* "Heartbreak" and *ṭēmu šanû/nakāru* "The mind alters/changes" – a noun that refers to a cognitive faculty forms part of the compound expression. In the case of *ḫīp libbi* "Heartbreak", the noun *libbu* has a wide semantic range that includes its function as the seat of thought, will, and emotion.[86] In the case of *ṭēmu šanû/nakāru* "The mind alters/changes", the noun *ṭēmu* can refer to reason, intelligence, or will, and is often simply translated as "mind" or "reason".[87] Furthermore, the expression *ṭēmu šanû/nakāru* "The mind alters/changes" is known to have Aramaic and Hebrew cognates that denote going mad.[88]

The second criterion that guided the choice of terms is that the three terms represent different aspects of mental disturbance that seem to be recognisable in some form or another in many cultures: that is, a depressed affect, an anxious state, and a type of mania or psychosis. Therefore, the types of symptoms organised with them will address different points on the spectrum from disturbances in mood (affect) to disturbances in thought and thought processes (cognition). As representations of different aspects of mental disturbance, the three terms are observed or organised with different types of mental symptoms. This will allow for broader patterns to be discovered, and areas of overlap can be especially informative due to the wide range of states they represent. Thus, the patterns in description that are observed with these core symptoms can be used to flesh out some overarching categories in descriptions of mental distress and disorder.

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[86] See §5.1.2.1.3.
[87] See §6.1.1.
[88] See §6.1.3.

3.3.2. Criteria for Selection of Texts

Criteria for the selection of texts may be divided into primary and secondary criteria. The primary criterion for the selection of texts was that the passage or entry must include at least one of the core symptoms under investigation. Stated another way, the passage or entry must include at least one reference to a mental state. By definition, every passage contains at least one such reference by virtue of including one of the core symptoms. On this basis, those experiences organised with the core term may be assessed as mental symptoms and, depending on the context and on this subsequent assessment, may provide information about patterning of mental symptoms. However, as shall be seen for some occurrences of *ašuštu* "Depression" and *ṭēmu nakāru* "The mind changes", this is not always the case. It is important to state this criterion because it opens up the possibility for other symptoms in the entries and passages to be considered to have a mental dimension, even if they describe physiological complaints and abnormal behaviour.

According to the secondary criterion, texts must include a diagnostic element. In its narrowest definition, a diagnostic text is defined as a text in the tradition of the *Diagnostic Handbook*, including the Middle Babylonian "threads" of knowledge from which Esagil-kīn-apli's editorial work drew (Finkel 1988: 149; Rutz 2011: 294). As such, one Middle Babylonian diagnostic text from Nippur is included. A more broad definition of a diagnostic text might include the diagnostic introductions to therapeutic texts. Therapeutic texts seem to belong to a separate but related tradition from the diagnostic material. At the same time, the introductory sections do provide information about

symptomatology, so they cannot be ignored in a study of symptom patterns. They must therefore be included in the supplementary material, though not in the core corpus.

Only one text in the corpus violates the second criterion when narrowly defined: *BAM* 316, included under the texts for the core symptom of *ḫīp libbi* "Heartbreak". However, it has been included, first, because of the paucity of surviving references to *ḫīp libbi* "Heartbreak" in the *Diagnostic Handbook* and its predecessors and, second, because the text is dedicated to this condition or symptom. Furthermore, *BAM* 316 remains untranslated, and a study of the meaning and usage of *ḫīp libbi* "Heartbreak" in the medical diagnostic tradition, as well as of the symptoms that are organised with it, seemed a timely opportunity to offer a partial edition of the relevant parts of this text.

3.3.3. The Corpus

The corpus for this study comprises each extant entry in the *Diagnostic Handbook* that references one of the core symptoms, in addition to one text from an earlier diagnostic tradition and one therapeutic text. Other than the two exceptions, the inclusion of which is justified below, two criteria define the corpus: first, the entry must come from the *Diagnostic Handbook* as the canonical diagnostic treatise of the first millennium BCE, and second, the entry must reference one of the core symptoms. In total, the core corpus for this study consists of nineteen texts, of which seventeen come from the *Diagnostic Handbook*.

3.3.3.1. The Core Texts of the Corpus

Each excerpt includes at least one reference to one of the three core symptoms of *ašuštu* "Depression" (6 texts), *ḫīp libbi* "Heartbreak" (4 texts), and *ṭēmu šanû/nakāru* "The mind alters/changes" (9 texts). In all but one case (*ašuštu* 5), the excerpt includes a selection of the entries before and after the entry that refers to the core symptom. Such entries are included to give context for the symptom description in the relevant entry. The arrangement of entries on tablets in the *Diagnostic Handbook* is deliberate and shows a consistent rationale, as discussed in Chapter 2.[89] For this reason, the placement of the entry in which the core symptom is elaborated can offer insights into the type of disease being described, the general character of its symptoms, or its relationship to other types of symptoms in the same tablet or chapter. Furthermore, an entry may form part of a group of entries for the same disease, or for a set of diseases assigned to the same causal domain. The following list details the excerpts for each of the core symptoms (and is repeated in Appendix A for ease of reference).

Table 2 List of the core texts

ašuštu **"Depression"**	***ašuštu* 1**	*Diagnostic Handbook* 7, 59′-65′
	***ašuštu* 2**	*Diagnostic Handbook* 22, 6-9
	***ašuštu* 3**	*Diagnostic Handbook* 18, 8-9
	***ašuštu* 4**	*Diagnostic Handbook* 22, 34-35
	***ašuštu* 5**	*Diagnostic Handbook* 26, 17′
	***ašuštu* 6**	*Diagnostic Handbook* 27: 29-34
ḫīp libbi **"Heartbreak"**	***Libbu* 1**	*Diagnostic Handbook* 13 157′-162′
	***Libbu* 2**	*Diagnostic Handbook* 26, 26′-29′

[89] See Heeßel 2004.

	***Libbu* 3**	*Diagnostic Handbook* 3, 39-40
	***Libbu* 4**	Therapeutic Text *BAM* 316, obv. iii 8′-iv 4
***ṭēmu šanû* "The mind alters"**	***Ṭēmu* 1**	*Diagnostic Handbook* 22, 47-52
***ṭēmu nakāru* "The mind changes"**	***Ṭēmu* 2**	*Diagnostic Handbook* 22, 53-57
	***Ṭēmu* 3**	Diagnostic Text 2N-T 336, obv. 21-24
	***Ṭēmu* 4**	*Diagnostic Handbook* 3, 41-44
	***Ṭēmu* 5**	*Diagnostic Handbook* 3, 89-90
	***Ṭēmu* 6**	*Diagnostic Handbook* 8, 13-14
	***Ṭēmu* 7**	*Diagnostic Handbook* 19/20, 13′-14′
	***Ṭēmu* 8**	*Diagnostic Handbook* 13, 19′-20′
	***Ṭēmu* 9**	*Diagnostic Handbook* 13, 32′-33′

These texts come primarily from the *Diagnostic Handbook*, the canonical diagnostic series compiled and edited by the scribe and scholar Esagil-kīn-apli during the reign of Adad-apla-iddina (r. 1067-1046 BCE).[90] While a concerted effort was made to restrict the corpus to the canonical diagnostic treaties, two exceptions were made.

The first exception concerns *ṭēmu šanû/nakāru* "The mind alters/changes", for which one of the core texts comes not from the *Diagnostic Handbook* but from an earlier and perhaps separate diagnostic tradition recorded on a Middle Babylonian tablet from Nippur (2 N-T 336). The text provides an example of a medical diagnostic text that predates or was contemporary with the canonical *Diagnostic Handbook*. Although diagnostic texts from the second millennium discovered in Babylonia, Assyria, northern Syria, and Anatolia remain poorly documented and understood, a recent article by Rutz

[90] See Kinnier Wilson 1956, 1957, 1962; Finkel 1988: 143; Heeßel 2000; Rutz 2011: 294-295. On the editorial role of Esagil-kīn-apli, see Finkel 1988; Heeßel 2000: 104-110; Heeßel 2004a: 100-102.

provides a welcome contribution to the study of this corpus.[91] The text in question for *ṭēmu šanû/nakāru* "The mind alters/changes" forms part of a composition whose incipit is identical to that of Chapter 3 of the canonical *Diagnostic Handbook*, but whose contents differ from the canonical text. The entries on this fragment, which preserves only the left side of the tablet, follow the form of those in the *Diagnostic Handbook*. A protasis introduces the symptoms, providing information about the course and features of the disease. None of the apodoses survive on the existing fragment. The inclusion of this tablet from an earlier diagnostic tradition may add to our understanding of *ṭēmu šanû/nakāru* "The mind alters/changes", though the earlier provenience of this tablet is noted.

The second exception, which concerns *ḫīp libbi* "Heartbreak", hails not from the diagnostic, but the therapeutic corpus. So far only one reference to *ḫīp libbi* "Heartbreak" survives in the *Diagnostic Handbook* in its current state of preservation. On the other hand, this symptom appears frequently in therapeutic texts from the Neo-Assyrian period, as well as in non-medical texts. However, this study is not concerned with the treatments for mental symptoms and disorder but, rather, is restricted to symptom patterns for the expression of mental distress and disturbance in the medical tradition as reconstructed from diagnostic texts. For this reason, additional textual material could not be sought from the non-medical corpus. To include all of the references from therapeutic texts would have several consequences for the scope, methodology, and aim of the present study. For unity and consistency, including references to *ḫīp libbi* "Heartbreak" in therapeutic texts would require that the same be included for *ašuštu* "Depression" and

[91] Rutz 2011. On Middle Babylonian diagnostic texts, see also Stol 1991-1992: 43-44; Heeßel 2000: 99-104; Attinger 2008: 18-24.

ṭēmu šanû/nakāru "The mind alters/changes", a decision that would widen the corpus significantly and pose additional methodological problems given the diversity of form and provenance of therapeutic texts.[92] This would be a substantial endeavour and provides an avenue for future research on the subject of both symptom patterns and treatments for mental distress and disorder. Second, to widen the scope of the core corpus to include therapeutic texts runs the risk of shifting the focus from symptoms to treatments.

However, two factors intervene in favour of making one exception in the case of *ḫīp libbi* "Heartbreak". First, *ḫīp libbi* "Heartbreak" recurs regularly in the therapeutic texts alongside the same symptoms that appear in the single extant reference from the *Diagnostic Handbook* as well as symptoms of a distinctly mental character. Its frequent attestations suggest it was a salient symptom. Secondly, its distribution with both somatic symptoms and descriptions of mental states offers a unique window onto the somatisation of mental distress and disorder. The symptom of *ḫīp libbi* "Heartbreak" seems to bridge these two categories of symptoms in descriptions of mental distress and disorder and thus provides an important anchor for the study of symptom patterns in the description of mental distress. Due to the scant surviving references to *ḫīp libbi* "Heartbreak" in the *Diagnostic Handbook*, at least one additional text that deals with the condition must be included to allow for a reconstruction of the kinds of symptoms organised with it.

For this reason, one therapeutic text was added to the core texts for this symptom. The text was chosen on the basis that it deals primarily with *ḫīp libbi* "Heartbreak".

[92] For the diversity of therapeutic texts, see Stol 1990-91. Recent scholarship has identified therapeutic compendia from the first millennium BCE that can be organised into coherent sub-corpora, such as *suālu* (Johnson 2014: 12).

Unlike other therapeutic texts that mention *ḫīp libbi* "Heartbreak" as part of a long list of other symptoms, this text is dedicated to the condition and has been chosen on the basis of this criterion, which sets the therapeutic text apart.

A diagnostic description at its most basic is a text that includes information about signs and symptoms. As seen above in extracts from the *Diagnostic Handbook*, these symptom descriptions may correspond to a label, a cause, a prognosis, or some combination of these. Therapeutic texts include diagnostic descriptions that provide useful information about the ways that symptoms were expressed and organised into coherent clusters.

The following summarises the chronological distribution of the manuscripts used for the core texts.[93]

Table 3 Chronological distribution of manuscripts for core texts

Period	Number of Manuscripts
Middle Babylonian	1
Neo-Assyrian	14
Neo-Babylonian	5
Late Babylonian	1[94]

It should be noted that the core texts are composite texts, reconstructed in some cases from multiple copies of diverse provenance. However, this diversity of provenance is considered not to affect the study of its contents, as the diagnostic corpus shows

[93] See Appendix A for a more detailed list.
[94] This manuscript (W. 22743/1) is for SA.GIG 27, for which the other two manuscripts relied upon in the reconstruction of this tablet are Neo-Assyrian (AO 6680 and A. 3441; counted among the Neo-Assyrian manuscripts for the core texts).

remarkable stability in its manuscripts from different places and periods.[95] Only in cases where a variant yields a considerable difference in meaning would such a variant be discussed.

3.3.3.2. Supplementary Medical Texts

The diagnostic introductions to medical therapeutic texts are consulted as supplementary sources for the information they provide about the core symptoms. Certain texts from other genres are further consulted in the philological introductions to each of the core symptoms in Chapters 4, 5, and 6, but these texts do not heavily inform the investigation and reconstruction of symptom patterns in the expression of mental distress and disorder that constitute the purpose of this study.[96] To supplement the symptom descriptions from the *Diagnostic Handbook* and the two additional texts that form part of the core corpus, excerpts from the diagnostic introductions to therapeutic texts from the Neo-Assyrian period are consulted in Chapter 7. These texts are meant to contribute additional references that bear out the patterns perceived in the diagnostic corpus and are limited to the diagnostic introductions to therapeutic texts. In particular therapeutic texts against witchcraft- and ghost-induced illness are consulted. Information about therapies and excerpts from therapeutic sections are not included.[97]

In addition, medical commentaries from the Late Babylonian period are occasionally used, in particular with respect to the core texts of *ašuštu* 1 and *Libbu* 1.

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[95] On the history of these manuscripts and the *Diagnostic Handbook*, see now Attinger 2008; Robson 2008 Geller 2010: 22-24, 38-42; Heeßel 2010. For additional bibliography, see Rutz 2011: 294 n2.
[96] These primarily include lexical texts; literary texts, especially in relation to the word *libbu*; and some letters. Other sources for the study of Akkadian medicine, including archaeological sources, are discussed in Attinger 2008.
[97] On the character of anti-witchcraft texts and the arrangement of therapies, see *CMaWR*: 8-10.

These sources come from later periods than those in which the *Diagnostic Handbook* was originally compiled and edited and in which the manuscripts for the *Diagnostic Handbook* used in this study were set down. However, commentaries can provide useful information about the exegesis of medical terms in the scholarly medical context. Genty has recently studied the logic and exegetical techniques used in the medical commentaries to the *Diagnostic Handbook* and their overall value for a study of medicine in Mesopotamia (Genty 2010; Frahm 2011: 218-241). In addition, Geller devotes a chapter to the relationship of these commentaries to medical texts more generally in his recent overview of medical theory and practice in Mesopotamia (2010a: 141f.).

The vast majority of the supplementary medical texts used in this study come from the *Diagnostic Handbook* itself. Along with supplementary diagnostic texts, therapeutic texts for illnesses and related misfortune caused by divine anger, ghosts, and by witchcraft are consulted. For the most part, therapeutic texts for ghost-induced illness draw from Scurlock's 2006 edition. With respect to ailments caused by witchcraft, most of the manuscripts used in this study date to the Neo-Assyrian period, many of which come from the Library of Aššurbanipal or from Sultantepe. These are published in Abusch and Schwemer's 2010 edition of anti-witchcraft rituals (*CMaWR*).

The geographical and chronological distribution of therapeutic texts and medical commentaries consulted in this study as supplementary texts can be summarised as follows: [98]

[98] See Appendix B for a more detailed list

Table 4 Chronological distribution of supplementary medical texts

Period	Number of Manuscripts
Middle Assyrian	1
Neo-Assyrian	54
Neo-Babylonian	1
Late Babylonian	11[99]

As with the diagnostic texts, these for the most part come from the Neo-Assyrian period and have a restricted provenance with most of the from Aššur, Nineveh, and Uruk. Although the therapeutic texts may have been used differently, or may have served separate scholarly functions, from the diagnostic texts, the overlap in time period and provenance suggest that as scholarly texts, they form part of a shared tradition.[100] It is therefore sufficient for the present purpose to treat the vocabulary of these texts as forming part of a shared and integrated medical language and tradition.

3.3.4. A Note on Conventions

With respect to dictionaries, this study relies on the CAD and cites AHw where such references can supplement the CAD or where the meaning of a term is uncertain, such as with *ḫuṣṣu* (§5.1.1). This study makes use of the standard transliteration and transcription conventions in the field of Assyriology for texts transliterated and transcribed from Akkadian and Sumerian cuneiform into Latin script. Where the meaning of a particular word or phrase is uncertain, the English translation of the relevant portion

[99] This manuscript (W. 22743/1) is for SA.GIG 27, for which the other two manuscripts relied upon in the reconstruction of this tablet are Neo-Assyrian (AO 6680 and A. 3441; counted among the Neo-Assyrian manuscripts for the core texts).
[100] See also Stol 1990-91; Heeßel 2007: 128-129.

is in italics. Sumerian words, as they appear in a Sumerian or bilingual text, are written in lower case with expanded spacing. This convention is applied for excerpts from works written in Sumerian (e.g., Lugalbanda); Sumerian words in bilingual lexical texts (e.g., OB-Lu); and references in text to a Sumerian word from a Sumerian work. Where a Sumerian logogram is used in an Akkadian text, small capital letters are used in transliterations to indicate the logogram. Where the reading of a sign remains uncertain, this basic value or an attempted reading of the sign is written in small, un-italicised capital letters, unless following the transliteration of the primary edition of a text.

3.4. Summary

Although the *Diagnostic Handbook* and therapeutic texts do not offer first-person accounts of illness or elaborate case studies, they do record symptoms and symptom clusters that derived meaning from the overall semantic framework of the medical tradition. The way these diagnostic descriptions were narrated or recorded must have drawn from, relied on, and reinforced an existing semantic illness network or networks. Part of the present study of patterns in the organisation and expression of mental symptoms is to reveal aspects of the Akkadian semantic illness network that frame these descriptions and support the interpretation of them as having a mental dimension or reflecting a mental disturbance. In light of this goal and of the problems with retrospective diagnosis, outlined in Chapter 2, the theoretical framework for this study shifts the focus onto symptoms as objects of inquiry and, in particular, symptoms organised around *ašuštu* “Depression”, *ḫīp libbi* “Heartbreak”, and *ṭēmu šanû/nakāru* “The mind alters/changes”.

Chapter 4: Texts for *ašuštu* "Depression"

This chapter investigates the occurrence of *ašuštu* "Depression" in order to identify the symptom patterns for emotional disturbance as expressed in the *Diagnostic Handbook*. Although the meaning of *ašuštu* "Depression" is not at stake, the nuances in how this symptom was experienced and what types of complaints typically ran together with a depressed mood deserve additional study. In order to avoid confusion with other terminology for depressed states and to retain the nuance of the original term, *ašuštu* "Depression" is left in the original Akkadian throughout the discussion with the English translation at its side.[101] The first section of this chapter will give an overview of the substantive *ašuštu* "Depression", the verb *ašāšu* which derives from the same root, and the Sumerian logographic equivalents. This background will help to elucidate the meaning of *ašuštu* "Depression" and its usage in the medical diagnostic and therapeutic texts, as well as its status as a medical symptom. The second section introduces the passages from the *Diagnostic Handbook* that refer to or describe *ašuštu* "Depression", together with other symptoms described in the passages and in individual entries. These will comprise the core texts for *ašuštu* "Depression". Notes are included with each passage to give its context and to identify the relevant symptoms.

As mentioned in Chapter 3, these core passages will provide the springboard for a discussion of overarching symptom patterns in Chapter 7. Therefore, the purpose of this chapter and of the two chapters that will follow for *ḫīp libbi* "Heartbreak" and *ṭēmu šanû/nakāru* "The mind alters/changes" will be to introduce the primary source material

[101] To reiterate a point made in §3.3.1, where depression is used as a translation for *ašuštu* or any other Akkadian terms that indicate depressed or dejected states, this translation is not intended to refer to the modern "Major Depressive Disorder" or to any other modern condition by the same name in English.

and to build a preliminary repertoire of symptoms and relevant terminology for the analysis of the patterns of description in Chapter 7. With respect to those symptoms organised with *ašuštu*, it can be shown that in addition to somatic symptoms and some unusual states of mind, abnormal behaviour is a strong indicator of mental disturbance and thus dominates patterns of description of mental symptoms.

4.1. *ašuštu* "Depression"

The substantive *ašuštu* "Depression" consistently describes depressed states in diagnostic and therapeutic texts. In the medical diagnostic texts, *ašuštu* "Depression" is written syllabically (including one by-form *a-šiš-tu* in SA.GIG 26: 17′[102]), as well as logographically with the Sumerian logograms NÍG.ZI.IR, or simply ZI.IR. The verb *ašāšu* "to be distressed, distraught, worried" (CAD A II 422-424), which derives from the same root as *ašuštu* (*ʾ-š-š*) and is often used to describe depressed or worried states in the medical context, is also written syllabically and logographically. When written logographically in the *Diagnostic Handbook*, the verb *ašāšu* is represented by the logograms ZI.IR in the basic stem and ZI.IR.MEŠ in the Gtn stem.

Before turning to *ašuštu* "Depression" in the medical corpus, some brief remarks on the logographic components of its logographic writing, and a look at the treatment of the Sumerian zi--ir and níg-zi-ir in lexical material, will provide some context on the meaning and usage of the term and its Akkadian equivalents in medical diagnostic texts. In addition, a brief look at the meaning and usage of the related verb *ašāšu* will provide further context for the core symptom in question.

[102] See §4.2.5.

4.1.1. Components of (NÍG.)ZI.IR

The substantive *níg-zi-ir is only attested as a compound logogram in Akkadian texts and does not appear in works written in Sumerian, other than the bilingual lexical lists. Therefore, this investigation of the logographic components of the Akkadian writing of *ašuštu* "Depression" will be limited to a short discussion of the compound verb in Sumerian zi--ir in an effort to elucidate the meaning of the individual signs and, thereby, provide a backdrop to the discussion of the Akkadian equivalents as listed in the bilingual dictionaries and the orthography of the Akkadian terms.

4.1.1.1. The Verb zi--ir in Lexical Texts

In her study of vocabulary for emotions in Sumerian, Jaques devotes an entry to the compound verb zi--ir in which she observes its general meaning to encompass "troubler, être dans la confusion, être dans la détresse" (2006: 225).[103] In its function as a verbal element, the verbal class of ir is not known and seems only to occur in the compound verb zi--ir (Jaques 2006: 225).[104] More can be said about the nominal element of this compound verb, zi, whose meaning "breath" or "life" leads Jaques to suggest that the literal sense of zi--ir might be "étouffer(?) le souffle" (Jaques 2006: 225). This interpretation finds support in the late period bilingual list Antagal G in which

[103] Foxvog, *Glossary* has an entry for zi--ir, translated as "to be troubled, worried" (69). Thomsen gives the same translation "to be worried" (Thomsen 2001: 308). See also Römer, SKIZ 1965: 113f.
[104] See Thomsen 2001: 308. The homophonous noun ir has the meaning of 'scent; smell' (*armannu*), and Sjöberg adds to this general semantic radius the meaning of "stench" (*erēšu*, *zūtu*) in 1972: 110 and 1973: 137. Note also in the OB Disease list ir = *zu-ú-tum* "sweat" (MSL IX: 79).

three consecutive lines, which are set apart as a group by rulings, deal with the root *ʾ-š-š* in the Akkadian portions:

136.	zi-ir	=	*a-šá-šu*
137.	šu-uš-ru	=	*uš-šú-šu*
138.	ši-ĝu$_{10}$ ba-šu-uš-ru	=	*na-piš-ti uš-šu-šat*

(Antagal G: 136-138)[105]

Rather than offer a translation, it would be more informative to discuss the terms listed in these entries. In the first of these, the verb Akkadian *ašāšu* "to become worried, disturbed, in despair" (CAD A II 422) is listed consecutively as the equivalent of zi-ir (Antagal G: 136).[106] The second of these lines lists the Sumerian šu-uš-ru with the *ašāšu* D (*uššušu*) "to cause distress" (CAD A II 424). Jaques's proposed literal interpretation of "to stifle the breath" for zi--ir gains support from the line that follows, which gives the equivalence, ši-ĝu$_{10}$ ba-šu-uš-ru = *na-piš-ti uš-šu-šat*, which Jaques translates as "ma source est perturbée(?), je suis oppressé" (Antagal G: 138; Jaques 2006: 225 n478). The use of ši-ĝu$_{10}$ "my life" as a subject with the verb zi--ir is also attested in a literary fragment (Eršaḫunga 78 rev. 17-18).[107] The Sumerian verb zi--ir thus can be understood as an expression of distress that may have its roots in a literal meaning that captures a shift in breath or breathing.

As noted by Jaques, it is possible that this meaning originated from distress experienced in the throat or breath. In both Sumerian (zi) and Akkadian (*napištu*), the word for throat and breath also served as the word for "life". As a metonym for life, the

[105] MSL XVII: 224.
[106] This equivalence of the compound verb zi--ir and *ašāšu* given in Antagal G is also suggested as a reconstruction for the OB glossary Erimḫuš II 97: zi-ir-zi-ir = [*a-ša-šu*] (MSL XVII: 31).
[107] Maul 1988: 313. The use of ši for zi "life" is unusual.

throat might have provided not only the metaphorical language for distress, but may also have been the site of sensations associated with the experience of worry. For example, the autonomic arousal response in attacks of anxiety in Generalized Worry Disorder can include swelling of the throat. A parallel in English might be the sensation of a "lump" in the throat in experiences of anxiety or prior to the act of crying (Rickels and Rynn 2001: 9). Whatever the precise origin of this nuance, the logographic values of zi and ir in Sumerian, as borne out in the Akkadian equivalents listed in the lexical texts, denote distress and worry, originally expressed as a function of the throat and breath.

4.1.1.2. The Verb zi--ir in Literary Texts

In terms of attestations of the verbal construction zi--ir in Sumerian literature, Jaques notes that it is principally found in the Old Babylonian period in letters and magical texts, as well as in epics, dialogues, and hymns (Jaques 2006: 226). The use of this Sumerian compound verb in Old Babylonian literature will not be explored in detail, but a few examples may help to provide further background for the emotional dimension of the type of distress it denotes.

The verb zi--ir is attested in constructions of parallel pairs or in a series with terms that have a similar meaning. For example, the verb appears in parallelism with ní te(.ĝ) "fear" in the Epic of Lugalbanda:

268. šà-ba en-me-er-kár dumu ^{d}utu-ke$_4$
269. ní ba-ni-in-te zi ba-ni-in-ir za-pa-áĝ-bi ba-ni-in-ug$_7$

268. In their midst, Enmerkar, son of Utu,
269. was afraid, he was distressed, he *ended* their noise.

(Lugalbanda 268-269)[108]

A similar parallelism appears for zi--ir and šà--sìg "to be depressed, anxious" (Foxvog Glossary 54) in Enmerkar and the Lord of Aratta (236).[109] Jaques notes a similar pattern in occurrence of zi--ir and verbs that denote confusion, lù "to be(come) disturbed, stirred up, blurred, confused; to mix" (Foxvog Glossary: 39)[110] and sùḫ "to be confused, blurred, tangled, in disorder, in disarray; to be dangerous" (Foxvog Glossary: 53).[111] Like zi--ir these can denote a physical state as well as a parallel "sentiment de trouble, de bouleversement" (Jaques 2006: 234). Furthermore, the conjugation of the verb zi--ir, which follows patterns for verbs that express sentiments, further corroborates its emotional dimension (Jaques 2006: 226). The form and usage of zi--ir support the interpretation of this compound verb as denoting not just distress but, more specifically, an emotional disturbance.

4.1.2. The Akkadian Verb *ašāšu*

The meaning and usage of the Akkadian verb *ašāšu* listed in bilingual lexical texts with the Sumerian zi--ir, may provide further information about the symptom *ašuštu* "Depression", which derives from the same root. Four roots ʾ-š-š may be identified: experience distress, rage (of storms), lay foundations, and catch (in a net) (Lambert 1996: 302). This section is concerned with the first meaning listed here, "experience distress". For the root that expresses distress, the verb is attested in both

[108] Following ETCSL <http://etcsl.orinst.ox.ac.uk/section1/c1822.htm>. Black 1997: 62-63.
[109] Cohen 1973: 74, 123. See Jaques 2006: 235 for further discussion of examples of such parallel usages.
[110] See also Jaques who translates "troubler, brouiller, ravager, souiller" and notes the Akkadian equivalent to be *dalāḫu* (2006: 227).
[111] See also Jaques who translates "brouiller, troubler" and notes the Akkadian equivalent to be *ešû* (2006: 227).

medical and non-medical texts, and Jaques notes that in the synonyms list LTBA II, *ašāšu* has two types of equivalences. The first is of a medical nature where *a-šá-šú = ra-ʾ-i-bu*, a word that denotes an illness with trembling and cramps (CAD R 80-81).[112] The second equivalence gives an emotional dimension: [*a*]-*šá-šu = pu-ul-ḫu* "terror, fearsomeness" (CAD P 503-504).[113] Within the medical context, the verb can have both a physiological and emotional dimension as suggested by these lexical attestations. A look at the use of *ašāšu* in the *Diagnostic Handbook* to mean physical and mental distress demonstrates the flexibility of the type of distress denoted by this verb and, in some cases, the overlap between physical and emotional distress.

The use of *ašāšu* in medical texts illustrates this dual usage of the term with its attested meanings of "to suffer from spasms, tremors" and "to be distraught" or even aggrieved (CAD A II 423-424).[114] In a more ambiguous example, one entry in SA.GIG 36 addresses this symptom as experienced by a pregnant woman: DIŠ ⌜TU⌝ [x (x)]-*šá i-ta-na-aš-šá-šu šà*-ŠÀ-*šà* ÚŠ "If a future mother, her … are continually distressed/depressed, her unborn child will die" (SA.GIG 36, 105). In this line, *ašāšu*, which has been interpreted as either a Gtn stem or Ntn stem has been translated as meaning physical distress in the CAD (CAD A II 3)[115] or emotional disturbance (Labat 1951: 211).[116]

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[112] LTBA II 2 iv 271; duplicate 3 iv 7. For the meaning of *raʾību*, see also Adamson 1990: 28ff.
[113] LTBA II 2 i 61.
[114] See also Jaques 2006: 226 n479.
[115] CAD A II 3 reconstructs ŠÀ.MEŠ in the break in the protasis and translates "if a pregnant woman's innards keep hurting(?)". The verb appears to have a plural ending, which would suggest a subject other than the (singular) patient. This is not in line with other usages of *ašāšu* in the *Diagnostic Handbook*, where the patient is the only attested subject of this verb in the extant examples. See examples in this section.
[116] See also Scurlock and Andersen 2005: 12.56. Labat translates "sont constamment douloureux(?)" (1951: 211). Note that Heeßel interprets this as an Ntn of *ašāšu* (2000: 223). The Ntn for this verb is attested, but forms written with a single *t* could also be the Gtn (Kouwenberg 2010: 654). Note both attested spellings of *ītanaššaš* and *ītanaššuš* seem to have the same meaning. See the philological note at the end of the entry for *ašāšu* A in CAD A II 424. Following this note in the CAD, this study understands both spellings to be the Gtn stem.

In fact, both meanings of *ašāšu* are attested in the *Diagnostic Handbook*, where the verb seems to encompass different types of distress, physical and mental, depending on the context. In SA.GIG 3, 71 and 74, the type of distress expressed with *ašāšu* is paired with symptoms of the headache and a swollen body. In both cases, the patient is the subject of distress. Two entries from SA.GIG 15 and one from SA.GIG 17 organise the type of distress expressed with *ašāšu* with symptoms that affect internal organs, including the *libbu*, ribs, and bowels (SA.GIG 15, 36′, 43′; SA.GIG 17, 29). Other examples from SA.GIG 13 describe a hot *libbu*, sweats compared with those suffered with *lubāṭu*, and the patient experiencing *ašāšu* (SA.GIG 13, 63-64).[117] Overall, these examples suggest that the verb denotes physical distress associated with the inside of the body (rib cage, *libbu*). In terms of the aetiology or diagnosis, Hand of Twin (^{d}MAŠ.TAB.BA) appears in the apodosis of two of the above-excerpted entries whose diagnostic descriptions include *ašāšu*.

Other attestations of this distress have a less ambiguous emotional dimension. In one, the beginning of the illness specifies fever and abdominal stress, but as it develops, symptoms seem to take an emotional turn:

11. U-*šú* LAL-*aṣ* IGI.II-*šú* BAD.BAD-*te ana* ˹AKKIL˺ *i-qal* NÍ-*šú ú-dam-ma-aq*
12. ZI.IR.MEŠ *u* IGI.MEŠ-*šú i-ta-nar-ri-qu* MAŠKIM SÌG-*su* ˹TA˺ TAG-*ma* KI-*šú* ˹KEŠDA˺
13. *ina* NINDA *ik-ka-lu* GU$_7$ *ina* A NAG-*ú* NAG NA BI *ana* U$_4$ 5-KÁM *ana* U$_4$ 7-KÁM TIN

11. he stretches out his finger, he continually opens his eyes, he ignores lamentation, he makes his "self" (NÍ) comfortable,
12. he is continually worried, and his face continually becomes pale, the Lurker has struck him, from (when) it touched and connected with him,

[117] Following Labat 1951: 116, ll. 4-5.

> **13.** in the bread that he eats, he is eating (the Demon), in the water that he drinks, he drinks (the Demon); that man, on the fifth day, (or alternatively) on the seventh day, he will live.
>
> (SA.GIG 17, 10-13)[118]

Following a description of crying out lamentation, the experience of *ašāšu* in the Gtn stem appears alongside turning pale. Two additional references to *ašāšu* of these appear in SA.GIG 22, which as Geller has noted is an "unusual tablet" that is "concerned with mental problems associated with physical symptoms" (2004b: 49). The following entry appears after a series of entries that describe one of the core symptoms, *ṭēmu šanû/nakāru* "The mind alters/changes", and other mental symptoms:

> **68.** DIŠ *ú-te-te-eṭ-ṭe* ZI.IR.MEŠ SÍK UGU-*šú it-ta-na-az-qap ina* GE_6 GAM
>
> **68.** If he is darkened and is continually worried, the hair on his scalp continually stands up, in the night he will die.
>
> (SA.GIG 22, 68)[119]

This example permits an interpretation of emotional disturbance, given the concurrent symptoms. One further attestation of *ašāšu* in which the verb denotes emotional disturbance is included among the core texts below, as it is associated with a diagnosis, *muruṣ râmi* "Lovesickness", that is also given for a symptom description including *ašuštu* "Depression".[120] In short, the examples from the *Diagnostic Handbook* show that the type of distress denoted by *ašāšu* is flexible and can be organised with both physiological and psychological symptoms.

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[118] Following Heeßel 2000: 195-196; Scurlock and Andersen 2005: 6.127, 19.233.
[119] Following Heeßel 2000: 256; Scurlock and Andersen 2005: Ap. 38.
[120] See *ašuštu* 2 and *ašuštu* 3.

Outside of the *Diagnostic Handbook*, the term is also attested in medical contexts that more readily admit an emotional interpretation of this symptom. A therapeutic text juxtaposes the Gtn of *ašāšu* with the substantive *ašuštu* "Depression": DIŠ NA <*i*>-*ta-na-ša-aš a-šu-uš-tú* ⌜ŠUB⌝.[ŠUB]-*su* "If a man is continually worried and depression continually befalls him" (*BAM* 174: 25′; Scurlock and Andersen 2005: 3.166). A magical text includes a spell to remove depression from one who is continually worried: *šá i-taš-šá-šu*! *ta-at-ta-saḫ a-šu-uš-tu* "(from) the one who is continually worried, you continually remove the depression" (*KAR* 321: r. 6; Oshima 2011: 234, 34). In therapeutic texts and prayers, both the patient[121] and the heart or insides (*libbu*)[122] can be the subject of such continual distress or worry.

The D stem *uššušu* also occurs with the meaning "maltraiter quelqu'un, causer la détresse, inquiéter" and can also be used in relation to illness (Jaques 2006: 226 n479). The use of the D stem of this verb in *Ludlul bēl nēmeqi* should be included, given that this text shows a penchant for the use of medical terms that rarely or never occur outside the domain of medical, ritual, and omen texts (Annus and Lenzi 2010: xxvii). The lines form part of a series of couplets in which opposing states of being are described in order to show the vicissitudes of life, such as depression and joy, exultation and mourning, starvation and satiation. The couplet in question contrasts good times with being worried or depressed:

46. *ina ṭa-a-bi i-ta-ma-a i-li šá-ma-ʾi*
47. *ú-taš-šá-šá-ma i-dab-bu-ba a-rad ir-kal-la*

[121] As in, for example, *AMT* 85/1: *i-ta-na-ša-aš*. See now *CMaWR* 2.3, 55".
[122] As in a Šamaš prayer K. 3387, obv. 18 (Gray 1901: pl. 10): *i-ta-na-šu-uš* ŠÀ-*bi* "the heart (*libbu*) is continually distressed". See Mayer 1976: 515.

46. In good times, they speak of ascent (to) heaven;
47. when they are worried (*ašāšu* Dt), they speak of the descent (to) the Netherworld

(*Ludlul* II 46-47)

This rare attestation of *ašāšu* Dt seems to have a clear emotional dimension that reflects the opposite of joy and well-being denoted by *ṭābu* "good, sweet, pleasing" (CAD Ṭ 19).

To summarise, the verb *ašāšu* denotes distress that can appear in numerous contexts and function as a symptom alongside a range of physiological complaints and mental states. In medical texts, where it is used in either the Gtn or Ntn, it can denote both physical and emotional distress, though attestations of the latter seem restricted to SA.GIG 22. With respect to the type of emotional distress denoted by the verb, these can include worry, despair, and even depression, though the translation of worry was adopted above. The substantive *ašuštu* "Depression" that derives from the same root must be viewed in the context of emotional distress.

4.1.3. The Akkadian *ašuštu*

Investigating the meaning of the Sumerian logograms zi and ir, often used to write the term *ašuštu* "Depression" in medical texts, and the meaning of the verb *ašāšu* provides a background for the discussion of the core symptom itself. The occurrence of *ašuštu* in the lexical texts and in non-medical texts provides further context for its meaning and usage in the diagnostic corpus. The core symptom is regularly grouped with such physiological symptoms as chills, fever, and stupor in lexical lists, such as the OB List of Diseases. Its occurrence in non-medical texts, which seems to be restricted,

together with these references in compilations of medical terminology suggests it serves as a technical medical term for depression as a mental symptom.

4.1.3.1. *ašuštu* in Lexical Texts and Disease Lists

The substantive *ašuštu* "Depression" is attested in both bilingual lexical texts, as well as in disease lists, including lists that appear in incantations. It appears in bilingual lists as an equivalent for zi-ir, which in such instances should be understood as a noun, rather than as the compound verb discussed above. A few lexical occurrences give an equivalence of zi-ir with *ašuštu*, such as in the Emesal-Vocabulary: èm-ir = zi-ir = *a-šu-uš-tum* "èm-ir (Emesal) (means) depression (Sum.) (means) depression (Akk.)" (Emesal-Vocabulary III 127; MSL IV: 39).[123] The same equivalence is also given in the legal lexical handbook *ana ittišu:* zi.ir.zi.ir.r[a.n]a.ka = *i-na a-šu-uš-ti-*[*š*]*u* "of his depression (Sum.) (means) in his depression (Akk.)" (*ana ittišu* 7 i 40; MSL I: 93). In Antagal VIII, the substantive *ašuštu* is preceded by an entry for *ašāšu*, though the Sumerian equivalent is broken: […] = [*a-š*]*u-uš-tum* "… (Sum.) (means) depression (Akk.) (Antagal VIII 261; MSL 17: 177).

That the substantive *ašuštu* represents a technical term for a symptom or condition is suggested in parallels to the OB List of Diseases that appear in Old Babylonian incantations and later copies collected by Goetze, which enumerate the same conditions and diseases that appear alongside *ašuštu* in the OB List of Diseases.[124] One parallel to the OB List of Diseases finds *ašuštu* grouped with the head and vertigo: SAG.DU ZÍ.IR IGI.NIGIN.NA *a-šu-uš-tum qaq-qa-di ṣi-da-nu* "Head, depression, vertigo (Sum.) (means)

[123] Lansberger et al. translate as "worry" (MSL IV: 39).
[124] Transcribed by Goetze 1955: 11-13. See also MSL IX 103.

depression, head, vertigo (Akk.)" (MSL IX 106: 19). The condition is grouped with silence or stupor (*qūlu*) and chills in another parallel: ní-zé-ir-zé-ir [x x-re] še$_9$-še$_9$-dè *a-šu-uš-tum qu-ú-lu hur-ba-šu* "Depression, …, chills (Sum.) (means) depression, silence, chills (Akk.)" (MSL IX 107: 25a).

The incantation *KAR* 233 (MSL IX: 105) shows a similar grouping of conditions and causes that include a type of epilepsy or "fall" (*miqtu*), types of fevers, and other conditions, as well as the gods and demons responsible.

7. [*asakku a-ḫa*]-*zu šu-ru-up-pu-ú a-*⌜*šu-uš-tu*$_4$⌝ *ḫur-ba-šú* LÚ.LÍL.[LÁ]
8. [MUNUS.LÍL.LÁ *ṣi*]-*da-nu u ḫa-a-a-at-tu* 𒀸*mu-kil* SAG ḪUL-*ti*
9. [*simmu si-li*]-ʾ*i-tu*$_4$ SA.AL.ḪAB *li-*ʾ*i-bu ú-qu u qu-u-*[*lu*]
10. [*šēdu mi*]-⌜*šit*⌝-*tu*$_4$ *ra-pa-du* ^{d}⌜GIDIM⌝ *la-maš-tu*$_4$ *la-pa-ṣu aḫ-ḫa-zu*

7. [*asakku*-disease], jaundice, shivering-fever, Depression (*ašuštu*), chill, *lilû*-demon,
8. [*lilītu*-demon, v]ertigo, and terrors 𒀸*mukīl rēš lemutti* demon
9. [wound, il]lness, *alluḫappu*-demon, *li*ʾ*bu*-fever, *uqqu*-paralysis, and silence,
10. [divine guardian, st]roke, wandering-about, ghost, Lamaštu, *labāṣu*-demon, jaundice-demon.

(*KAR* 233 rev. 7-10) [125]

The passage gives a formulaic list of symptoms, diseases, and disease agents that regularly occur as a group. Line 7 begins with diseases that are normally listed in incantations, some terms for which also refer to the demons that personify or cause the diseases. The symptom or condition of *ašuštu* falls between a type of fever, *šuruppû*, which Stol interprets as "shivering fever" (2007: 19),[126] and another description of shivering or possibly chills, *ḫurbāšu* "chills; shivers of fear" (CAD Ḫ 248-249). The line that follows also begins with a demon and is followed by *ṣīdānu* "vertigo" (CAD Ṣ 171-

[125] See also Stol's translation and comments on these lines in 1993: 24-25.
[126] See Stol (2007: 19) on *šuruppû* (A.ZA.AD) "shivering fever".

172) and *ḫayattu* "panic, mortal terror" (CAD Ḫ 1), which may also be interpreted more specifically as a fit of fear or panic.[127] Vertigo, also expressed with the metaphor of a face that spins (*ṣūd pāni*, *pānū ṣâdu*), is often associated with unusual mental states, including the core symptoms of this study (*Ṭēmu* 4).[128]

That *qūlu* "calm, silence, stupor" (CAD Q 303-304) occurs in a stock list with *ašuštu* is instructive of the types of mental symptoms organised with dejected states, as well as the physical dimension of the experience of depression. The word *qūlu* can mean silence or stupor, and, as in *KAR* 233, it is paired with *ḫurbāšu*-chills in several other Standard Babylonian texts from the scholarly tradition, including the canonical incantation series *Maqlû*. In *Maqlû* VIII 86, the ailments of *qūlu* "silence, stupor" and *ḫurbāšu*-chills are wished upon the witch. The ailment of *qūlu* also appears in a more expanded list of ills to be unleashed upon the witch, including general illness, malaria (*diʾu*), sleeplessness, silence or stupor (*qūlu*), and depression (*kūru*) (*Maqlû* VII 130).[129] The term *kūru* "daze, depression, stupor" (CAD K 570-571) together with another word for depression, *nissatu*, appear with *qūlu* again in *Maqlû* VII 41. It seems that *qūlu* can itself stand in for a depressed state, as it may replace the word *kūru* in one manuscript for *The Dialogue of Pessimism*: LÚ *šá* MUNUS *i-ram-ma ku-u-ri* (var. [*qu*]-*lu*) *u* SAG.PA.LAGAB *i-me-šu* "The man who loves a woman forgets depression (*kūru*) and grief (*nissatu*)" (*The Dialogue of Pessimism* 48).[130] As a type of silence or stupor, it seems that *qūlu* is regularly grouped with terms that refer to chills, fevers, and dejected or dazed states.

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[127] See Stol 1993: 43-44.
[128] See §7.3.2.
[129] See CAD Q 304 for more references.
[130] Following *BWL* 146. See CAD K 571 mng b.

Finally, *rapādu* appears in this list of ailments along with *ašuštu*. As a verb, *rapādu* "to wander" (CAD R 147-152) represents a behavioural symptom that appears in disorders with a strong mental component and that is attested in the core texts for *ašuštu* "Depression" and *ṭēmu šanû/nakāru* "The mind alters/changes". As a noun, the word can also refer more specifically to a condition that has been interpreted quite specifically as "staggers (listeriosis)" (CAD R 147). A patient can be seized by or fall ill with *rapādu*, which is attested in omen literature as well as medical texts. The condition also appears with terms that describe epilepsy (LBAT 1597: 6). Due to the salience of the verb *rapādu* "to wander" as a behavioural symptom, it is perhaps possible to understand the word in this list as representing the behaviour of wandering (or even staggering), rather than as listeriosis, which would be difficult to prove in the absence of paleopathological evidence from ancient corpses. Due to its recurrence in the medical texts with the core symptoms and in supplementary medical texts, the symptom of *rapādu* is discussed in detail in §7.2.2. For the present discussion, it is worth noting this appearance of this term with *ašuštu* in the incantation *KAR* 233.

While proximity in a list does not guarantee a semantic relationship, the arrangement of entries in lexical texts and in formulaic lists consistently tends to group together terms that follow an identifiable organizational principle, that share a theme, or that fall within a similar semantic range. Thus, such passages do reveal patterns and groupings that narrow down the range in meaning, or the underlying thematic principles, of a term or group of terms. Based on its occurrence in the OB List of Diseases and parallels, and in the incantation text *KAR* 233, *ašuštu* "Depression" is associated with a

host of somatic complaints, behaviours, and moods that prefigure the types of symptoms organised with this core symptom in the *Diagnostic Handbook*.

4.1.3.2. *ašuštu* in Non-Medical Texts

Both diagnostic and therapeutic texts organize *ašuštu* "Depression" with signs and symptoms that regularly accompany emotional disturbance and that are consistently grouped together. The signs and symptoms for emotional disturbance in medical texts are often expressed in terms and categories shared by non-medical texts, particularly wisdom literature and prayers (van der Toorn 1985: 66). Although *ašuštu* "Depression" is attested in non-medical contexts, these occurrences seem to be restricted to magical texts, particularly incantations, and omens. In omens, *ašuštu* "Depression" can be written syllabically or with the sign DIRI (SI.A),[131] a logogram also used to represent dizziness (*neqelpû*) in medical texts.[132]

A look at the occurrence of *ašuštu* "Depression" in incantations shows consistency in the meaning and usage of this word. Where it appears in a Standard Babylonian Lamaštu incantation, it does so alongside non-verbal expressions of worry or dejection, including a pale face or changed countenance, both of which represent non-verbal expressions of distress in Akkadian: *zi-mi tur-ra-qí bu-un-na-an-né-e tu-uš-pe-el-li a-šu-uš-tu*$_4$ *ta-nam-di-i* "You (Lamaštu) make faces pale, you bring about a change in the features, you bring about depression (*ašuštu*)" (4R 56 ii 3-4 and duplicates). The topos of a changed countenance as a reflection of emotional disturbance and, more specifically, of

[131] See CAD A II 479 for examples. Note also the equivalence of diri with *adāru* in Erimḫuš II 95, which precedes an entry for zi-ir-zi-ir (MSL VII: 31).
[132] Heeßel 2000: 402. For the occurrence of DIRI = *neqelpû* in this study, see *Ṭēmu* 5.

depression has been studied by Gruber, who notes that a "gloomy face or pallor characteristic of depression or sadness" appears "throughout ancient Semitic literature by a variety of expressions including 'changed countenance'", an expression attested in Akkadian, Biblical Aramaic, Biblical Hebrew, and Ugaritic (Gruber 1980: 358).[133] *Ašuštu* "Depression" also appears in the context of several other psychological complaints in *Maqlû* V. Among the ills suffered by the supplicant and deflected on the witch causing the misfortune are *ašuštu* "Depression", hunger, and several terms for fear and anxiety, including *pirittu* "fear" and *ḫīp libbi* "Heartbreak" (*Maqlû* V: 75-78).[134]

Descriptions of depressed states in non-medical texts, such as literature and prayers, tend to employ other terms for depression and grief, or use familiar topoi for the expression of such states. Often, these terms double as expressions specifically associated with mourning or death rituals. For example, *nissatu* can mean "grief, worry, depression" as well as a "song, wailing song" (CAD N 274). The latter meaning evokes the period of mourning in which mourners express grief through lamentations (Cohen 2005: 15). *Nissatu* enters the heart or belly of Gilgameš as he ponders the death of his friend, Enkidu, and his own inevitable death: *ni-is-sa-tu*$_4$ *i-te-ru-ub ina kar-ši-ia* "grief entered into my belly (*karšu*)" (Gilgameš IX 4). Similarly, *nissatu* figures in the framework of complaints by the protagonist of the *Theodicy* who asks for a counsellor to whom to relate his grief (*ni-is-*⌜*sa-tu*$_4$⌝, I 7) and who complains that stupor (*ku-ú-ru*) and grief (*ni-is-sa-tu*$_4$) have darkened his features (I 30).[135] Incantations also employ this term in

[133] A changed countenance can be expressed with *zīmī nakāru*, *zīmī šunnû*, *pānī nakāru*, as well as with the verb *ewû* "to change, turn into" (CAD E 413-415). See Gruber 1980: 358-365 for a discussion of a pallid face and change in countenance as topoi of emotional disturbance in Akkadian.
[134] See §7.1.1.
[135] The term often occurs with *kūru* in a number of texts, including letters (e.g., *ABL* 74 rev. 7), incantations (e.g., *Maqlu* VII 41, 130), ritual texts (e.g., Laessøe *Bīt Rimki* 39, 27), and royal inscriptions (e.g., Aššurbanipal in *Iraq* 29 55: ND 5406 ii 7).

parallel with other terms that express disturbances in mood, as in the canonical series *Šurpu*:

> **84.** *di-ʾa-šú di-lip-ta-šu ni-is-sa-su* NU DU_{10}-*ub* UZU.MEŠ-*šú*
> **85.** *ʾù-a a-a-um la ṣa-lal-šú na-zaq-šú ni-is-sa-su ta-ni-iḫ-šú*
>
> **84.** his malaria, his insomnia, his grief, his bad health (lit. flesh),
> **85.** 'Oh!' and 'ai!', his sleeplessness, his worry, his grief, his weariness.
> (*Šurpu* IV 84-85)[136]

From these examples, it seems that a repertoire of terms was available for the expression of depressed states in non-medical contexts, including literature.

The divide is not fixed, however, and *nissatu* "grief" crosses over into medical therapeutic texts. For example, *nissatu* appears in the names of plants prescribed for emotional distress, including ^{ú}*šammi nissati*, ^{ú}SAG.PA.LAGAB.[137] In a medical prescription for happiness, the term also appears to refer to depression, alongside other vocabulary for such states, including *kūru* "daze, depression, stupor" and *tānīḫu* "weariness, fatigue" (CAD T 173) (*BAM* 318, obv. i 37, 40, ii6).[138] Although *ašuštu* is also attested in some non-medical texts, its distribution in such genres as literature is more limited. The usage of *ašuštu* "Depression" appears to be largely restricted to scholarly scientific contexts, including omen texts, and is consistent with that of a technical symptom in light of its inclusion in the OB List of Diseases, as well as its consistent use in both medical diagnostic and therapeutic texts. Like other terms that describe depressed states in Akkadian, including *kūru, qūlu*, and *tānīḫu*, the word *ašuštu* "Depression" may also

[136] Following Reiner 1958: 28. Compare this concurrence of *diʾu/diḫu*, sleeplessness, and depression with *Maqlû* VII 130, where the terms *qūlu* and *kūru* are used to denote depression or stupor.
[137] ^{ú}*šami nissati*, ^{ú}SAG.PA.LAGAB "drug for depression of spirits" (Thompson 1949: 220). See for example, *CT* 14, pl. 25, i 8 and therapeutic text *BAM* 1 i 59.
[138] See now Schwemer 2013: 186.

encompass fatigue and stupor that may have helped to organise the experience of dejection.

4.2. Texts for *ašuštu*

This section introduces the core texts that refer to or describe *ašuštu* "Depression" with brief notes to give the context of the passage and to identify the relevant mental symptoms organised with this core symptom. The purpose of this section is to introduce the primary source material and to build a repertoire of symptom terminology. An in-depth analysis that will take into account intertextual references from both medical and non-medical texts, as well as modern parallels where helpful, will be taken up in Chapter 7, alongside those observed for the *ḫīp libbi* "Heartbreak" and *ṭēmu šanû/nakāru* "The mind alters/changes".

4.2.1. *Diagnostic Handbook* 7, 59′-65′ (*ašuštu* 1)

Tablet 7 of the *Diagnostic Handbook* enumerates symptoms relating to the mouth, such as the lips, tongue, speech, and voice, and their corresponding causes, disease names, and prognoses. For the passage chosen here, the witnesses have incomplete attestations of the final portions of lines, so although diagnoses and prognoses are partly damaged, entries provide information about symptoms. The passage commences a series of entries on speech, written KA. It is reasonable to read KA as DU_{11} = *dabābu* "speech, words" (CAD D 2) given the position of this passage in the overall order of entries on the tablet following symptoms of the mouth (KA = *pû*) and palate (*liq* KA = *liq pî*); while the logogram could be read as referring to the mouth, it is unlikely that the author would

have returned to symptoms of the mouth after dealing with the palate. The entries that follow this section dealing with changed speech move on to symptoms related to the voice (*rigmu*) and, more specifically, the cries of an ill person (SA.GIG 7, 86′ to 92′). Thus, the arrangement supports the reading of *dabābu* for KA as the core symptom.[139]

59′. DIŠ GIG [DU$_{11}$-*šú*] ⌜KÚR⌝.KÚR-*ir ana* U$_4$ 3-[KÁM x]
60′. DU$_{11}$-*šú* [KÚR.KÚR-*ir*] *u ra-pa-du su-ud-dur*[140]*-šú ana* U$_4$ 3-[KÁM x]
61′. DIŠ DU$_{11}$-[*šú*] KÚR.KÚR-[*ir u*] SIG$_7$.MEŠ *i-ár-ru u* UZU.ME-*šú* SIG$_7$.MEŠ *ana* U$_4$ 3-[KÁM x]
62′. DIŠ DU$_{11}$-*šú* KÚR.KÚR-⌜*ir*⌝ [*u*] KÚM DAB.DAB-*su u ú-rap-pad ana* U$_4$ 3-[KÁM x]
63′. DIŠ DU$_{11}$-*šú* KÚR.KÚR-⌜*ir*⌝ *u* ⌜*ḫa*⌝-[*a*]-⌜*šú*⌝[141] *i-ḫa*-[*a*]-⌜*šú*⌝ *ana* U$_4$ 3-[KÁM x]
64′. DIŠ DU$_{11}$-*šú* KÚR.KÚR-[*ir*] *u a-šu-uš-tu*$_4$ ŠUB.ŠUB-*su ana* U$_4$.DU$_{11}$.GA-*šú ana* U$_4$ 3-[KÁM x]
65′. DIŠ DU$_{11}$-*šú* KÚR.KÚR-⌜*ir*⌝ *u* ÉR.MEŠ *ana* U$_4$.DU$_{11}$.GA -*šú ana* U$_4$ 3-[KÁM ……]

59′. If the patient, [his speech] continually changes: on the thi[rd] day […].
60′. His speech [continually changes] and wandering about is regular for him, on the thi[rd] day […].
61′. If his speech continually chang[es and] he vomits yellow, his flesh turns yellow, on the thi[rd] day […].
62′. If his speech continually change[s and] fever keeps on seizing him and he wanders about, on the thi[rd] day […].
63′. If his speech continually changes and he is nauseous, on the thi[rd] day […].
64′. If his speech continually chang[es] and Depression (*ašuštu*) continually befalls him for his designated day, on the thi[rd] day […].

---

[139] This follows Labat's interpretation (1951: 65 n118).
[140] The tablet has *dur* not GÚ which is used in Labat 1951. Labat reads GÚ here and transcribes accordingly as *kišādi*, the second term in a genitive construction with *sud* as the regens in construct state. There are few candidates for such a form: either as a construct for *suddû*, whose meaning "one sixth (of a shekel)" (CAD S 342) has no place here; or for *suddudu* "to take care of" (CAD S 342), for which this form is incomplete. A better option, which has support from the medical commentary to this passage, is to read the sign following *sud* as *dur* and understand the resulting *suddur* as the D stem of *sadāru* (*sudduru*) "to do, send regularly, to occur regularly" (CAD S 15) for the condition *rapādu suddur* (*SpBTU* I, 32, rev 8). This interpretation also lines up nicely with the chronicity of illness, one of the criteria that tilts behaviour beyond the abnormal or deviant in the territory of the pathological. The commentary to these lines will be discussed in §7.2.2.1.
[141] Labat suggests [*imim*?] *u ik*[*aṣṣ*]a(?) "[s'il a chaud(?)] et s'il a froid".

> 65′. If his speech continually change[s] and he continually weeps for his designated day, on the thi[rd] day […].
>
> (SA.GIG 7, 59′-65′ = *ašuštu* 1)[142]

Symptoms relating to disorganised or unintelligible speech are paired with other behaviours indicating mental disturbance, with descriptions of mental states, and with physiological symptoms. The symptoms that elaborate on the core speech problem occur in the following order: regular wandering about (l. 60′); vomiting up a yellow substance together with a face that is pale (l. 61′); fever and wandering about (l. 62′); depression (l. 64′); and weeping (l. 65′). Another possibility for line 63' would be to read *ḫattu* (*ḫa-tú*) "terror" (CAD Ḫ 150) or perhaps *ḫayyattu* (*ḫa-<a-a>-tú*) "panic, terror" (CAD Ḫ 1), which might be proposed based on the medical commentaries to these lines (*SpBTU* I 32, rev 10-11; *SpBTU* I 33, rev. 1′), both of which explicate the word *ḫayyattu*.[143] A syllabic writing of *ḫayyattu* would be unexpected, as LAL is the more common writing in the *Diagnostic Handbook*. These possible readings are nevertheless worth suggesting. Of particular note in this passage are the descriptions of disturbances in speech and wandering about, both of which represent behaviours regularly associated with mental disturbance.

Symptoms: changed speech, regular wandering about, vomiting, turning yellow, fever, wandering about, terror(?), Depression (*ašuštu*), weeping
Diagnosis/Aetiology: (broken)

---

[142] Following Labat 1951: 64-66, ll. 59′-65′; Scurlock and Andersen 2005: 14.34, 16.48, 6.140, 3.124, 14.36, 16.85. Line numbering for SA.GIG 7 follow Labat 1951.
[143] Labat suggests *šú* for this partly damaged sign, but only the top portions of two vertical wedges, or possibly a diagonal and verticle wedge, are visible. If the latter is accepted, it is possible to reconstruct a *tú*(UD).

4.2.2. *Diagnostic Handbook* 22, 6-9 (*ašuštu* 2)

In two passages from the *Diagnostic Handbook*, SA.GIG 22, 6-9 (*ašuštu* 2) and SA.GIG 18, 8-9 (*ašuštu* 3), *ašuštu* "Depression" and *ašāšu* "to be distressed, worried" appear as symptoms of *muruṣ râmi* "Lovesickness". Both sets of entries for *muruṣ râmi* "Lovesickness" showcase similar clusters of symptoms and provide further insight into behavioural, emotional, and psychosomatic complaints organized with *ašuštu* "Depression". Von Soden initially suggested that the illness *muruṣ râmi* refers to venereal disease (AHw 951a). However, modern editors, such as Heeßel (2000: 264) and Scurlock and Andersen (2005: 372) follow Labat's translation of Lovesickness as a possible emotional disturbance based on the symptoms (cf. Labat 1951: 178).[144] Scurlock and Andersen interpret the description as one caused by anxiety about love, the stress of which "causes behavioural abnormality and psychosomatic complaints" (Scurlock and Andersen 2005: 372). The proposed cause seems too specific and arbitrary, as the illness name may simply be a frozen form of an expression that came to be used as a diagnostic label. However, Scurlock and Andersen's observations about the symptomatology are relevant. The present study is not concerned with underlying disease or illness, but rather with the way that mental symptoms were expressed and the types of symptoms with which they are organised. In both entries, the apodosis specifies that the illness is the same for a man and a woman (cf. Heeßel 2000: 43).

The first set of entries, which make direct reference to *ašuštu* "Depression" in the symptom description, appear in Tablet 22 of the *Diagnostic Handbook*. The relevant lines associated with this diagnosis of Lovesickness are:

[144] See also Labat 1951: 178 n313 for the reading of *ra-mi* as *râmi*.

6. DIŠ *iš-ta-na-ʾi-i* KA ŠUB.ŠUB-*su* KI ŠÀ-*šú* $DU_{11}.DU_{11}$-*ub ṣu-uḫ la pak-ki iṣ-ṣe-né-eḫ*
7. GIG *ra-mi* GIG *ana* NITA *u* MUNUS 1-*ma*
8. DIŠ NÍG.ZI.IR ŠUB.ŠUB-*su* ZI.MEŠ-*šú* GUR.MEŠ NINDA GU_7 KAŠ NAG-*ma* UGU-*šú* NU DU-*ak*
9. *ʾù-a lìb-bi i-qab-bi u uš-tan-na-aḫ* GIG *ra-mi* GIG *ana* NITA *u* MUNUS 1-*ma*

6. If he continually flutters about, speech continually fails him (lit. falls), he continually talks with himself, he continually laughs foolishly;
7. he is sick with Lovesickness; it is the same for a man and a woman.
8. If Depression (*ašuštu*) continually falls upon him, he continually *sighs* (lit. his breaths continually return); he eats bread and drinks beer but it does not go well for him,
9. (then) says 'Oh, my *libbu*!' and is dejected (*uštannaḫ*), he is sick with Lovesickness; it is the same for a man and a woman.
(SA.GIG 22: 6-9 = *ašuštu* 2)[145]

The verb *ištanaʾʾi* (*iš-ta-na-ʾi-i*, l. 6) that heads this first excerpt for Lovesickness raises some difficulties. Two possibilities, addressed by Heeßel in his detailed commentary to these lines, present themselves (Heeßel 2000: 263-264). The first interpretation is as the Gtn iterative form of *šaʾû* "to flutter about", which sits well with wandering about as a topos of depression, or the Gt of the related *šanāʾu* "to obstruct the throat" (MSL IX 99).[146] This recalls the meaning of the Sumerian word zi noted in Section 1 above, whereby a possible obstruction of the throat or breath may have formed the basis of the Sumerian verb zi--ir whose components resurface in the logographic spelling of *ašuštu* "Depression". However, *š-n-ʾ* is not a viable root for the form attested in the text. For this reason, the former interpretation of *šaʾû* is tentatively adopted with the understanding that this choice is open to speculation and to future revision.

[145] Following Heeßel 2000: 251-252; Scurlock and Andersen 2005: 16.23-24, 6.83.
[146] See MSL IX 99 for further discussion of possible interpretations of *iš-ta-na-ʾi* as it appears in the SB recension of the List of Diseases.

Two speech-related symptoms appear in this excerpt: speech is described as continually falling, which may indicate sudden interruption in one's speaking and is here translated as a more general failure of speech; and the patient is also described as talking to himself, or soliloquy (l. 6). A description of the patient as laughing further fills out the image of emotional disturbance that emerges from abnormal speech behaviours. In conjunction with *ašuštu* "Depression" befalling the patient is an expression that could be understood as exhaustion via the image of being out of breath, or as sighing, the latter of which contributes to the overall picture of a depressed state (l. 8). Another possible interpretation is hyperventilation, which can have deleterious effects on one's state of mind.[147] The pairing of a symptom that relates to breathing or sighing with *ašuštu* "Depression" echoes the original meaning posited for the Sumerian verb zi--ir discussed above.

Finally, another term understood to express a depressed mood (*uš-tan-na-aḫ*, l. 9) occurs just before the diagnosis of Lovesickness. The verb is a derived form of *anāḫu* A "to be tired, exhausted" (CAD A II 101). The meaning of -tan- stem for this verb in the $Št_2$ as attested here likely derives from the taPRvs noun *tānīḫu* "weariness, hardship, fatigue" (CAD T 173), from which flows the meaning of "to be dejected, in pain" (CAD A II 105).[148]

Symptoms: fluttering about, failed speech, talking to oneself, foolish laughter, Depression (*ašuštu*), *sighing*, abdominal complaints, crying out, dejection (*anāḫu* $Št_2$)
Diagnosis/Aetiology: Lovesickness

[147] Toone's study of conversion disorders addresses the connection between hyperventilation and disturbances in cognition and awareness (1990: 212).
[148] See Kouwenberg 2010: 409 for more examples of $Št_2$ stems derived in this way. This verb is discussed further in §7.1.2.

4.2.3. *Diagnostic Handbook* 18, 8-9 (*ašuštu* 3)

Although the other attestation of GIG *râmi* does not include a reference to *ašuštu* "Depression" in the protasis, the verb *ašāšu* does appear in the symptom description. This overlap shows a consistency in symptoms that are grouped together under a particular label, and the text is therefore included as one of the core texts for *ašuštu* "Depression".

8. [DIŠ SU-*šú* KÚ]M NU TUK GU$_7$ NAG *muṭ-ṭu* [*r*]*ig-mu* UGU-*šú* GIG *ik-ki ku-ri iq-ta-nab-bi*
9. [*u*$^?$ *i*$^?$-*ta*$^?$]-*na-aš-šá-aš* NA BI GIG [*r*]*a-a-me* GIG *ana* NITA *u* MUNUS 1-*ma*

8. [If his body] does not have [fe]ver; he has no desire to eat or drink,
[n]oise is painful for him, he continually says "My mood is numbed",
9. [and he is continually wo]rried (*ītanaššaš*); that man is sick with
[L]ovesickness; it is the same for a man and a woman.
(SA.GIG 18, 8-9 = *ašuštu* 3)[149]

The symptom pattern of Lovesickness in this entry begins with the negation or absence of fever: the patient is described as *not* having a fever.[150] From its start, the entry thus steers away from a strictly physiological illness. The patient is described as having a reduced appetite, continually crying out that his mood is depressed (*ik-ki ku-ri*, l. 8), and continually feeling depressed or worried (*i-ta-na-aš-šá-aš,* l. 9).

[149] Following Heeßel 2000: 218.
[150] The presence or absence of fever is an observational element in classifications of depression in ancient Greek texts. Aretaeus's (ca. 150 AD) account of melancholia describes it as "a lowness of spirits from a single phantasy, without fever…" (Adams 1856: 298-99; cited in Jackson 1986: 251). Similarly, he describes mania as "chronic derangement of mind without fever" (Adams 1856: 301; cited in Jackson 1986: 251). The writings of Galen of Pergamon (131-201 AD) also establish melancholia and mania as chronic diseases without fever (Jackson 1986: 252). This continues to be a trend in observations and clinical descriptions through the rest of the medieval era (Jackson 1986: 254). Although these writings come from eras and regions quite separate from the one in question, a look at such works may shed light on references to fevers as an organizational principle in descriptions of psychological disorder.

Symptoms: no fever, loss of appetite, noise sensitivity, crying out, claiming to be numb, worry (*ašāšu*)
Diagnosis/Aetiology: Lovesickness

4.2.4. *Diagnostic Handbook* 22, 34-35 (*ašuštu* 4)

This entry opens with a complex of physical symptoms followed by *ašuštu* "Depression". It should be noted that the physical symptoms described here are consistent with those grouped with emotional disturbance in therapeutic texts. The disease described here, Hand of Marduk, seems to have a strong psychological and, more specifically, psychosomatic element.

34. DIŠ UB.MEŠ-*š*[*ú*] ⌜DU$_8$⌝.MEŠ SAG ŠÀ-*šú di-ik-*⌜*šá* TUKU⌝ *pi-qa la pi-qa* MÚD *ina* KIR$_4$-*šú* DU-*ku* Á.II-*šú* SIG.MEŠ
35. NÍG.ZI.[IR] ŠUB.ŠUB-*su* IGI.II-*šú* MÚD *šu-un-nu-*ʾ*-a* ŠU ^{d}AMAR.UTU *a-dir-ma* GAM

34. If hi[s] limbs are loose, his epigastrium has piercing pain, blood sometimes flows from his nose, his arms are continually weak,
35. Depre[ssion] (*ašuštu*) continually befalls him, (and) his eyes are bloodshot, Hand of Marduk; he will be worried and die.
(SA.GIG 22, 34-35 = *ašuštu* 4)[151]

The relevant symptoms are loosened or numb limbs, stomach discomfort, bloodshot eyes, and *ašuštu* "Depression". Eyes suffused with blood may refer to bloodshot eyes, as from crying, though this is speculative.[152] Of note, the prognosis of death is qualified by an episode of anxiety. This qualification is also observed with Hand of Marduk in SA.GIG 22, 37 and SA.GIG 12, 3.

[151] Following Heeßel 2000: 254; Scurlock and Andersen 2005: 3.238; 9.24.
[152] Elsewhere, blood in the eyes is described with headache in a therapeutic text, where it is described as IGI.II-*šú* MÚD *ú-kal-la* "his eyes hold blood" (*BAM* 3 iii 15). Later in the same column of the same text, the eye on the same side of the wounded temple is described as full of tears (*BAM* 3 iii 20), as well as being bloodshot (*BAM* 3 iii 28, 31, 34).

Symptoms: weakness, epigastric pain, bloody nose, Depression (*ašuštu*), bloodshot eyes
Diagnosis/Aetiology: Hand of Marduk

4.2.5. *Diagnostic Handbook* 26, 17′ (*ašuštu* 5)

In the context of epilepsy, one entry pairs *ašuštu*, which is spelled *ašištu*, as being experienced at the same time as a "fit" (LAL). The entry appears amid a section of isolated entries where the primary or initial symptom of fit is elaborated in each line with a different variable, and it should therefore be excerpted alone:

> **17′.** D[IŠ U]D LAL-*šú a-šiš-tu*$_4$ DAB-*su* ÚḪ *ina* KA-*šú* DU-*ak* ŠÙD AD-*šú* DAB-*su* GAM
>
> **17′.** I[f wh]en (it) overwhelms him, Depression (*ašuštu*) seizes him, spittle runs from his mouth, a vow of his father has seized him; he will die.
> (SA.GIG 26, 17′ = *ašuštu* 5)[153]

The use of the verb "to seize" with *ašuštu* "Depression" is unusual. So far, it is described as falling over or befalling the patient (ŠUB = *maqātu*), which sits well with the metaphor of down associated with sadness (e.g., *šapālu*). It is possible that another sense or perhaps a more extreme type of *ašuštu* "Depression" is meant here, or that the onset of the depressed or dejected state is more sudden, perhaps given its association with a fit. Stol has noted the pattern of epilepsy with melancholy, but his study focuses on the concurrence expression with the Akkadian term *ḫīp libbi* "Heartbreak" (Stol 1993: 27-32). It is, however, also possible that *ašuštu* "Depression" here refers not exclusively to a disturbance in mood, but rather to a stupor that may or may not be associated with a dejected state.

[153] Following Heeßel 279; Scurlock and Andersen 2005: Ap. 63.

The diagnosis given in each of the entries that precede the excerpted one is *antašubba*-epilepsy (SA.GIG 26: 15′-16′), so it is worth noting that this is not given as a diagnosis here. Instead, an unusual aetiology appears: a vow of the patient's father has seized him. In his edition of SA.GIG 26, Stol notes that this aetiology appears in the tablet that deals with paediatrics in the *Diagnostic Handbook* and refers to an unfulfilled vow made by the patient's father (1993: 60; Heeßel 2000: 293). Another possible explanation relies on the spelling of *ašuštu* in this entry as *ašištu*, which may alternatively be understood as a by-form of *aširtu* "an offering or pious gift to the gods" (CAD A II 439). Stol interprets *aširtu* as a vow and observes that this kind of wordplay served as "one of the scientific methods for linking widely different matters" in Babylonian science (1993: 60). In light of the latter observation, it is indeed possible that *ašištu* is a by-form of *ašuštu* "Depression" as a stupor-like state, intended also to form a pun with *aširtu*.

Symptoms: fit, Depression (*ašuštu*), spittle
Diagnosis/Aetiology: seized by vow of his Father

4.2.6. *Diagnostic Handbook* 27, 29-34 (*ašuštu* 6)

SA.GIG 27 falls within the chapter that deals with epilepsy and other factors that affect the course of this illness.[154] Following a ruling, the entry below deals with a number of emotional disturbances, including Depression, that may form part of the clinical picture of the epilepsies, or that may have been observed with the epilepsies and set apart as a subset of symptoms or related illness.

> **29.** DIŠ ZI.IR ŠUB.ŠUB-*su mim-ma šá im-ma-ru ú-ṣal-la* UB.NIGIN.NA-*šú* KÚM *u* IR u_4-*mi-šam-ma* TUKU-*ši*

[154] See summary of tablets and chapters in Heeßel 2000: 19-20.

30. *a-na*! *zu-za-a bi-bil* ŠÀ *ma-dam-ma* TUKU.MEŠ EN *ú-bal-lu-niš-šú* ŠÀ *i-ḫa-*˹*ḫu*˺
31. U$_4$ *ú-ba-lu-niš-šú* IGI.BAR-*ma la i-lem* ŠU GIDIM$_7$ *šá ina* A SÌG-[*iṣ*] ˹x˺
32. DIŠ *tu-gu-un-šú ú-zaq-qat-su* GEŠTU.II-*šú* GÙ.DÉ.MEŠ SÍK SU-*šú* GUB.GUB-*az*
33. *kal* ^{lú}AD$_6$-*šú* GIN$_7$ *kal-ma-tu*$_4$ *i-ba-šú-ú i-nam-muš u* ŠU-*su ub-bal-ma*
34. *la i-ba-áš-šú* ˹*la ig-gi-ig* ŠU GIDIM$_7$ UD.DA LÚ GIN$_7$ ^{giš}NÍG.GIDRI *šá* ^{d}XXX GÌR.II-*šú* ŠU GIDIM$_7$

29. If Depression (*ašuštu*) continually falls upon him; if everything that he sees, he supplicates; his limbs daily have fever and sweat;
30. from time to time, he continually has a large appetite until they bring it to him, (and then) he is disgusted;[155]
31. when they bring it to him, he looks but does not eat; Hand of Ghost Struck in Water.
32. If his *tugnu*[156] causes him stinging pain, his ears continually roar, the hair on his body continually stands on end,
33. all of his body is in motion, as if there are insects (on it), but as soon as he puts his hand (there),
34. there are none, he does not scratch; Hand of Ghost (of) Sun-Stroke, the man's feet are like the sceptre of Sîn, Hand of Ghost.[157]

(SA.GIG 27, 29-34 = *ašuštu* 6)[158]

This passage includes a complex of physical symptoms connected with mental disturbance in other core passages, such as changes in appetite (ll. 30-31) and roaring ears (l. 32), the latter of which appears alongside descriptions of unusual mental states

[155] Literally, "the *libbu* vomits", but this translation follows the interpretation suggested in Stol 1993: 80.
[156] The translation for this word remains elusive, and both Stol 1993 and Heeßel offer no definitive solution. Stol notes that *tugānu* is an ailment in the epigastric region, but this does not fit the spelling in any of the manuscripts. One manuscript (W. 22743/1 = *SpBTU* III, 89) has *tu-qu-un-šu*. However, the attested meanings of the word *tuqnu*, which can mean "safety security" (CAD T 480) or may refer to a type of garment (481), do not fit the context. See Stol 1993: 80. In their study of stroke and facial palsy, in which a new translation of SA.GIG 27 is offered, Kinnier Wilson and Reynolds understand the word to be a metathesized form of *qutnu*, "a 'thin skin' that might cover certain parts of the human or animal body" (Kinnier Wilson and Reynolds 2007: 90 n60). Scurlock and Anderson translate this term as "(the skin under) his headband", which may suffer symptoms due to having spent too much time in bed while ill and having therefore neglected personal hygiene (2005: 242).
[157] The reading of the diagnosis in this line is open to interpretation. Stol suggests emending the three manuscripts for line 34 to read *as* in lieu of GÌR.II and emend <GAR>-*as-su*!-*ma*! = *šaknassuma*. This would yield the following translation: "Hand of a Ghost (of) Sun-Stroke; (something) like the staff of Sin has been laid upon the man", a diagnosis referenced in the following line (Stol 1993: 80).
[158] Following Heeßel 2000: 299-300; Scurlock and Andersen 2005: 15.16, 10.186, 15.18, 16.68.

elsewhere in the *Diagnostic Handbook* and in therapeutic texts.[159] Other physiological symptoms include stinging pain (l. 32) and throbbing hands (l. 27). The description of hair standing on end, though with reference to hair on the head, appears with *ašāšu* elsewhere in the *Diagnostic Handbook* with a darkened expression.[160]

Like in previous core texts for *ašuštu* "Depression", as well in the lexical texts discussed in §4.1.3.1, fever appears as a symptom in the same protasis with *ašuštu* (l. 29). This may suggest that *ašuštu* "Depression" can refer in some contexts to a stupor-like state associated with both physiological and psychological distress. The meaning of stupor or exhaustion seems to form part of other Akkadian terms that refer to depression, such as *kūru* "daze, depression, stupor"; *qūlu* "calm, silence, stupor"; and *anāḫū* "to become tired, weakened", a verb that in the $Št_2$ denotes depression (CAD A II 105).

The entry further describes two symptoms that can be interpreted as hallucinations, or as a figure of speech. The patient is described as supplicating everything he sees (l. 29), which evokes the abandonment of the patient's personal god and the desire for reconciliation. This interpretation is preferred over hallucination because of the social context of prayer and supplication as typical responses to distress. Near the end of the excerpted passage, a description of bodily movements is compared to how a person might be expected to move if covered in insects, although no insects are present (ll. 33-34). The reference to being covered in insects seems to provide a simile for the body's movements, while at the same time indicating that no skin symptoms, which might give rise to the need to scratch, are present.

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[159] See §6.2.6 (*Ṭēmu* 6) and §7.3.3.
[160] SA.GIG 22, 68 (see §4.1.2). The same topos appears with fear in a therapeutic text against ghost-induced illness (*BMS* 53, 6-9; Scurlock 2006: Text 120).

Based on its placement in the apodosis, Hand of Ghost seems to account for the symptoms and illness described in lines 26-28, and Hand of Ghost Struck in Water accounts for those symptoms and illnesses detailed in lines 29-31. In the entries that follow the excerpted passage, various symptoms and illnesses are attributed to Hands of Ghosts (e.g., Hand of Ghost, l. 34; Hand of a Wandering Ghost, l. 36).

Symptoms: Depression (*ašuštu*), supplication, fever, sweat, loss of appetite, stinging pain, roaring ears, hair standing on end, bodily movement
Diagnosis/Aetiology: Hand of Ghost, Hand of Ghost Struck in Water, Sun-Stroke, Hand of Ghost

4.3. Summary

With these core passages set out, the relevant symptoms observed with *ašuštu* "Depression" in the *Diagnostic Handbook* can be summarised.

Table 5 Summary of symptoms organised with *ašuštu* "Depression"

Text	Psychological	Physiological	Behavioural
***ašuštu* 1**	terror(?) *ašuštu*	vomiting turning pale nausea fever	changed speech regular wandering about wandering about weeping
***ašuštu* 2**	*ašuštu* dejection (*anāḫu* $Št_2$)	abdominal complaints	fluttering about failed speech talking to oneself foolish laughter *sighing*

			crying out
***ašuštu* 3**	numb mood (*ikki kūri*) *ašāšu*	no fever loss of appetite noise sensitivity	crying out
***ašuštu* 4**	*ašuštu*	weakness epigastric pain bloody nose bloodshot eyes	
***ašuštu* 5**	*ašuštu*	fit spittle	
***ašuštu* 6**	*ašuštu*	fever sweats loss of appetite stinging pain roaring ears hair standing on end bodily movement	supplication

The types of symptoms organised with *ašuštu* "Depression" suggest that this symptom can refer not only to a depressed mood, but also to a depressed state in the sense of a stupor. The use of the same term to refer to both is attested in other Akkadian words with a similar semantic range, such as *qūlu* and *kūru*, and this overlap suggests an overlap between the physiological and psychological experience of depressed states.

The relevant symptoms that recur with the other core symptoms and must be isolated for discussion include abnormal behaviour expressed through speech, including speech that continually changes (*ašuštu* 1), speech that fails (*ašuštu* 2), and soliloquy (*ašuštu* 2). Other abnormal behaviours include psychomotor agitation, expressed through the topos of wandering about in *ašuštu* 1 and 2, which may also be associated with fever

in *ašuštu* 1. Several somatic complaints must also be emphasised. In particular, complaints organised around the abdomen, including changes in appetite and pain, and roaring ears will be discussed. The types of moods, complaints, and behaviours organised with *ašuštu* “Depression” introduce some of the patterns in the expression of emotional distress and disturbance that are observed in diagnostic descriptions for the other two core symptoms, *ḫīp libbi* “Heartbreak” and *ṭēmu šanû/nakāru* “The mind alters/changes”.

Chapter 5: Texts for *ḫīp libbi* "Heartbreak"

The symptom, (*ḫūṣ*/*ḫuṣṣu*) *ḫīp libbi* "Heartbreak" refers to a form of anxiety and, arguably, somatic symptoms felt in the torso and belly that may accompany this emotional state. The expression *ḫīp libbi* "Heartbreak" is of particular importance to this study of symptom patterns for two reasons. First, it incorporates a body part – namely, the *libbu* – into a description of a mental state. As such, by itself it provides an informative example of a metaphor for emotional distress and disturbance. Second, as a metaphor, it provides information about the somatisation of emotional and mental disturbance more generally and, therefore, sheds light on features of the semantic network for mental disorder.

Although the expression *ḫīp libbi* "Heartbreak" is attested only once in the *Diagnostic Handbook* in a broken context at SA.GIG 13, 161′, it is dealt with extensively in therapeutic texts, where it regularly appears in diagnostic descriptions alongside other mental symptoms, including *ašuštu* "Depression" and *ṭēmu šanû/nakāru* "The mind alters/changes". The expression also appears in at least two late Babylonian medical texts, including one commentary.[161] It is also widely attested in non-medical texts from the first millennium BCE, including literature, letters, and canonical incantations, and its distribution across such a variety of genres and text types makes it worth investigating in a study of mental symptoms, despite the paucity of references in the *Diagnostic Handbook*.

The expression comprises at least two, but often three, terms: *ḫūṣ* or *ḫuṣṣu/a/i*, two terms that sometimes precede *ḫīp libbi* "Heartbreak" but whose meanings remain

[161] *SpBTU* I 43 (see §5.1.3.2) and BRM 4, 32 (see §7.3.3).

unclear; *ḫīp* (GAZ), the construct state of the noun *ḫīpu* "break" (CAD Ḫ 196-197); and *libbi* (ŠÀ), the genitive form of the noun *libbu*, a word which can be translated in numerous ways. The term *ḫīp* is uncontroversial and will therefore not be addressed separately. However, *ḫūṣ* or *ḫuṣṣu/a/i* and *libbu* warrant further examination. A full discussion of the meaning and usage of ŠÀ or *libbu*, a noun with a wide semantic range, deserves a separate philological study, and the meaning of the terms *ḫūṣ* and *ḫuṣṣu/a/i* remains opaque. Nevertheless, a few observations ought be made about these two components of the compound expression. It is therefore necessary to provide a backdrop for the meaning of *ḫīp libbi* "Heartbreak" as a reflection of anxiety and for this choice of translation, before setting forth the references to this symptom in diagnostic descriptions.

The first section of this chapter will address the meanings of *ḫūṣ* and *ḫuṣṣu/a/i*, and will give an overview of the meaning of *libbu* and its use in illness expressions, including *ḫīp libbi* "Heartbreak". This section will clarify the meaning and usage of this expression as one that refers to anxiety and, therefore, its status as a mental symptom. The second part of the chapter will give the core texts for the study of *ḫīp libbi* "Heartbreak" with a brief discussion of relevant symptoms as they appear in the selected passages. These core texts will be used as a departure point for a discussion of recurring patterns in the description of mental symptoms, to be taken up in Chapter 7. In particular, the ways in which symptoms of anxiety, especially as captured by and organised with *ḫīp libbi* "Heartbreak", were expressed in the Akkadian medical tradition show the proclivity to express mental symptoms in terms of specific physiological complaints.

5.1. Individual Components of the Compound Expression

5.1.1. *ḫūṣu* and *ḫuṣṣu*: "Pain?"

One variation on the expression *ḫīp libbi* "Heartbreak" finds it preceded by the word *ḫūṣ* or *ḫuṣṣu/a/i*, the more commonly attested forms of the latter being *ḫuṣṣa* and *ḫuṣṣi*.[162] The addition of *ḫūṣ*/*ḫuṣṣu* to *ḫīp libbi* "Heartbreak" seems to be restricted to certain contexts. For example, Stol notes that this variation occurs only occasionally in the medical corpus, where a duplicate text may omit this term (Stol 1993: 30). To follow one of the examples cited by Stol (1993: 30 n61), in a tablet of prescriptions *BAM* 311, the line that summarizes the previous 21 lines includes *ḫūṣ* before the expression *ḫīp* (GAZ) *libbi*: 15-*me* UGU DIŠ NA *ḫu-uṣ* GAZ ŠÀ[!]-*bi* TUKU.MEŠ-*ši* "15 times over (him) if a man continually has *ḫūṣ* Heartbreak" (*BAM* 311, 22′). However, in another therapeutic text, *BAM* 317, only *ḫīp libbi* (GAZ ŠÀ-*bi*) is written: DIŠ NA GAZ ŠÀ-*bi* TUKU.TUKU.MEŠ "If a man continually has Heartbreak" (*BAM* 317, rev. 16). Stol notes, however, that this phenomenon is not replicated in prayers and literary texts, where *ḫūṣ/ḫuṣṣu* regularly precedes *ḫīp libbi* "Heartbreak" (1993: 30).

When preceding the expression *ḫīp libbi* "Heartbreak", the term *ḫuṣṣu* seems to be in apposition to the expression that follows, possibly in a hendiadys construction, whereas the term *ḫūṣ* represents the regens in the construct state. Von Soden treats the two together in a single entry in AHw where *ḫūṣu*/*ḫuṣṣu* in the phrase *ḫu-uṣ*(-*ṣu/ṣa/ṣi*) *ḫīpi libbi* is translated as "Leibschmerzen", or stomach-ache (AHw 361). Following von Soden's entry, *ḫūṣ* and *ḫuṣṣu* may be seen as different forms of the same noun. However, the meaning proposed by von Soden fails to take into account the emotional dimension of

[162] The nominative form *ḫuṣṣu* will be used throughout this discussion, though it should be remembered that all three forms are attested.

ḫīp libbi "Heartbreak" and of the type of pain that the term *ḫūṣ/ḫuṣṣu* may denote. The CAD translates *ḫūṣu* as both "a physical pain" and "an emotional hurt" with a philological note appended to the entry that suggests the word to have possibly been a "hendiadys construction denoting a specific abdominal pain" (CAD Ḫ 260). Geller gives a more specific explanation of *ḫūṣu* as "a type of stomach cramp" (Geller 2010a: 151).

The exact meaning of *ḫuṣṣu* is not fully understood, though a few possible interpretations have been offered. One interpretation views the addition as stylistic, rather than semantic. Stol explains the presence or absence of *ḫūṣ* or *ḫuṣṣu* in medical texts as a stylistic scribal feature and adds that a Neo-Babylonian medical commentary suggests that later scribes no longer understood the meaning of the word.[163] The Neo-Babylonian commentary in question is listed as a bilingual text in Dougherty's catalogue. This commentary elaborates on an entry from SA.GIG 13 that forms part of the core corpus of this study and that represents the only extant reference in the *Diagnostic Handbook* to *ḫīp libbi* "Heartbreak" (*Libbu* 1). The surviving portion of the entry reads: [DIŠ…] ˹*ḫu*˺-*uṣ-ṣa* GAZ ŠÀ TUKU.MEŠ-*šu* ŠU ^{d}XV ⩘ ŠU […] "[If…] he continually has *ḫuṣṣa*-pain, *ḫīp libbi*, (it is) Hand of Ištar; alternatively, Hand of […]" (SA.GIG 13, 161′). The relevant lines elaborate on *ḫuṣṣa* and *ṣâlim* "to fight, object; quarrel" (CAD Ṣ 89):

10. *ḫu-uṣ-ṣa še-mu-ú šá ka-ba-bu*
11. *ṣa-a-lim ša* INIM *ana* GIG-*um*

10. *ḫuṣṣa* (means) to roast as in burning
11. quarrelling of the word (is) related to the illness

[163] *GCCI* II 406: 10 (cited in Stol 1993: 30 n63). Medical commentaries must be used with caution but should nevertheless be used. On medical commentaries as a source for the study of medical texts, see Hunger 1992: 469; Genty 2010; Geller 2010a; Frahm 2011: 218-241. On the use of "artificial philology" in commentaries more generally, see also Livingstone 1986: 49-52.

(*GCCI* II 406: 10-11)[164]

Another possible translation of line 11 might be "quarrelling as in (with) speech (as part of) the illness".

Possible interpretations of this commentary and its contribution to our understanding of the terms *ḫuṣṣu* and *ḫūṣu* have been discussed recently in a short philological article by Al-Rashid (2014), but a brief summary should be included to clarify what may be meant by this term as it occurs with the core symptom of this study, *ḫīp libbi* "Heartbreak". The term *ḫuṣṣa* is first elaborated with reference to *šemû* "to roast" and *kabābu* "burning", a term that used with *libbu* in a transitive usage in an incantation against a heart that burns: ŠÀ-*ba la i-kab-ba-ab-ka* "so that the heart may not burn you" (*KAR* 238, r. 14). The same usage is attested in a report by an *āšipu*.[165] In fact, the *libbu* is no stranger to burning and is paired elsewhere with *ḫimṭu* "scorching; fever" to denote "anxiety" (CAD Ḫ 193). In an Old Babylonian omen text, the expression *ḫimiṭ libbi* appears alongside *adāru* A "to be worried, disturbed, restless" (CAD A I 103): *ina ḫi-mi-iṭ li-ib-bi it-ta-na-ad-dar* "through anxiety of the *libbu*, he will be continually worried" (YOS 10 54 r. 13; Böck 2000: 298).[166]

In the above commentary, *kabābu* "burning" is cited to elaborate a symptom – namely, *ḫuṣṣa* – in a medical text as it precedes an expression that incorporates the *libbu* (i.e., *ḫīp libbi*), an organ that burning can affect elsewhere. This association is therefore not out of place. However, the words *šemû* and *kabābu* are not used in the medical

[164] GCBC 766.
[165] Thompson 1900: 235 A 13 [83-1-18, 232]; Hunger 1992: 469.
[166] See also the physiognomic omen text: DIŠ ŠÀ *ú-ḫa-maṭ-an-ni* XXX UGU-*šu* TUKU-*ši* "If (he says) my heart burns me, Sîn has (a debt) over him" (*CT* 51, 147: 11′; following Reiner 1982: 285). The phrase *libbu ḫamāṭu* in relation to depression and anger is also addressed in Gruber's cross-linguistic study (1980: 366-372). On *ḫamāṭu* and *ḫimṭu* in medical texts, see Stol 2007: 19-21.

literature (Geller 2010a: 151). Geller notes that the attempt to define *ḫuṣṣa*, which he understands as stomach cramps, through the analogy of roasting or burning may reflect a broader phenomenon, attested in later Greek medicine, of drawing analogies with vocabulary for cooking in order to deduce the internal functioning of the body (2010a: 152).

The term *ḫuṣṣa* is then further elaborated by *ṣâlim*, translated here as "quarrelling" (CAD Ṣ 89), which derives from the same root as the noun *ṣāltu* "quarrel, disagreement, affray" (CAD Ṣ 86-87). The latter frequently appears with the expression *ḫūṣ/ḫuṣṣu ḫīp libbi* "Heartbreak" in therapeutic texts.[167] From the commentary, it seems that the enigmatic term *ḫuṣṣa*, as it appears in SA.GIG 13, 161′ is being explained with reference to experiences that are elsewhere associated with this term, even if the precise nature and meaning of these elaborations remains unclear to modern scholars (Al-Rashid 2014). The commentary may further suggest that *ḫuṣṣa*, as it occurs in *GCCII* 406 and in SA.GIG 13, has a meaning that overlaps with one interpretation of the term *ḫuṣṣu*: namely, as a verb in the D stem meaning "to anger, harass, irritate, trouble", suggested by Boyd (1983).[168]

These is still no consensus on the meaning of the terms *ḫūṣ* or *ḫuṣṣu*, but it is possible from *GCCII* 406: 10-11 to reach a limited understanding of *ḫūṣ/ḫuṣṣu* as used with the expression *ḫīp libbi* "Heartbreak". In this study, I follow the CAD's translation of *ḫūṣu* as "pain", and take *ḫuṣṣu/a/i* to be a form of *ḫūṣu*. Thus, I translate *ḫūṣ ḫīp libbi*

[167] For example, *ḫu-uṣ* GAZ ŠÀ TUKU.TUKU-*ši ina* É *ṣal-tu ina* SILA *pu-uh-pu-uh-hu-ú* GAR-*šú* "he continually has *hūṣ* (of) Heartbreak; for him in the home there is strife, in the streets, quarrelling" (*CMaWR* 8.6: 17; *AMT* 21/2 read with *BAM* 232:). Note also the occurrence of the phrase, *ina bīti* LÚ.NE (*ṣāltu*) *ina* SILA *pu-uḫ-pu-ḫu-ú* "in the home, there is strife, in the streets, quarrelling" (*STT* 247: 6) without *ḫūṣ ḫīp libbi* in a text that describes various misfortunes resulting from divine anger. See Stol 1993: 29 for more references to *ṣāltu* with *ḫīp libbi*.

[168] See Boyd 1983. See also Al-Rashid 2014 for discussion of his interpretation in light of *GCCII* 406: 10-11.

as “pain of Heartbreak” and *ḫuṣṣa ḫīp libbi* as “pain, Heartbreak”. In contexts with *ḫīp libbi*, the type of pain being described is most likely emotional; however, the separation between emotional and physical pain may not be necessary in the Akkadian context. The consistent overlap in the *libbu*’s function as an internal organ and as an organ of thought and emotion may suggest *ḫīp libbi* “Heartbreak” to be both a form of anxiety and the somatic discomfort that accompanies this emotional state (Al-Rashid 2014). This overlap will become clearer in light of a discussion of the semantic range of *libbu*.

5.1.2. *libbu*

Expressions for emotional disturbance in a non-medical context often incorporate internal organs as both the subject and the site of those emotions. P. Dhorme’s early study of the metaphorical use of the names of body parts in Hebrew and Aramaic provides a useful starting point for the discussion of the way internal organs figure into Akkadian idiomatic expressions for emotional states. In his analysis, the Assyrians and Babylonians “ont localisé dans le coeur, le ventre, le foie et les autres organes internes les mouvements, les émotions, les sentiments et même les idées de l’âme, sans toujours limiter avec précision les domaines où s’exercent les diverses facultés” (Dhorme 1923: 109). Although internal body parts of both animals and humans do not readily lend themselves to the assignment of symbols or association with concrete objects, these organs do form the site of many emotional sensations (Dhorme 1923: 109). Labat similarly calls the *libbu* the seat of “des sentiments, des passions, de l’intelligence et de la sagesse” (1972-1975: 367). Both Dhorme and Labat are correct in pointing out the noetic and emotive properties of the *libbu* and other internal organs. The following discussion

gives a brief overview of the Akkadian term *libbu* and its various biological referents and psychological faculties in order to establish its function as the seat of thought and emotion, to demonstrate the overlap of physiological and psychological, and to provide further support for interpreting *ḫīp libbi* "Heartbreak" and its concurrent complaints as mental symptoms.[169]

5.1.2.1. General Notes on *libbu*

The Akkadian term *libbu* lacks a clear correspondence to any single organ or part of the body, and a few preliminary comments will serve to introduce the range of anatomical parts to which this term can refer.[170] For the purposes of this discussion, the term *libbu* will remain un-translated in order to avoid obscuring its intended meanings and usages in different contexts. Although many of these meanings of *libbu* are accepted and listed in the available dictionaries, the available secondary literature on medicine in ancient Mesopotamia has thus far furnished no discussion of the usage of this term as both a psychological and physiological referent. It will be necessary to provide some context and philological background for the understanding of the term *libbu* in the

[169] The Akkadian word *libbu* also functions in ways that are not related to human anatomy or psychology, which will not be included in this discussion. For example, it can refer to the inside of a building, area, city, document, plant, body part, and other objects (CAD L 164, 167-169), and the *libbu* has a variety of prepositional uses (CAD L 164, 172-175). This could be compared with the English metaphorical usage of the word "heart" to refer to the essence or interior of something: for example, "the heart of the matter" to refer to the essence of or a central concept in a matter, or "the heart of the city" to refer to the interior of the city. The latter is noted as an example of the use of the heart in metaphors of interiority in a cross-cultural study of metaphorical uses of the word "heart" in English, Spanish, French, Italian, and German. In the analysis, the heart as the core or centre of something may have its roots in the fact that the heart is "situated in the chest and almost in the middle of the body" (Pérez 2008: 43). See also Berendt and Tanita 2011.

[170] This philological survey is not intended to be a comprehensive discussion of the Akkadian term *libbu* but is presented show how it functions both as a physiological and psychological organ and to help provide a background for its usage in expressions for mental symptoms, such as *ḫīp libbi*. A more full discussion would necessarily include a discussion of the rich Sumerian substrate for this terminology and lies beyond the scope of this study.

expression *ḫīp libbi* "Heartbreak" and to justify the assumption that this expression refers to a psychological state akin to anxiety. The meaning and usage of *libbu* in the contexts to be discussed below may be framed with a hypothesis, which is perhaps implicit in current understandings of this term but should nevertheless be stated clearly: the *libbu*'s noetic properties are inseparable from its physiological form and location. The physical "organ" or site in the body referred to by *libbu* is the seat of thought and emotion; the *libbu* as a seat of thought and emotion is a physiological organ.

5.1.2.1.1. The Anatomical *libbu*

As a part of the body, it has been variously translated based on context as the heart, abdomen, intestines, entrails, womb, and torso.[171] As Stol notes, it often refers in a very general way to the intestines or the abdomen, and even simply to "the inside of the body" (1993: 27; 2006: 103).[172] The *libbu* may also refer to the exterior abdomen or torso. This discussion will provide an overview of the different anatomical referents of the *libbu* in order to illustrate its semantic range. In particular, it will prove important to establish the usage of *libbu* to mean the stomach, chest, heart, and innards, in light of two patterns in the description of mental symptoms: first, in general, the overlap in emotional and physiological sensations for anxiety; and second, more specifically, the association of mental distress with abdominal symptoms.

[171] CAD L 165-166 (mng. 1). AHw I 549-550. The *libbu* can also refer to parallel body parts on animals, but this discussion will be limited to human anatomy. See CAD L 167.
[172] See also Beckman 1990: 627; Labat 1975: 367.

5.1.2.1.1.1. The *libbu* as Organ that Beats

In at least one medical text, the heart is identified as the organ that beats. The only known Old Babylonian diagnostic text (Attinger 2008: 18) makes reference to the heart as throbbing by pairing the *libbu* with the verb *šaḫāṭu* Gtn "to twitch" (CAD Š I 91), which when used in medical contexts with certain parts of the body likely refers to pulsing or throbbing:

> 11′. *šum-ma mar-ṣu i-na-˹a˺-šu¹ da-˹ma˺-am ma-li-a*
> 12′. *li-ib-ba-šu iš-ta-˹na˺-ḫi-iṭ-ma qá-tam i-sà-ki-ip*
> 13′. *mar-ṣu ˹šu˺-ú ú-ul i-ba-˹lu?˺-uṭ*
>
> 11′. If the eyes of the patient are full of blood,
> 12′. his *libbu* constantly throbs (lit. jumps), and he pushes down (his) hand,
> 13′. that patient will not live.
>
> (LB 2126: 11′-13′)[173]

The rest of the passage, which describes a patient who looks fearful, has a change in appearance, suffers pain in the hands and feet, constantly cries out, but has no fever, seems to suggest an anxious state. The diagnosis is Hand of Witchcraft (l. 21′). The *libbu* here may refer to the heart itself, or to the portion of the torso that is observed or felt to throb. It should be noted that observations of the pulse in other contexts pair throbbing (*šaḫāṭu*) with reference to veins (*šerʾānu*), but not to the *libbu*.[174]

This medical reference to the *libbu* as an organ that beats may be supplemented by references in non-medical texts. In literary contexts, the *libbu* is also said to beat with

[173] TLB II, 21. Following Heeßel 2000: 97. See also Attinger 2008: 17-18.
[174] See Oppenheim 1962.

the verb *nakādu* G "to beat, throb, palpitate" (CAD N I 153).[175] For example, in the Standard Babylonian Epic of Gilgameš, the protagonist recounts his having felt for the heart of his dead friend Enkidu only to find no pulse: *il-pu-ut* ŠÀ-*ba-šu-ma ul i-nak-ku-*[*ud*] "He touched his *libbu*, but it was no longer beating" (SB *Gilgameš* VIII: 58).[176]

Another verb used to express the heartbeat is *tarāku*, as in *The Fable of the Fox*: *ki-i-ma at-mi ku-uš-šu-di i-tar-ra-ku lìb-bu-šu-nu* "Like pursued fledglings their *libbu*s will thump" (*The Fable of the Fox,* obv 11).[177] In his philological commentary to this line, Lambert notes that the same simile is used in the *Annals of Sennacherib* where Sennacherib's enemies, the Elamite and Babylonian soldiers and their leaders, unsurprisingly, are fleeing: *ki-i at-mi* TU^{mušen} *kuš-šu-di i-tar-ra-ku lib-bu-šu-un* "Like those of a pursued fledgling dove, their *libbu*s beat" (OIP II 47, 29-30; Grayson and Novotny 2012: 22 vi 29-30). Another example of *tarāku* with *libbu* appears in a text that recounts an Assyrian prince's dream of the Netherworld, a work of royal propaganda: *a-gal-ti-*⌜*ma*⌝ *ki-ma eṭ-li ta-pi-ik da-me šá ina ṣu-ṣe-e i-di-ši-šú it-tan-al-la-ku* EN*—bir-ki ik-tùm-mu-šú-ma i-tar-*⌜*ra*$^{?}$⌝*-ku* ŠÀ-*bu-u-*⌜*šú*⌝ "I woke up, and like a man who has shed blood, who moves about by himself in a reed thicket, whom a runner catches up with, so that his *libbu* pounds…" (VAT 10057, rev 29).[178]

As with the Old Babylonian diagnostic text, the intended referent may be the heart as the internal organ that beats, or the portion of the torso where this beat can be felt or observed. Both interpretations illustrate that the Akkadian *libbu* was identified as a

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[175] On its own, *nakādu* has the meaning "to worry, to fear, to be anxious about", as well as "to beat" (CAD N I 153). In some instances where *libbu* occurs with *nakādu*, an idiomatic expression for worry is intended (CAD N I 153 mng 1b).
[176] See now George 2003: 654-655.
[177] *BWL* 192.
[178] Following Livingstone 1989: Text 32. See CAD T 203-205 (mng 2) for more references of *tarāku* with *libbu*.

beating part of the body, such that the best translation in English in such contexts would be the "heart".

5.1.2.1.1.2. The *libbu* as Stomach, Belly, and Innards

As a physical body part, the *libbu* is also used more generally to refer to the stomach, belly, and innards. This is especially noted in medical texts, including therapeutic texts and medical incantations. In terms of diagnostic texts, SA.GIG 13 is dedicated to symptoms observed or reported of the ŠÀ, which has various referents.[179] In addition, Akkadian anatomical terms for internal organs in this area often form compounds with *libbu*, signalling or giving clues as to where in the body the term refers. Those that appear in the passages for *ḫīp libbi* that will be dealt with below are: *dūr libbi* "stomach lining(?), diaphragm(?)", *rēš libbi* "epigastrium",[180] *šerʾān libbi* "stomach sinews" or "veins of the stomach", and the Sumerogram ŠÀ.MEŠ, which should be read as *qerbū* "intestines", rather than *libbū* (MSL IX: 87-88; cf. CAD L 166-167).[181] The *rēš libbi*, or epigastrium, in particular is the site of numerous symptoms in the *Diagnostic Handbook* and in therapeutic texts and thus may be said to have played an important role in disease diagnosis.[182]

The *libbu* figures in numerous ways in both medical and non-medical texts that suggest it to be the site of the body where flatulence, bloating, and gas are experienced.

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[179] The many meanings of the Sumerian word ŠÀ will not be discussed here, except cursorily as it pertains to the meaning of *libbu*.
[180] This body part appears in several of the core texts for this study: *ašuštu* 4, *Libbu* 1, *Ṭēmu* 8, and *Ṭēmu* 9. It also features regularly in diagnostic descriptions for the supplementary therapeutic texts. See §7.3.1.1.
[181] Note that terminology for parts of the abdominal region also employ *karšu* in the same way, such as *pî karši* "pyloric opening of stomach" (Adamson 1974: 105-106), although three other locations are referred to in connection with this term: the pharynx, mouth, and teeth (Geller 2010b: 6). See Cadelli 2000: 298 for discussion.
[182] See Stol 2006: 103.

This location of wind in the *libbu* also appears in literary contexts. When Marduk confronts Tiamat in *Enūma eliš*, he released the *imḫullu* "evil wind" against her, which she swallowed: *in-né-sil* ŠÀ-*ba-šá-ma pa-a-ša uš-pal-ki* "Her *libbu* became bloated, her mouth she opened wide" (*Enūma eliš* IV, 100).

In medical therapeutic texts, wind is described as being in the *libbu*. For example, one therapeutic text includes a diagnostic description in which the patient has bowels (ŠÀ.MEŠ-*šú*) that are blown up or swollen, intestines (*ir-ru-šú*) that tremble and rumble, and IM *ina* ŠÀ-*šú i-lé-eb-bu* "wind in his *libbu* cries out" (*BAM* 159 v 50).[183] Medical incantations also describe wind in the *libbu* and frame the effects of this symptom with metaphors of blockage, stagnation, and fermentation. Collins cites several examples in his study of natural illness in medical incantations, one of which may be reproduced here to illustrate the *libbu* as the location of gas or flatus: ÉN ŠÀ *nam-zi-tu*$_4$ *bi-la-as-su* IM$^!$ "Incantation: the *libbu* is a fermenting vat, its fermenting mixture is wind" (*BAM* 574 iii 54). Similarly, two medical incantations also compare the chest (*irtu*) to a fermenting vat that contains wind.[184] Collins interprets this alternation as evidence that in such contexts, the *libbu* "refers not to a specific internal organ, but rather to the person's 'insides'" (1999: 80). The words *libbu* and *irtu*, in Collins's view, "refer to the same thing, viewed from the inside and the outside, respectively" (1999: 80 n17).

Thus, the *libbu* refers to the interior abdominal region, and in some contexts, a more general translation like "belly" might offer an alternative to more specific anatomical terms, such as abdomen or intestines, given the limited knowledge of the

[183] This symptom is also described for women specifically (e.g., SA.GIG 36, 19′, *BAM* 240: 20; *BAM* 580 iii 16; *Iraq* 18 133: 32).
[184] The first is PBS 7 87: rev 1-2 (CBS 1960) (Farber 1984: 70); and the second is *BAM* 574 (K 191+) iii 42. Both are published in Collins 1999: 129-131. A similar overlap occurs for the *irtu* and the *rēš libbi* in BM 76510: 1-2 (see Stol 2006: 107 n20).

different functions of internal organs that characterises Mesopotamian medicine in general.[185] Such a general interpretation may be appropriate for non-medical contexts, as well as some medical texts, including medical incantations. It is, however, apparent that in other contexts, such as the therapeutic text cited above (*BAM* 159), more specific parts of the abdominal region may be the intended referents of *libbu*. This may be inferred when the *libbu* appears alongside other terms for internal organs in the abdominal region, such as *qerbū,* and *irrū*.

In addition to referring to the insides and to specific parts of the insides, the *libbu* can also refer to the exterior chest or abdomen. For example, in an Old Babylonian physiognomic text, moles are described as covering *pa-nu-⌜šu⌝ i-ra-sú* [*li*]*-ib-ba-šu qá-ta-šu še-pa-a-šu* "his face, his chest, his *libbu*, his hands, his feet" (VAT 7525 iii 8-9).[186] Given that the sequence of body parts seems to move from top to bottom, the *libbu* seems to have been distinguished from – and located lower than – the chest (*irtu*). Descriptions of hands across the *libbu* may also refer to the abdomen or to the torso more generally, as in an entry from the *Diagnostic Handbook* in which the patient is described as continually placing his hands on his *libbu* (SA.GIG 16, 43′). A staff can also be placed across the *libbu* (*BAM* 248 iv 5). In these references, the hands or staff could conceivably be placed on the chest, and there are no other hints as to whether the abdomen, chest, or entire torso is the intended referent. The *libbu* can therefore refer to an exterior part of the body in the chest or abdominal region, or both.

[185] On the limitations of the understanding of internal organs in the process of digestion more specifically, see Stol 2006.
[186] Following Köcher and Oppenheim 1957-1958: 66.

5.1.2.1.1.3. The *libbu* in Reproductive Anatomy

The Akkadian word *libbu* is used to refer to various parts or aspects of male and female reproductive anatomy, including genitalia. With respect to the male genitalia, the word *libbu* is used possibly as a euphemism for penis, as well as a *representamen* of the erection. The ŠÀ.ZI.GA texts, a group of rituals and incantations that address male sexual function and dysfunction, employ the logogram ŠÀ and the Akkadian equivalent of *libbu* to denote the male sexual organ.[187] The expression ŠÀ.ZI.GA and its Akkadian equivalent, *nīš libbi* "rising of the *libbu*", refer "specifically to the ability to get and maintain an erection for sexual intercourse" (Biggs 2006: 44).[188] Thus, the *libbu* in such texts may refer to the penis as an organ, or may serve as a metonym for sexual potency.

Both the Sumerian logogram ŠÀ and the Akkadian equivalent *libbu* can denote interiority, which may explain their use in references to the foetus as *ša libbīša* (usually wr. *šá* ŠÀ-*šá*) "foetus, unborn child" (CAD L 175). The *libbu* can also refer to the womb as the "interior" of the female in non-medical texts, such as in Neo-Assyrian and Neo-Babylonian royal inscriptions.[189] For example, the gods created Aššurbanipal *ina* ŠÀ *ummišu* "in the *libbu* of his mother" (Streck Asb. 2 i 5). Further, the compound expression *ṣīt libbi* to refer to progeny or offspring incorporates this use of *libbu* as the womb (CAD Ṣ 218). However, medical contexts and in particular gynaecological texts seem to favour more specific terminology for the womb, including *šassūru* (ŠÀ.TÙR), *agarinnu*, *nādu*, *qerbītu,* and ARḪUŠ (GÁ.MUNUS).[190]

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[187] See Biggs 1967 for the definitive edition of the ŠA.ZIG.GA incantations. See also Biggs 2006. Geller also notes that term *libbu* was used as a euphemism for penis (2004a: 27).
[188] See also Ebeling 1925: 24; CAD N II 296 (mng 2).
[189] The same is noted for *karšu* (CAD K 223).
[190] See Steinert 2013.

5.1.2.1.2. The Psychological *libbu*

To turn to the *libbu*'s noetic properties, the Akkadian *libbu* figures in expressions of thought, will, or intention, as well as emotion. A brief passage from a physiognomic text illustrates the range of such noetic and emotive properties ascribed to the *libbu* and provides a useful starting point for a discussion of this organ as both the site and faculty of thought and emotion.

78. DIŠ ŠÀ-*šú da-li-iḫ i-ḫad-du ina-mí-i*[*r*]
79. DIŠ ŠÀ-*šú ma-ru-uṣ* KA.ŠÀ-*ti* ŠE.G[A]
80. DIŠ ŠÀ-*šú ḫe-lu ku-ba-tu* IGI-[*mar*]
81. DIŠ ŠÀ-*šú a-dir i-ḫad-d*[*u*]
82. DIŠ ŠÀ *rap-šá* GAR LÚ-*tam ra-bi-tam* DU-[*ak*]
83. DIŠ ŠÀ *na-as-si-iq ni-iš-mu-šú i-dam-mi-*[*iq*]
84. DIŠ ŠÀ *le-mu-un* INIM-*šú* KUR-[*ad*]

78. If his *libbu* is disturbed, he will be joyful, he will shine.
79. If his *libbu* is sick, *he will direct* (it) (toward) his secret desire.
80. If his *libbu* is shining, he will experience honours.
81. If his *libbu* is anxious, he will be joyful.
82. If he has a big *libbu*, he will live in great dignity.
83. If the *libbu* is *picky*, his hearing will be good.
84. If the *libbu* is evil, he will achieve his word.
(*Šumma kataduggû* 78-84)[191]

In each entry, the protasis sets forth some quality or emotion suffered or experienced by the *libbu*, and the apodosis gives the appropriate prediction. Many of the qualities ascribed to it have a literal or figurative mental dimension, as do the predictions that correspond to them.[192] In the apodoses, the *libbu* is confused or disturbed (*dalāḫu*), sick (*marāṣu*), shining (*ḫelû*), anxious (*adāru*), wide (*rapāšu*), picky (*nasāqu* D), and evil (*lemēnu*). It seems clear that this organ functions here not – or more accurately, not *only* –

[191] Following Böck 2000: 136-137. See also Kraus 1936: 98.
[192] Böck translates the word *libbu* in ll. 78-81 and 84, as "Gemüt" and adopts "Herz" for ll. 82-83.

as a physical body part, but rather as a psychological one that can experience a range of emotional and mental attributes. The usage of *libbu* in these capacities is instructive, firstly, of its function as the site of psychic life, and secondly, of the close connection between the physiological and psychological in conceptions of certain internal organs in general.

5.1.2.1.2.1. The *libbu* as Seat of Thought

Several contexts highlight the *libbu*'s function as the seat of intellect, associated with thought, knowledge, and will. Its function as the mind or seat of thought is borne out by its capacity for speech and other mental faculties, but at the same time, these cannot be divorced from the potential location of the *libbu* in the torso or belly. The noetic and physiological properties of the *libbu* are borne out in the compound expression *ḫīp libbi* "Heartbreak" whose occurrences in the diagnostic and therapeutic corpus suggest it to be a mental symptom with a somatic component.

Verbs that denote thought and speech are used with *libbu* to indicate thought processes, including self-conscious or self-reflexive thought. The use of terminology for speech, in particular, to indicate thought processes takes on importance in the context of mental symptoms, given that speech behaviours provide a salient descriptive frame for disturbances in mood and thought; abnormal language and speech behaviours provide a dominant pattern for the description of mental symptoms in Akkadian diagnostic texts. Indeed, verbs of speech are used in both ways alongside *ḫīp libbi* "Heartbreak": to denote speech behaviours and to denote thought processes with the *libbu*.

A few examples will suffice to illustrate this noetic function of the *libbu* in Akkadian.[193] One can deliberate or decide with or within one's *libbu*, which can itself also be the agent that deliberates and decides, as with the verb *malāku* in its basic and Gt stems (CAD M I 154-158). The protagonist of the *Poor Man of Nippur* deliberates with his *libbu* as to how to deal with his many problems: *it-ti* ŠÀ-*bi-šú lum-mu-ni šu-ú im-ta-lik* "he deliberated with his dejected *libbu*" (*STT* 38: 11, 16).[194] Given the reciprocal function of the Gt stem, the use of *itti* in *itti libbīšu* alongside *malāku* Gt makes the *libbu* the interlocutor. In the curse section of a royal inscription of Aššurnasirpal II engraved on a large stone monument, sometimes referred to as the Nimrud Monolith, *libbu* is used with *malāku* in the curse section with reference to one who might decide to destroy the monument: *ú-zu-un-šú i-šá-ka-nu-ma* ŠÀ-*ba-šú / i-ma-al-li-ku-šu* "(who) sets his mind and whose *libbu* / advises him" (AKA pl. 69 v 75-76).[195] This excerpt shows that the *libbu* may act as the subject of the verb *malāku* and thus may itself, as the organ of thought, advise or deliberate. However, *malāku* is more regularly used with other nouns denoting the mind or inner mental life, notably *ṭēmu* "mind, will, intention" (CAD Ṭ 85-96, esp. mngs 3, 4, and 5), *ramānu* "self" (CAD R 117-125), and the noun that derives from the same root *m-l-k*, *milku* "advice, decision; intellectual capacity, mood" (CAD M II 66-68; cf. CAD M I 155-156, mng 2b for examples). This parallelism in the usage of *libbu* and that of two other terms that represent the self, intention, or mind demonstrates the intellectual capacity of this organ.[196]

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[193] A more complete list appears in CAD L 172 (mng 3c).
[194] Following Gurney 1956: 150. See CAD M 156-157: *malāku* Gt "to deliberate".
[195] Following RIMA II 253-254.
[196] This parallelism is further evidenced in the use of another verb that often occurs with both *ṭēmu* and *libbu*, albeit more rarely with the latter: namely, *šanû* "to change" (CAD Š I 405 mng 2). The pairing of *ṭēmu* and *ramānu* with the verb *šanû* G can express going mad or becoming deranged. However, with the

Another verb used with *libbu* that demonstrates its mental capacity is *kapādu* "to plot, plan" (CAD K 173). With *malāku*, the *libbu* was the agent or location of deliberation, and the same may be observed for *kapādu*. In *Etana*, the *libbu* is the subject in a couplet in the Eagle and Serpent Narrative, when the fully-grown eagle decides to eat the young of the serpent: Á^{mušen} ŠÀ-*ba-šu le-mut-tu ik-pu-du-*⌜*ma*⌝ */ ik-pu-ud-ma* ŠÀ-*ba-šu le-mut-tu* "The eagle, evil did his *libbu* plot, his *libbu* plotted evil" (*Etana* II 37-38).[197] The same phrasing is used in Aššurbanipal's "Coronation Hymn" to describe a potential enemy who plots evil and speaks maliciousness against the king: *šá a-na* LUGAL *ina* ŠÀ-*bi-šú i-kap-pu-du* MÍ.ḪUL…*šá a-na* LUGAL *ina* ŠÀ-*bi-šú i-ta-mu-ú nu-ul-la-a-ti* "He who in his *libbu* plots evil against the king…who in his *libbu* speaks maliciousness against the king" (LKA 31, rev. 11, 13).[198]

In addition to verbs that describe thought processes directly, such as *malāku* and *kapādu*, one also communes with one's *libbu* with verbs of speech to indicate thought processes. The verb *amû* Gt "to discuss, to talk over" (CAD A 86-87, mng 1a) can take on the meaning of "to think, to ponder" (CAD A II 86-87, mng 2c) when used with *itti*, *ina*, and *ana libbi*. To cite a more ambiguous example from Standard Babylonian literature, the Sultantepe version of Nergal and Ereškigal describes Ea's reflection before addressing Nergal in the following terms: [^{d}]*E-a an-ni-tú ina še-me-šú zik-ra it-ta-mi ana* ŠÀ-*šú* "Ea, in hearing this, conceived an idea in his *libbu* (lit. spoke an idea to his *libbu*)"

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libbu, the verb in its basic stem seems to describe changing one's mind. The pairing of *libbu* with *šanû* D denotes causing confusion (CAD Š 407 mng 5).

[197] Following Novonty 2001: 30.

[198] Following Livingstone 1989: 27 (Text 11).

(Nergal and Ereškigal 103).[199] The expression is also consistent with the predication of speech acts on the *libbu* to denote thought processes, which guides the translation given.

Verbs of speech used with *libbu* can also be understood literally, as describing the act of speaking or talking. In these occurrences, *libbu* refers to the self as the indirect object of such speech. This expression appears in two of the core texts for this study. The verb *dabābu* G with *itti libbi* can mean "to ponder, think", but it can also be taken more literally to mean "to mutter to oneself" (CAD D 11 mng 7). Examples of this latter meaning of talking or muttering to oneself seems to be confined to medical texts and physiognomic omens that describe unusual behaviour. In fact, a therapeutic text that includes *ḫīp libbi* "Heartbreak" in the diagnostic description also includes the symptom of talking to oneself (*AMT* 21/2, 9). Given the salience of speech-related symptoms in the *Diagnostic Handbook*, a literal interpretation of the phrase *itti libbīšu dabābu* is more appropriate in such medical contexts.[200] Similarly, in the same way that one can speak to one's *libbu*, one can also speak to one's *ramānu* "self":

25′. DIŠ KI ŠÀ-*šú* $DU_{11}.DU_{11}$-*ub še-am* TUKU-*ši*
26′. DIŠ KI NÍ-*šú* $DU_{11}.DU_{11}$-*ub* É DÙ-*uš*

25′. If he talks to his *libbu*, he will acquire barley.
26′. If he talks to his self (*ramānu*), he will build a house.
(*CT* 51, 147: 25′-26′)[201]

In both cases, the protasis is intended to convey the behaviour of talking to oneself. This parallelism is instructive of the *libbu*'s function as the seat of cognition. Indeed, the *libbu*

[199] Following Ponchia and Luukko 2013: 15, 40.
[200] After all, "thinking" or "pondering" are not pathological and would therefore make for bizarre medical symptoms.
[201] Following Reiner 1982: 285.

can also refer to the self in other parallel usages with *ramānu*, as attested in a description of a fit: *šum-ma e-nu-ma* DAB-*šú* ŠÀ-*šú e-er* ZI *šum-ma e-nu-ma* DAB-*šú* NÍ-*šú* NU ZU-*e* NU ZI "If when it seizes him, his *libbu* is awake, it will go away; (alternatively) if when it seizes him, he does not know himself, it will not go away" (SA.GIG 10, 3).[202] It should be unsurprising that the *libbu* can take on the meaning of self, in addition to its function as the seat of thought and emotion. In essence, the self is the underlying agent of such faculties; it functions as an amalgam of all the psychic functions and psychology of the person, as captured in the term *libbu*.[203]

As might be expected of the seat of thought, the *libbu* can also experience confusion, as expressed with the verb *dalāḫu* "to stir up, roil; to disturb" (CAD D 43f.), which further demonstrates its function as the seat of thought. The quality of confusion is predicated of the *libbu* in the physiognomic omen excerpted above: DIŠ ŠÀ-*šú da-li-iḫ i-ḫad-du ina-mí-ir* "If his *libbu* is disturbed, he will be joyful, he will shine" (*Šumma kataduggû* 78).[204] In another therapeutic text against witchcraft, the *libbu* is again described with the verb *dalāḫu*: ŠÀ-*šú da-liḫ* "his *libbu* is disturbed" (*BAM* 323, 91). Other symptoms described in this therapeutic text against illness induced by a pursuing ghost include several mental symptoms that suggest panic or anxiety, including roaring ears,[205] weakness, and paralysis (*BAM* 323, 89-91). The therapeutic text thus deals with mental symptoms, including a disturbed *libbu*. In a therapeutic text for ailments caused by witchcraft, the patient's *libbu* is described with *dalāḫu* as ŠÀ-*šú it-ta-na-ad-laḫ* "his

[202] *AMT* 106, 2: 3 // AO 6679. The transliteration in Labat omits the signs ŠÀ-*šú* (1951: 80). See also Scurlock and Andersen 2005: 8.5 (with duplicates).
[203] The concepts of individuality and self in ancient Mesopotamia have recently been studied by Steinert 2012 and need not be repeated here. See Steinert 2012: 257-384 on *ramānu*.
[204] Following Böck 2000: 136. See also Kraus 1936: 98.
[205] See §7.3.3.

libbu is continually disturbed" (*BAM* 214, obv. 5).[206] Schwemer interprets this symptom probably not as one that describes a cardiac arrhythmia: "Angesichts der Verwendung von *ittanadlaḫ* auch in Bezug auf die ganze Person…scheint mir hier eher der metaphorische Gebrauch von *libbu* vorzuliegen als eine Beschreibung von Herzrhythmusstörungen" (2007: 173 n39). Such a literal translation, wherein the *libbu* is understood as the organ that beats, is unnecessary.

These examples come from a range of texts written in Akkadian, though limited to texts from the scribal tradition (as opposed to everyday documents such as letters) written for the most part in Standard Babylonian. The usage of *libbu* in these contexts and the verbs that are predicated of it demonstrate its function as the seat of thought and intellect. As noted at the start to this section, the *libbu*'s function in these capacities need not be separated from its physiological dimension and location in the body. The *libbu* can not only plot, plan, and speak (i.e., think), but it can also experience confusion. The *libbu* functions as an organ of thought, susceptible to disturbance, such that a translation of "heart", akin to the English usage of "heart" in its capacity as the mind, or "mind" would be appropriate in such passages. Whether or not the *libbu* refers to the physical organ of the beating heart is less important than its referent of heart-as-organ-of-thought in such contexts. While it may be the case that the stomach, innards, or perhaps even the torso are the intended physical referents, the *libbu* can function as the mind and has a strong mental component that may be overlaid onto this physical component. In addition to thought and thought processes, the *libbu* can also experience emotion, which further demonstrates its status as the seat of the psychic life of the individual.

[206] This text is revisited in §7.3.3.

5.1.2.1.2.2. The *libbu* as Seat of Emotion

In terms of its function as the location or source of emotion, *libbu* occurs with verbs and adjectives that refer to emotions, including anger, sadness, and malaise. Only a few examples need illustrate this emotional capacity, as it is well documented.[207] The three examples offered here further support the hypothesis that the *libbu*'s psychological and physiological referent overlap: anger and rage, fear, and a more general expression of being "sick" (*marṣu*). The types of emotions considered not only elucidate recurring usages with *libbu*, but also provide examples of emotions that cross-culturally elicit a physiological response in the gut and/or torso (Hupka et al 1996).

The *libbu* can be furious, as is often attested in incantations and prayers in which the supplicant pleads for mercy and for the god's angry heart to be calmed: *ri-šá-a re-e-ma ag-gu* ŠÀ-*ba-ka li-nu-ḫa sur-riš* "Have mercy on me; let your angry *libbu* be quickly appeased!" (*KAR* 58, 34). Similarly, in Esarhaddon's Gottesbrief, he addresses the god, Aššur: *ag-gu* ŠÀ-*ba-ka li-nu-ḫa-am-ma re-e-mu ri-šá-an-ni-ma* "Let your angry *libbu* be appeased for me, have mercy on me" (Borger Esarh. 103 ii 24; Leichty 2011: 33 II i 24). This is in fact a well-attested topos, in which a god whose *libbu* is angry must be appeased, that also occurs in literature. For example, Ereškigal's less than favourable reception of her sister, Ištar, in the Netherworld is described in the same terms. When Ea sends the male prostitute Aṣušunamir to the Netherworld to negotiate Ištar's release, he instructs the makeshift messenger to have Ereškigal swear an oath but only *ul-tu lìb-ba-šá i-nu-uḫ-ḫu kab-ʿtaʾ-as-sa ip-pe-red-du-u* "After her *libbu* has calmed down and her mood (*kabattu*) has become cheerful" (*Descent of Ištar*, 96). In the same sense that the *libbu* must calm down, another internal organ, the *kabattu* "liver", must also be cheered.

[207] See CAD L 172 for lists of verbs and adjectives used with *libbu* to express emotion.

Such contexts permit a more figurative interpretation of the organs being referenced to account for the context. "Heart" in the sense of one's emotional centre and "mood" may approximate the intended meaning.[208]

The *libbu* can also feel fear (*parādu*, *galātu*). Once again, the *libbu* may be the site of physical discomfort in situations that elicit anxiety and fear. At the same time, as the subject of verbs that denote fear and anxiety, the *libbu* itself experiences these emotions. In the *Diagnostic Handbook*, the *libbu* is described as experiencing fright, or perhaps as experiencing a trembling sensation associated with fear, with the verb *galātu* in SA.GIG 12, which deals with symptoms relating to the chest:

> **2.** DIŠ GABA-*su* DU$_8$.MEŠ-*át* SAG.KI-*šú* ŠUB-*ut* MÚD *ina* KIR$_4$-*šú pi-qam la* ˹*pi-qam* DU-*ka*˺
> **3.** ŠÀ-*šú pi-qam la pi-qam* MUD-*ud* ŠU ^{d}AMAR.UTU *a-dir-ma* BA.ÚŠ
>
> **2.** If his chest is loose, his temple falls, blood sometimes flows from his nose,
> **3.** his *libbu* from time to time is very frightened, Hand of Marduk, he will be worried and die.
>
> (SA.GIG 12, 2-3)[209]

The verb *parādu* can be used similarly with the *libbu* to describe a fearful state or, possibly, the associated trembling felt in the *libbu*. Although this overview does not address everyday documents, it may be noted that the expression *libbu parādu* occurs in Old Babylonian Mari letters.[210] A similar phenomenon is described in the apodosis of an entry from *Šumma ālu* in which the *libbu* of the people experiences fear: URU.BI ŠÀ ÙG.BI

[208] When combined with the verb *malû*, the *libbu* figures in expressions that denote anger and that further demonstrate its status as the seat of emotion. See CAD M I 179-180 for references.
[209] Following Labat 1951: 100 (Sm 232); Scurlock and Andersen 2005: 3.237, 8.6, 19.235, 20.28.
[210] For example, ARMT 26 169, rev 7. See CAD P 142 for references in OB Mari and in OA.

i-pár-ru-ud "That city, the heart of its people will be afraid" (*Šumma ālu* I 30).[211] The "heart" in its capacity as not only the noetic organ, but also perhaps the physical location of sensations that accompany emotional reactions, seems to be the best translation.

Another example that may be interpreted as conveying the emotive properties of the heart is *marāṣu* "to be sick", the verb whose root is shared by the noun *murṣu* "illness". A *libbu* that is paired with this verb may be sore or sick, and in some contexts, this has an emotional dimension such that the verb can be interpreted as meaning "to be displeased" or even aggrieved. In an Old Babylonian manuscript of the Epic of Gilgameš, the protagonist expresses his grief to the ale-wife for his friend, Enkidu, using this pairing of *libbu* and *marāṣu*: *ana ib-ri-ia li-ib-bi ma-ʾru*ʾ-[*uṣ* x x x] … *ana En-ki-du*$_{10}$ *li-ib-bi ma-ru-ʾuṣ*ʾ [x x x] "For my friend, my *libbu* is sore…For Enkidu, my *libbu* is sore" (VAT 4105 + BM 96974 iii 18, 20).[212] George opts for a translation of "my heart is sick" to capture the emotional pain localized in the emotional *libbu* (2003: 278). The *libbu* seems to be the site of emotional pain and as such, may refer to the organ in the chest area or to the belly more generally, where a physical sensation often accompanies emotional upheaval.

This discussion gives a small sampling of the myriad attestations that illustrate the function of the *libbu* as the seat of thought and emotion. Together with the examples cited above of the *libbu* as the beating heart, the stomach, innards, and other internal organs, this overview of the various meanings of the *libbu* in Akkadian provides a sufficient background of the meaning and usage of the term for the present purpose, which is to

[211] Following Freedman 1998: vol. I, 29.
[212] Following George 2003: 278.

examine its meaning in expressions of emotional distress and disturbance and, more specifically, in the context of *ḫīp libbi* "Heartbreak".

5.1.2.2. The *libbu* in Medical Expressions

With respect to illness, the term *libbu* forms a component in expressions that describe both emotional states and that describe physical ailments, many of which are interpreted as symptoms or illnesses in the abdominal region.[213] Labat notes that many of these expressions do not necessarily correspond to the organ or organs denoted by the term *libbu*, and he cites *ḫip libbi* as an example (1972-1975: 367). In some cases, the type of symptom or the nature of the condition denoted by the term is ambiguous. This section will provide examples of the uses of *libbu* in compound expressions that appear in medical texts and in lexical lists to show the range of symptoms and illnesses that this term can describe. In particular, *kīs libbi* will be investigated as an example of an expression that can represent both physiological and psychological distress.

In the OB List of Diseases,[214] a section of entries that spans at least 28 lines (159-186, after which the manuscripts are broken) lists ailments built around the Sumerogram ŠÀ and their Akkadian equivalents.[215] Many of the symptoms or conditions listed deal with the stomach or intestines. For example, in šà ti-di-il = ŠÀ *e-eb-ṭú* "swollen *libbu*" (OB List of Diseases: 168), šà and its translation, *libbu*, may refer to the stomach or

[213] A more complete list of ailments that incorporate the word *libbu* can be found in CAD L 167. This discussion is intended only to survey some of the lexical and medical material to show the varying contexts in which the *libbu* figures in compound expressions that represent medical complaints and the types of illnesses that these complaints constitute.
[214] Published in MSL IX: 77-89. All excerpts from the OB List of diseases follow this publication.
[215] MSL IX: 79-80. For some of these ailments, the Akkadian equivalents continue to make use of the Sumerogram ŠÀ, rather than writing out the Akkadian *libbi*(*m*) in both the OB and SB recensions of the list (MSL IX: 91).

abdominal region. Two consecutive entries may deal with heartburn, or a symptom that involves a burning sensation in the abdomen or torso:

166. šà bíl-lá *ḫi-mí-*[*iṭ* ŠÀ]
167. šà sìg *ṣú-ru-up* [ŠÀ]

166. hot heart (Sum.) (means) burni[ng of *libbu*]) (Akk.)
167. struck heart (Sum.) (means) burning pain of [*libbu*]
(OB List of Diseases: 166-167)

The latter *ṣurup libbi* is connected with the violation of taboos (MSL IX: 88) and dietary restrictions in hemerologies (Livingstone 2013: 264-265).

The surviving 28 lines in the OB List of Diseases that deal with šà and *libbu* have a few dispersed correspondences in the Standard Babylonian recension (MSL IX: 91).[216] As in the Old Babylonian recension, many of these deal with ailments of the stomach and intestines, including swelling (*napāḫu*) and constipation (*esēlu*) (SB List of Diseases: 5-6). However, unlike in the surviving portions of the Old Babylonian recension, some of these predicate emotional adjectives or conditions onto the logogram šà and its Akkadian equivalent *libbu*. For example, the *libbu* is described as angry over the course of two lines:

6. [šà-ĝu$_{10}$ al-dib] ŠÀ *ú-za-an-ni*
7. [šà(-ĝu$_{10}$) dib] = *ka-ma-lu*

6. [my *libbu* becomes angry (Sum.)] (means) it makes the *libbu* angry (Akk.)

[216] Published in MSL IX: 90-102. All excerpts from the SB List of Diseases follow this publication. Note that the Sumerian portions of each entry include the first person possessive suffix -ĝu$_{10}$, which is not written in the Akkadian translations. It is possible that this is an artefact of the style of Ugu.mu. Since the in-text translations offered above render the Akkadian equivalents that appear in the entries, the possessive suffix is left out of the translations.

7. [(my) *libbu* is angry (Sum.)] (means) to become angry (Akk.)
(SB List of Diseases: 6-7)[217]

One medical expression whose ambiguity illustrates the range of symptoms and illnesses that incorporate the term *libbu* is *kīs libbi*, whose appearance in the SB List of Diseases (l. 1) suggests its status as a pathological condition. Its physical nature can be inferred from references in a number of medical incantations. The symptoms for *kīs libbi* in one medical incantation include flatulence, dry lips, and discoloured eyes, and the remedy focuses on relieving the sufferer specifically of flatulence by expelling "wind" (*šāru*) via the anus or throat (*BAM* 574 ii 21-7; Collins 1999: 77-78, 166-168).[218] Further, the term *kīs libbi* is sometimes abbreviated to *libbu*, perhaps in reference to the belly, in incantations against *kīs libbi.*[219] Outside of the medical tradition, one bilingual incantation in *Utukkū lemnūtu* XII lists *kīs libbi* with ailments of the head, teeth, and heart as part of a ritual to remove various ills from the body of the supplicant.

102. lú ḫul igi ḫul ka ḫul eme ḫul
lem-nu šá pa-ni lem-nu pu-u lem-nu li-šá-nu lem-nu
103. sag gig zú gig šà gig lipiš gig
mu-ru-uṣ qaq-qa-di MIN *šin-ni* MIN ŠÀ *ki-is* ŠÀ-*bi*
104. ka-inim-ma-ne-e sag-gá-na ḫé-éb-ta-an-zi-zi-e-dè
[*ina*] *šip-ti an-ni-ti ina re-ši-šú li-in-na-as-ḫu*

102. Evil one whose face is evil, whose mouth is evil, whose tongue is evil
103. Headache, tooth-ache, heart-ache, belly-ache (*kīs libbi*)
104. By this incantation, may they be removed from him.
(*Utukkū lemnūtu*, 12: 102-104)[220]

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[217] MSL IX: 92.
[218] See also incantations against *kīs libbi* in *STT* 252 (Reiner and Civil 1967: 191).
[219] For example, *BAM* 574 iv 18 (Collins 1999: 155-157). See Collins 1999, "Belly 20" (158-160) and "Belly 21" (160-162). See also Collins 1999: 77-87 for more detailed analysis of *kīs libbi* in medical incantations, including a description of general symptoms.
[220] Within the series, the tablet deals with illnesses and misfortune brought upon by the Sebetti. See Geller 2007: 162, 239. See also Prosecký 1988.

Lines 102-103 show some parallelism in the features of the demon seen as evil and in the location in the body of illnesses to be removed: namely, the face, mouth, and tongue. This may account for the choice of ills listed in line 103, moving from the head downward. However, MIN (= *muruṣ*) *libbi kīs libbi* presents some difficulties to translation. That *libbu* is used consecutively suggests that two separate types of ailments are intended. One possible interpretation is to treat *muruṣ libbi* and *kīs libbi* as two different types of *libbu* pain, perhaps one physical and one emotional. An alternative would be to translate *muruṣ libbi* as sickness of heart, or more simply "heartache", and *kīs libbi* as sickness of belly, or "bellyache".

The medical incantations and this attestation of *kīs libbi* in *Utukkū lemnūtu* XII thus suggest it refers to a physiological symptom or condition suffered in the abdominal region. However, in the Assyrian dream-book, *kīs libbi* is contrasted with *ḫūd libbi* "joy of heart":

10. DIŠ ^{giš}GEŠTIN GU$_7$ *ḫu-ud* ŠÀ-*bi*
11. *šum$_4$-ma* *ki-is* ŠÀ-*bi*

10. If he eats a single grape, joy of heart;
11. if (*ditto*), *kīs libbi*

(Dream-book: obv iv 10-11)[221]

Oppenheim translates the latter as a broken heart in his edition of the Dreambook (Oppenheim 1956: 272). To contrast *kīs libbi* with an emotional state may suggest an

[221] Following Oppenheim 1956: 316.

emotional dimension to the expression and warrants an interpretation of *libbu* not – or not only – as belly, but as the site and source of psychic phenomena.[222]

The attestations of expressions built around the *libbu* in lexical texts and the example of *kīs libbi* illustrate the flexibility of the *libbu* in medical language. These entries from the OB and SB List of Diseases illustrate the variety of ailments in which the *libbu* forms a component. In some of the entries, the *libbu* seems to refer to the literal organ that experiences discomfort, such as swelling, constipation, and burning. Others, however, may employ the *libbu* in its capacity as the seat of thought and emotion. The nature of the *libbu*'s referent (stomach, heart, mind, etc.) and the symptom or condition described must in some cases be deduced from context.

Given the flexibility in the *libbu*'s meaning and usage, it is possible to treat this term as a salient bodily metaphor, where metaphor is understood in the context of medicine as defined in §3.1.3.3. The use of *libbu* in expressions of distress provides information about the way certain symptoms, such as anger, burning, and soreness, were experienced and structured according to bodily concepts; the *libbu* offers a metaphor that reflects an acceptable mode of expression and that may even be tailored to available therapies meant to treat the physical *libbu* itself, rather than the more abstract emotional experience.

A recurring ailment in medical therapeutic texts, referenced only once in the *Diagnostic Handbook* in its present state of preservation, is *ḫīp libbi* "Heartbreak". Although the term occurs only once in the *Diagnostic Handbook* in a broken context, the use of the term in therapeutic texts suggests it to be a form of anxiety, and for this reason,

[222] A medical commentary to a ŠÀ.ZI.GA incantation seems to suggest a similar emotional dimension in explicating *kīs libbi* with *nazāqu* (*SpBTU* II 39, 4), but the reading is uncertain.

it is included in this study as a core mental symptom. The experiences and complaints organised with *ḫīp libbi* "Heartbreak" are instructive of dominant patterns in the expression of mental symptoms and mental disorder, as is the expression itself, which provides information about a salient bodily metaphor used in the description of mental distress and disorder.

5.1.3. *ḫīp libbi* "Heartbreak"

Now that the individual components of the term *ḫīp libbi* "Heartbreak" have been discussed, the expression itself may be considered as a whole. This section will consider references to *ḫīp libbi* "Heartbreak" in lexical texts and in one Late Babylonian medical text to shed further light on its meaning and to provide a sufficient backdrop to references in the diagnostic corpus.

A few words must first be said about how *ḫīp libbi* has previously been interpreted, as it is necessary to decide on a translation for reference and for future use. Scurlock translates *ḫīp libbi* as a "crushing sensation in the chest" and "crushing of the heart".[223] Ritter and Kinnier Wilson favour "nervous breakdown" as a translation, which captures the mental component even though it departs from the original Akkadian terms (1980: 25). In an article on Akkadian anatomical and pathological terms, P. Adamson briefly addresses the phrase *ḫūṣ ḫīp libbi*, for which he offers an interpretation as abdominal pain associated with cardiac angina, "a pain associated with ischaemia of cardiac muscle and aggravated by actual physical exercise" (1981: 126). This latter characteristic may have accounted for the association of this pain with impotence, which

[223] As in Scurlock 2006: 346; Scurlock and Andersen 2005: 168-169; 370-371.

Adamson posits based on the occurrence of Heartbreak in the *Diagnostic Handbook* (SA.GIG 13: 161′)[224] and in the therapeutic text *AMT* 85/1 vi 8 (1981: 131 n22).

Stol offers a translation that is faithful to the original Akkadian while capturing both the psychological and possibly somatic components of the expression: in his section on Melancholy that forms part of his epilepsy study, he translates the expression as "Heartbreak" (2003: 27). After a brief survey of the occurrence of these terms in therapeutic texts and in Old Babylonian and Assyrian letters, he concludes that

> a man with a broken heart can be ill-tempered, suspicious, have a nervous breakdown, be full of apprehensions, be worried, or in a panic. He could be called a 'melancholic' which can include being a hypochondriac and neurotic. (Stol 1993: 31)

From Stol's interpretation and from the numerous translations of the term that have been offered in the secondary literature, it seems that *ḫīp libbi* can have a range of meanings in different contexts and genres. However, in medical texts from the first millennium BCE, its meaning seems to be more restricted, and it is consistently organised with a similar repertoire of symptoms.

"Break of the *libbu*" offers a more literal, if clumsy and incomplete, translation, and given the semantic range of *libbu*, it seems justified to leave this word in the original Akkadian. It has been shown that *libbu* can mean anything from the insides, to specific internal organs, to the mind or mood. Both the *libbu*-as-insides or *libbu*-as-organ, and to the *libbu*-as-mind or *libbu*-as-mood, might be the object of the break. At the same time, it is not necessary to separate the physiological from the psychological in our understanding of *libbu*. The Akkadian conception of psychology might not be consistent or compatible

[224] See below §5.2.1 (*Libbu* 1).

with a dualistic view of the mind and body, wherein mind and body are conceptualised as separate substances. The native schema that can be reconstructed from the Akkadian diagnostic texts tends to express psychological phenomena in physical terms, as evidenced in the meaning and usage of *libbu*, and as will be shown in general patterns in the description of mental symptoms.

With its wide semantic range that permits both literal and figurative understandings of this term, the English word "heart" offers a possible translation for *libbu* that encompasses both the physiological (though limited to only one of the many body parts to which the Akkadian term can refer) and psychological referents, and that therefore does justice to the overlap in these two aspects of the *libbu*. Thus, where the expression *ḫīp libbi* is translated, Stol's interpretation of "Heartbreak" is preferred.

5.1.3.1. *ḫīp libbi* "Heartbreak" in Lexical Texts

It is useful to begin with information provided in lexical texts and medical commentaries. The OB Lu-Series has an entry for a man "whose heart is broken" between entries that elaborate several terms for fear and one that describes a man suffering from intestinal problems:

46.	lú ní-te	=	*pa-ar-du*
47.	lú ní-te	=	*pa-al-ḫu*
48.	lú ní-te-te	=	*pa-ˀalˀ-la-ḫu*
49.	lú šà dar	=	[*šá li-ib*]*-ba-*<*šu*> *ḫe-pu-ú*
50.	lú šà ti-ki-il	=	*ša li-ib-ba-šu ˀedˀ-du*

46.	one who is afraid	=	afraid one
47.	one who is afraid	=	reverent one
48.	one who is very afraid	=	very reverent one
49.	one whose heart is broken	=	one whose *libbu* is broken

50. one whose belly is swollen = one whose *libbu* is swollen[225]
(OB Lu-Series, Recension B col v 46-50)[226]

The entries go on to list several other states or conditions built upon the logogram ŠÀ, of which several have a psychological character (e.g., zaraḫ = *na-as-šu* "wretched", v 55). Further along in the tablet, a generally sick (gig) heart in Sumerian is elaborated in the Akkadian:

10. lú šà sìg = *ša li-ib-*[*ba-šu ṣa-ar-pu*]
11. lú šà ˹gig-ga˺ = *ša li-ib-ba-šu* ˹*mar*˺-[*ṣu*]

10. one whose *libbu* is burnt = one whose *libbu* is burnt
11. one whose *libbu* is sick = one whose *libbu* is sick
(OB Lu-Series, Recension B col vi 10-11)[227]

Although *ṣarāpu* generally means "to burn", the root from which it derives, *ṣ-r-p*, is also the same one that gives rise to the adverb *ṣarpiš* "bitterly, grievously, loudly" (CAD Ṣ 112-113).[228] Regarding the entries that give the Sumerian and Akkadian for "one whose *libbu* is sick", this pairing of *libbu* with *marāṣu* was encountered above in a context that suggests mental anguish; the phrase *libbī maruṣ* "my *libbu* is sore" (*li-ib-bi ma-ru-*˹*uṣ*˺) describes the reaction of Gilgameš to the death of Enkidu. A "sore" or "sick" *libbu* can describe grief, though in a lexical context, the intended meaning of the bilingual translations may be more literal.

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[225] The parallels to this line suggest such a meaning. See also OB List of Diseases 168: šà-ti-ki$^{!}$-il = ŠÀ *e-eb-tu*; Erimḫuš VI 237: šà ti-[x]-il = *ṣe-me-ru*. See MSL XII 189-190.
[226] MSL XII: 185.
[227] MSL XII: 185.
[228] Recall that *ḫuṣṣu* was explicated with reference to burning in *GCCII* 406: 10 (§5.1.1). Is it possible that burning served as a general metaphor for pain, or that the semantic overlap between burning and experiencing pain was commonplace?

The OB Lu-series, of which there are four known recensions, is distinguished from Lu-ša and its forerunners in that it "has a wider anthropological outlook" containing for the most part "terms for psychological qualities, bodily characteristics, morbid states, and general human activity, usually of a non-professional character" (Biggs et al 1969, MSL XII: 151). The text is replete with examples of psychological states and elaborations of illness terms and descriptions. For example, Recension A dedicates a sequence of entries to mental states, including strangeness and madness (ll. 115-117), speech problems (ll. 118-119), foolishness (l. 121), and weeping and moaning (ll. 127-129). The general character of this lexical text may thus explain the inclusion of various translations for qualities and, in some cases, ailments of the šà and *libbu*, as a physiological organ and the seat of thought and emotion central to human life.

5.1.3.2. *ḫīp libbi* "Heartbreak" in a Late Medical Text

The main source for information about *ḫīp libbi* "Heartbreak" in the medical corpus comes from therapeutic texts, which consistently list this symptom with signs of emotional disturbance. These texts will be discussed in Chapter 7, where they are used to supplement the sparse references to this condition in the *Diagnostic Handbook*.

The way that *ḫīp libbi* "Heartbreak" is organised in a medical text from late Babylonian Uruk, *SpBTU* I 43, which lists diseases associated with parts of the body, supports an interpretation of this symptom as a mental one.[229] Several features of the commentary are discussed in detail in Geller's edition of the text, which forms part of his

[229] The unique features of this text are treated extensively by Geller in 2010b: 3ff. Earlier treatments include the original edition provided by Hunger in *SpBTU* I 43; Köcher 1978: 22-25; Stol 1993: 26-27; Geller 2001/2002: 61; Geller 2004b: 34-38; Heeßel 2004: 113-114.

study on the relationship between Babylonian medicine and astrology (2010b: 4ff.). First, the text shows little interest in fevers that, as demonstrated in Stol's study of fevers, play a major role in the Akkadian medical tradition (Stol 2007; Geller 2010b: 8). Secondly, Geller notes that, while other examples of texts that list diseases are available, such lists are "never in association with specific internal organs or parts of the human anatomy" (2010b: 8). Heeßel suggests that the text reflects a shift in the approach to medicine more generally – a shift that unfortunately cannot be dated with precision – from one that focuses on the divine origin of diseases to one concerned with the bodily origin: "the symbolic meaning of diseases does not appear in this text, but instead the text displays an interest in how diseases work, which organs produce what kind of disease" (2004a: 113).

The lines of the text that support a mental interpretation of Heartbreak appear at the beginning:

1.	*ul-tu lìb-bi*	GAZ ŠÀ-*bi*
2.	KI.MIN	AN.TA.ŠUB.BA
3.	KI.MIN	ŠU DINGIR.RA
4.	KI.MIN	ŠU ^{d}INNIN
5.	KI.MIN	*be-*^{r}*en*$^{\urcorner}$*-nu*
6.	KI.MIN	$^{d\lceil}$LUGAL.ÙR.RA$^{\urcorner}$

1. From the heart, Heartbreak;
2. ditto, falling-disease;
3. ditto, Hand of God;
4. ditto, Hand of Goddess;
5. ditto, epilepsy;
6. ditto, epilepsy.

(*SpBTU* I 43: 1-6)

A disease classified as originating from the heart (*ultu libbi*), *ḫīp libbi* "Hearbreak" is grouped with conditions that have a strong mental component. These include the various

epilepsies: AN.TA.ŠUB.BA, *bennu*, and Lugal-urra. As Geller notes in his analysis of this passage, "The important point is that 'seizure' and 'epilepsy' were often treated as psychic rather than simply physical diseases" (2010b: 6). In an earlier treatment of the text, Geller draws a comparison in the division of diseases found on *SpBTU* I 43 to the later Greek *De affectionibus interioribus* and notes that "All diseases associated with the 'heart' are diseases which were later associated with the brain in later Greek medical lore, namely epileptic-like seizures and depression" (2004b: 36). Indeed, Stol's study of epilepsy addresses in detail conditions and symptoms that regularly occur with epilepsy, and mood disorders, including *ḫīp libbi* "Heartbreak", are among them (1993: 23-53).

While this particular medical commentary displays unusual features, the illnesses listed in lines 2-6 are grouped together elsewhere, such as in *KAR* 44, the so-called "Exorcist's manual" (rev. 10-11).[230] That this work classifies them together suggests that the illnesses in this group share some common characteristics and, perhaps, even that this grouping of conditions with a mental component enjoyed a canonical status.[231] In *KAR* 44 rev. 10, two terms that describe epilepsy appear with Hand of God, Hand of Goddess, and Hand of Ghost.[232] With respect to the grouping of these terms in *KAR* 44 rev. 10, Geller notes it shows that "these illnesses were already classified as a group with common characteristics" that were "to be treated with a medical *bulṭu* or recipe rather than with incantations" (2010b: 6). In the following line, various Hands are listed, including those associated with mental disturbance, such as the Lilû demon (LÍL.LÁ.EN.NA). Hand of God and Hand of Goddess are elsewhere considered reflections of impotence (Geller 2010b:

[230] A recent edition of this text is published by Jean in her study of the exorcist and exorcism in Neo-Assyrian texts (2006).
[231] See also Jean 2006: 70.
[232] These are also grouped together in therapeutic texts, as in *BAM* 531 (Geller 2000: 254).

6), which appears with *ḫīp libbi* "Heartbreak" in its sole surviving attestation in the *Diagnostic Handbook* and in various attestations of *ḫīp libbi* "Heartbreak" in therapeutic texts.[233]

For this recurring group of psychological diseases to be explained as issuing from the heart may suggest that *ḫīp libbi* "Heartbreak" shares the mental component that characterizes them. At any rate, for the epilepsies to issue from the stomach or belly is not consistent with conceptions and descriptions of this illness in the *Diagnostic Handbook* and therapeutic texts. As with the grouping of *ašuštu* "Depression" in incantations and lexical lists of diseases,[234] the way *ḫīp libbi* "Heartbreak" is grouped here suggests that the term may be understood as referring to a psychological ailment; in this compound expression as it occurs here, *libbu* is used in its capacity as the seat of emotions and thought.

At the same time, given the consistent overlap in the heart's function as a physiological organ and as the seat of psychic life, it may not necessarily be useful to separate these meanings, to extract the mental from its physical location. It is more useful to understand the *libbu* as an organ that is both the physical site of the experience of discomfort, distress, or disorder, as well as the figurative (or perhaps literal) seat of thought and emotion. It has, in other words, both a biological and emotional referent, in some cases understood simultaneously or contiguously, and in others, understood separately. For this reason, a more literal translation, "Heartbreak", of the Akkadian compound expression that retains the name of the internal organ, as it is variously understood, has been adopted. In other words, "heart" in this expression can be

[233] Geller cites *BRM* 4 20:30; *STT* 300 15; LBAT 1597: 11′ (2010: 6).
[234] See §4.1.3.1.

understood to refer to the interior of the torso – the literal heart, as well as the belly and chest area – and to the function of this part of the body as the seat of thought and emotion.

5.2. Texts for *ḫīp libbi* "Heartbreak"

5.2.1. *Diagnostic Handbook* 13, 157′-162′ (*Libbu* 1)

Although the single known entry in the *Diagnostic Handbook* that refers to *ḫīp libbi* is partly broken, in the interest of completeness, it must be included among the texts here. SA.GIG 13 deals with symptoms relating to the *libbu* (ŠÀ) and its various parts, such as the epigastrium (SAG ŠÀ) and intestines or bowels (ŠÀ.MEŠ). The entries that precede and follow the line that references *ḫīp libbi* have also been included. The except does not form a cohesive passage, but these additional lines are included in an effort to narrow, in light of the semantic range of *libbu*, the scope of what the term may be referring to and how *ḫīp libbi* "Heartbreak" is intended in the relevant entry (l. 161′).

157′. [DIŠ… SAG] ŠÀ-*šú za-qir* […]
158′. [DIŠ…] BÀD ŠÀ-*šú ana* SIG$_7$-*šú is-niq* […]
159′. [DIŠ …] ÍL ŠÀ-*šú ṣa-bit* ŠU ^{d}XV *ana ki-*˹x˺ […]
160′. [DIŠ…]-*ka* ÍL ŠÀ-*šú* A *tab-ku* ŠU [^{d}XV?]
161′. [DIŠ…] ˹*ḫu*˺-*uṣ-ṣa* GAZ ŠÀ TUKU.MEŠ-*šu* ŠU ^{d}XV ˹ ŠU […]
162′. [DIŠ…] *pa-pan* ŠÀ-*šú* DU-*ak* ŠU […]

157′. [If…] his [epi]gastrium is protruding […]
158′. [If…] the wall of his stomach[235] is turning yellow[236] […]

[235] Labat translates *dūr libbi* as diaphragm based on the Arabic *ḥajar bain aṣ-ṣadr wa al-baṭn al-ḥajāb al-khājiz* (1951: 125 n224). See also *dūr libbi* in a sequence with *libbu*, *šaman libbi*, and *rēš libbi* in an OB extispicy text (YOS 10 42 ii 12; YOS 10 14, 16, 19, 21, and 23; cited in CAD D 197).
[236] Labat has "[*š.* ……] *dûr libbi-šú ana ḫašî-šú is-niq imât* '[Si ……, et si] son diaphragme(?) presse ses poumons : il mourra'". However, the sign he transcribes as *ḫašû* "lungs" appears not to be a MUR or a MUR.II, but a SIG$_7$ = *(w)arāqu* "to be(come) green-yellow; pale"

159′. [If…] his sexual potency is seized, Hand of Ištar, to … […]
160′. [If…] his sexual potency (lit. rising of his *libbu*),[237] semen pours out, Hand of [Ištar?]
161′. [If…] he perpetually has pain, Heartbreak (*ḫuṣṣa ḫīp libbi*), Hand of Ištar; Hand of […]
162′. [If…] his bellybutton goes, Hand of […]
(SA.GIG 13, 157′-162′ = *Libbu* 1)[238]

One possible reconstruction of the broken introductory section of each of the excerpted lines may follow the protases of lines 139′-144′ of the same tablet preceding the portion where the left side begins to show damage: DIŠ ŠÀ ŠÀ GÙ-*si* "If he cries out, 'My insides, my insides!'".[239] The same description forms part of the protases of lines 146′ and 152′-154′, but appears after a short broken section in which a different primary symptom may have been named. The expression *ḫīp libbi* appears in line 161′ following the enigmatic *ḫuṣṣa*.

It is difficult to say anything with certainty about the arrangement of entries or the meaning of terms, given the broken context. Lines 157′-158′ possibly deal with the epigastrium and diaphragm, while lines 159′-160′ deal with male sexual potency (*nīš libbi*). In line 159', the reference to Hand of Ištar suggests that impotence is being dealt with, as she is widely associated with this condition in the *Diagnostic Handbook* and in the ŠÀ.ZIG.GA incantations.[240] The additional symptom of *riḫûtu*(A) *tabkū* "semen is

[237] See §5.1.2.1.1.3.
[238] *LKU* 102: 7-12. Line numberings follow Heeßel 2000: 144. See also Labat 1951: 126; Scurlock and Andersen 2005: 14.13, 19.162.
[239] This expression recurs in numerous contexts throughout the *Diagnostic Handbook*. In some cases, it seems to refer explicitly to stomach pain (e.g., Geller's translation of SA.GIG 13, 161' reads: "if a patient cries, 'my stomach, my stomach!' he has stomach cramp (and) internal distress – it is the Hand of Ištar" (Geller 2010: 151).), but in others, it is associated with unrelated symptoms, including those lines that precede the ones excerpted for *Libbu* 1, SA.GIG 13, 139′-147′. For this reason, the more general term of "insides" is preferred as a translation. See §7.3.1.2.
[240] For example, KUB 37 82:4. Ištar also regularly appears in incantations: for example, *LKA* 95 rev. 17 (Biggs 1967: 17); Biggs 1967: 27-32). One text (*KAR* 70: 1-10) gives instructions for an omen to determine the cause of loss of potency, one of which is Hand of Ištar (l. 9), and the other being sorcery (l. 10). See

poured out" in line 160′ suggest that this line may also deal with issues relating to male libido or sexual health, as the phrase seems to suggest some sort of discharge.[241] Hand of Ištar is, however, also closely associated with emotional disturbance in other contexts, many of which are discussed in this study. Therapeutic texts do often group together a protruding epigastrium, impotence, and *ḫīp libbi* "Heartbreak" or other terms for depression, so the juxtaposition is not unexpected and does not exclude the emotional dimension of *ḫīp libbi*.[242]

Symptoms: pain (*ḫuṣṣa*), Heartbreak (*ḫīp libbi*), protruding epigastrium, yellow stomach lining, sexual dysfunction, bellybutton
Diagnosis/Aetiology: Hand of Ištar, Hand of [X]

5.2.2. *Diagnostic Handbook* 26, 26′-29′ (*Libbu* 2)

Although the following entries do not make reference to *ḫīp libbi* "Heartbreak", they do include a symptom that describes the patient's *libbu* (ŠÀ) as continually breaking with the verb *ḫepû* (GAZ) "to break", which derives from the same root as *ḫīp* (GAZ). Tablet 26 of the *Diagnostic Handbook* is the first in the subseries that deals with epilepsy, *šumma miqtu imqussūma* "When a fall befalls him" (SA.GIG 26-30). The entries for *Libbu* 2 fall within the section that deals with *ḫayyattu* (LAL) "fit", a term that can refer to

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also Stol 1991-92: 45, with notes 17 and 18 for other examples of her association with sexual dysfunction. See Stol 1999: 57-58.

[241] Though the logogram read here as referring to semen (A) is used, it is possible that general penile discharge is being described. A symptom that appears in potency incantations describes a discharge from the penis, characteristic of the sexually transmitted disease, gonorrhoea, but possibly mistakenly identified as semen. See Biggs 1967: 3 n16 for examples. This may also be the case in several therapeutic texts against witchcraft (*CMaWR* 2.5.1, 2′-3′; 2.5.3, 3).

[242] See §7.3.1.1.

an epileptic fit, or a fit caused by fear, panic, stroke, fever, or other physiological or psychological reactions to stimuli.[243]

26′. ⌜DIŠ U_4⌝ LAL-*šú ta-lam-ma-šú* DUGUD-*su u ú-zaq-qat-su* EGIR-*nu*
27′. LAL-*šum-ma* NÍ-*šú i-maš-ši* AN.TA.ŠUB.BA *ina ma-šal* u_4-*mi* DUGUD-⌜*su*⌝
28′. DIŠ U_4 LAL-*šú* SAG.KI.II-*šú* GU_7.MEŠ-*šú* ŠÀ-*šú* GAZ.MEŠ-*šú* EGIR-*nu* ŠU.II-*šú u* GÌR.II-*šú ú-kap-*⌜*pár*⌝
29′. BAL.BAL-*ut* ÚḪ NU TUKU *u it-ta-nag-ra-ár* ŠUB-*tu* ⌜*ḫa-mi-tu*$_4$ ŠU ^{d}XV ZI-*bi*

26′. If at the time it[244] overwhelms him, his torso(?) is heavy for him and gives him stinging pain; later,
27′. it overwhelms him and he forgets himself: Falling-Sickness; in the middle of the day, it will be heavy for him.
28′. If, at the time it overwhelms him, his temples cause him pain, his heart (*libbu*) continually breaks; later, he rubs his hands and feet,
29′. he turns over, he does not have saliva, and he is made frightened; *ḫamītu*-disease, Hand of Ištar; it will go away.
(SA.GIG 26, 26′-29′ = *Libbu* 2)[245]

The symptom described as ŠÀ-*šú* GAZ.MEŠ-*šú* "his *libbu* continually breaks" is unclear here and may of course be unrelated to *ḫīp libbi* "Heartbreak". Based on the semantic range of *libbu*, at least two possibilities present themselves: firstly, abdominal pain or cramps, or secondly, anxiety associated with *ḫīp libbi* "Heartbreak".

The observation that the patient has no saliva, presumably in reference to saliva that runs from the mouth during an epileptic fit, suggests that the condition described in the entry may not be a *bona fide* epileptic fit. Furthermore, the patient is described as being made to feel afraid with *garāru* Ntn "to shy away, become scared, to be in a panic" (CAD G 49). Stol suggests this meaning in his commentary to this line: "Instead of the

[243] See Stol 1993: 42-46.
[244] This carries over from the beginning of this section at lines 15′-16′, which begin: DIŠ ⌜LAL⌝-*šú* LAL-*šum-ma* "If his fit overwhelms him" (following Stol 1993: 44-45, 60f.).
[245] Following Heeßel 2000: 280 and Stol 1993: 60f; Scurlock and Andersen 2005: 13.201, 13.42, 16.66, 19.14.

translation ‘he is rolling over’ for *ittanagrar*, ‘he is made frightened’ could be possible, deriving the form from the verb *garāru* with this meaning” (1993: 62). To support this interpretation, he cites a medical commentary to a ŠÀ.ZIG.GA incantation, which explains *garāru* with reference to the verb *palāḫu* (*SpBTU* II 39, 3).[246] While the meaning of the expression “his *libbu* continually breaks” as it appears in these entries remains ambiguous, the passage was included in the interest of including all references in the *Diagnostic Handbook* that deal (directly or indirectly) with *ḫīp libbi* “Heartbreak”.

Symptoms: fit, temple pain, breaking heart (*libbu*), rubbing hands and feet, turning over, absence of saliva, fear
Diagnosis/Aetiology: *ḫamītu*-disease, Hand of Ištar

5.2.3. *Diagnostic Handbook* 3, 39-40 (*Libbu* 3)

Like *Libbu* 2, these entries do not directly reference *ḫīp libbi* “Heartbreak”, but rather include a verbal expression that employs the same components. These entries form part of SA.GIG 3, which deals with symptoms relating to the head and skull.

39. DIŠ SAG.DU-*su* DAB.DAB-*su* GÙ-*su* TAG.TAG-*su* GABA-*su* GU$_7$.MEŠ-*šú*! ŠÀ-*šú* GAZ.MEŠ-*šú i*[*t-ta-na-ad-là*]*ḫ*[247]
40. GU$_7$ *u* ⌜NAG⌝ NU GUR-*ma* GU$_7$ *u* NAG ^{d}XV MU É *er-bet-ti* ÚŠ.ME-*šú šá-niš ana* MUNUS MU *a-rin u sa-ma-li* [*ana* KI.SIKIL.BÀN.D]A[248] MU *ki-gul-lim áš-tam-mi*

[246] The source text for this commentary is possibly Biggs 1967: 50. Von Weiher’s note on this line in *SpBTU* II 39 makes the same observation. See also ŠÀ-*šú ig-da-na-ru-ur* “his heart becomes scared” (*BAM* 145, 9). In the same therapeutic tablet, the heart is also described as ŠÀ-*šú e-ta-na-áš-šá-áš* “his heart is continually distressed” (*BAM* 145, 7). See Stol 1993: 62 n25.
[247] This restoration follows from the medical commentary to these lines *STT* 403 rev. 35 (Scurlock and Andersen 2005: 751 n6).
[248] This restoration follows from the medical commentary *STT* 403 rev. 40 (Scurlock and Andersen 2005: 751 n7).

> **39.** If his head continually seizes him, his neck continually touches him, his chest continually causes him pain, his heart (*libbu*) continually breaks, he is [continually distu]rbed,
> **40.** he eats and he drinks, without eating and drinking again (lit. he does not return and eat), Ištar continually pursues him; because of a crossroads (lit. house of four); alternatively, for a woman, (it is) because of well and cup; [for an adolescent girl] (it is) because of place of mourning (and) *inn*.
> (SA.GIG 3, 39-40 = *Libbu* 3)[249]

The primary symptom of a head that continually seizes is organised with a neck that touches him, chest pain, and a heart (*libbu*) that continually breaks (l. 39). In addition, the patient suffers from a lack of appetite, expressed as eating and drinking without wanting to (l. 40). The *libbu* may refer to the belly, whose "breaking" may explain the lack of appetite. Equally, the symptoms of neck and chest pain, and a lack of appetite could be interpreted as somatic symptoms associated with mental distress, expressed with the idiom of the *libbu* that continually breaks. The apodosis unfortunately does not provide further clarification. Therefore, these lines must presently remain open to interpretation.

Symptoms: seized head, neck and chest pain, breaking heart (*libbu*), loss of appetite
Diagnosis/Aetiology: Ištar

5.2.4. Therapeutic Text *BAM* 316, obv. iii 8′-iv 4 (*Libbu* 4)

The following passage is from an unedited therapeutic text that deals extensively – indeed, almost exclusively – with *ḫīp libbi* "Heartbreak" and the semantically related *libbašu itteneḫpīšu* "His heart continually breaks", encountered in *Libbu* 2 and *Libbu* 3.[250]

[249] Following Labat 1951: 20, 22; Scurlock and Andersen 2005: 19.5. See also Scurlock and Andersen 2005: 751 n8-9.
[250] This translation is based on Köcher's drawing of the relevant columns of this tablet and has not been collated with the original tablets and fragments. See Appendix C for translation and additional notes.

Indeed, the latter verbal expression as used in this core text may help to clarify its meaning in the *Diagnostic Handbook* as indicative of a mental symptom. As noted in Chapter 3 in which the core texts were explicated, this passage forms an exception to the main criterion for the other core texts for this study: namely, the criterion of being a diagnostic text. This exception was made for *ḫīp libbi* "Heartbreak" due to the paucity of surviving references in the *Diagnostic Handbook* and to the unique attention paid to this symptom in this particular therapeutic text. The entries not only pair *ḫīp libbi* "Heartbreak" with a number of mental symptoms, but also provide information about a possible aetiology and include detailed instructions for treatment of these various occurrences of this symptom.

obv. iii
8′. DIŠ NA ŠÀ-*šú* GAZ.MEŠ-*šú pi-qam* NU *pi-qam i-pár-ru-ud*
9′. NA BI DIB-*ti* DINGIR *u* ^{d}*iš*$_{8}$-*tár* UGU-*šú* GÁL-*ši* DINGIR-*šú* KI-*šú ze-ni*
10′. *ana* BÚR KA.A.AB.BA ^{ú}*nu-ṣa-bu* ^{giš}SUR.MIN ^{ú}NIGIN^{sar}
11′. ^{na4}ZÁLAG ^{ú}DILI *ina* ^{síg}ÀKA NIGIN-*mi ina* KUŠ DÙ.DÙ
12′. *ina* GÚ-*šú* GAR-*an-ma* DINGIR.ŠÀ.DIB.BA SILIM-*im*
13′. DIŠ NA GAZ ŠÀ-*bi* TUKU.MEŠ-*ši* U$_{4}$ *u* GE$_{6}$ *pu-luḫ-tú* TUKU-*ši*
14′. DINGIR-*šú* KI-*šú ze-ni* DINGIR-*šú* KI-*šú ana* SILIM-*me* ^{ú}*ši-qit-tú*
15′. KA.A.AB.BA ^{na4}BABBAR.DILI ^{na4}*èš-me-kám*
16′. *ḫa-ḫe-e šá* UDUN ZÌ.MAD.GÁ IGI ^{d}NUSKA *ina* KUŠ
17′. DIŠ NA ŠÀ-*bi* GAZ.MEŠ-*šú* ^{ú}IGI-*lim* MÚD ^{giš}ESI GU$_{7}$.MEŠ
18′. *ina* KAŠ ˹NAG˺ Ì.GIŠ EŠ.MEŠ *ina* ^{síg}ÀKA NIGIN-*mi ina* KUŠ
19′. DIŠ KI.MIN ^{ú}A.ZAL.LÁ ŠÌTA *ina* KAŠ NAG-*šú*
20′. DIŠ NA ŠÀ-*šú nu-ul-la-ti i-ta-mu*
21′. ^{ú}*er-kul-la* ^{ú}*tar-muš*$_{8}$ ^{ú}ḪAR.HUM.BA.ŠIR
22′. ^{ú}LÚ-*a-nu* ÚḪ.^{d}I$_{7}$ KA.A.AB.BA *ina* KUŠ
23′. DIŠ NA *ḫu-uṣ-ṣa* GAZ ŠÀ-*bi u* SAG.PA.LAGAB TUKU.MEŠ-*ši*
24′. *nu-ul-la-ti* ŠÀ-*šú i-ta-mu*
25′. ^{ú}A.ZAL.LÁ ^{ú}IGI-*lim ina* KAŠ *ina* Ì.GIŠ *ina* KUŠ

rev. iv
1. DIŠ KI.MIN ^{ú}IGI-*lim* NUMUN ^{giš}*bi-ni* ˹NUMUN˺ [x x x x (x)]
2. DIŠ KI.MIN ^{ú}*a-ra-ri-a-nu* NUMUN ^{giš}*bi-ni* NUMUN ^{ú}A.ZAL.LÁ *ina* KAŠ SAG NAG

3. DIŠ NA ŠÀ-*bi* ŠÀ-*bi i-qab-bi* ŠÀ-*bi* NU GU$_7$-*šú* NINDA NU GU$_7$ A NU NAG
4. *i-dam-mu-*⌜*um*⌝ NA BI DIB-*ti* DINGIR-*šú u* ^{d}*iš*$_8$-*tár-šú* UGU-*šú* GÁL-*ši*

obv. iii

8′. If a man, his heart continually breaks, (and) on repeated occasions, he is afraid,
9′. that man, anger of god and goddess is over him, his god is angry with him.
10′. To release (it), 11′. you hem 10′. *imbuʾ tâmti*-mineral, *nuṣābu*-plant, cypress, *supālu*-juniper
11′. *zalāqu*-stone and "solitary" plant into a garment, you lace (them) (together) in a leather (bag),
12′. and you place (it) around his neck, and the angry god is reconciled.
[ruling]
13′. If a man continually has Heartbreak (*ḫīp libbi*), day and night he has fear,
14′. his god is angry with him, to make his god reconciled with him, sweet almond,
15′. *imbuʾ tâmti*-mineral, *pappardilû*-stone, malachite,
16′. spittle of a kiln, flour before Nuska in a leather (bag).
17′. If a man, (his) heart continually breaks, you make him eat 'heals-a-thousand'-plant, blood of ebony,
18′. you make him drink (it) in beer, you anoint him with oil, you hem (it) in a garment, in a leather (bag).
[ruling]
19′. If *ditto* (=(his) heart continually breaks), you grind up *azallû*-plant and make him drink it in beer.
20′. If a man, his heart ponders foolishness,
21′. *erkulla*-plant, lupine, *ḫarmunu*-plant,
22′. plant of mankind, *ruʾtītu*-sulphur, *imbuʾ tâmti*-mineral, in a leather (bag).
[ruling]
23′. If a man continually has pain, Heartbreak (*ḫuṣṣa ḫīp libbi*) and grief,
24′. his heart ponders foolishness,
25′. *azallû*-plant, 'heals-a-thousand'-plant in beer, in oil, in a leather (bag).

rev. iv

1. If *ditto* (=his heart ponders foolishness), 'heals-a-thousand'-plant, [you …] seed of a tamarisk, se[ed of a …].
[ruling]
2. If *ditto* (=his heart ponders foolishness), you make him drink *ararianu*-plant, seed of a tamarisk, seed of an *azallû*-plant, in choice beer.
[ruling]
3. If a man says, "My insides! My insides!" (but) the *belly* does not hurt him, he does not eat bread, he does not drink water,
4. he moans; anger of his god and his goddess is over him.

(*BAM* 316, obv. iii 8′-iv 4 = *Libbu* 4)

The *materia medica* prescribed for treatment, as well as the instructions for their preparation, will not be discussed in this study, since the focus is on symptoms.

This passage is unique in that all of the symptoms that occur with *ḫīp libbi* "Heartbreak" and *libbašu itteneḫpīšu* "his heart continually breaks" are mental symptoms, many of which directly describe states of mind or emotions. These are fear (iii 13′), grief or wailing (iii 23′), thinking foolish thoughts (iii 20′ and 24′), crying out (iv 3), and moaning (iv 4). Although it does not directly reference *ḫīp libbi* "Heartbreak" column iv resumes one of the symptoms organised with it in the previous diagnostic introduction (iii 23′), that of pondering foolishness. With foolish thoughts, two additional symptoms are described in 3-4. Crying out "My insides, my insides!" (col. iv 3) can be an exclamation of general anguish or may specifically indicate stomach pain. Also encountered for *ašuštu* "Depression" (*ašuštu* 3; *ašuštu* 7) and in the *Diagnostic Handbook* with *libbašu itteneḫpīšu* "his heart continually breaks" (*Libbu* 3), a reduced appetite is described (col iv 3). Finally, moaning (col iv 4) is another symptom associated with depressed states both in medical and non-medical contexts.[251]

Finally, the aetiology given for the symptoms described is divine anger. This is elsewhere associated with mental symptoms, though not exclusively. Among the core texts for this study, divine anger is given as one aetiology for *ṭēmu šanû* "The mind alters" in *Ṭēmu* 1. To give examples that reference *ḫīp libbi* "Heartbreak", a therapeutic text for averting different types of evil with various stones names anger of god and goddess as the cause of symptoms that evoke mental disturbance, including worry,

[251] See van der Toorn 1986: 65, n142. See also Levine 1993: 92-94.

talking to oneself, and *ḫīp libbi* "Heartbreak" (*SpBTU* II 22, obv. 16-19).[252] Divine anger is also named as the cause in *BAM* 234, which describes symptoms associated with anxiety, including *ḫīp libbi* "Heartbreak" (*BAM* 234, 9).[253] The aetiological significance of divine anger at least in part derives from the significance of divine disfavour as a cause of suffering and misfortune in general. Mental disturbance in particular may lend itself to this explanation because of its association with abnormal behaviour.

Symptoms: Heartbreak **(***ḫīp libbi*), breaking heart (*libbu*), pain (*ḫuṣṣa*), fear, pondering foolishness, grief, crying out, loss of appetite, moaning
Diagnosis/Aetiology: divine anger

5.3. Summary

The *libbu* has a wide semantic range that makes it difficult to translate, but this range also seems to render the term well-suited to descriptions of both psychological and physiological distress in Akkadian. In lexical texts, it figures in numerous expressions for symptoms and conditions, some of which incorporate the *libbu* as the stomach or other parts of the abdominal region, and others that depend upon its noetic properties. Indeed, the meaning and usage of *libbu* suggest that its noetic and physical properties need not be separated. After all, experiential phenomena are labelled according to socially available categories. The multi-faceted conception of the *libbu,* which is embedded into beliefs about the body and medicine insofar as can be deduced from the textual evidence, provides a framework for focusing on the *libbu* as the site of distress and, in particular, for denoting anxiety with a compound expression built on the *libbu*: namely, *ḫīp libbi*

[252] See now Schuster-Brandis 2008: 251.
[253] See §7.1.1.1.

"Heartbreak". This pattern of association of physiological with psychological, and of the *libbu* with anxiety, gives meaning to elements in the medical lexicon that are organised with *ḫīp libbi*. Both the expression *ḫīp libbi* "Heartbreak" and many of the symptoms organised with it provide evidence for the preference for somatisation in the description of mental symptoms and disorder.

The symptoms organised with *ḫīp libbi* "Heartbreak" in the core texts are summarised below in Table 5a.

Table 6 Summary of symptoms organised with *ḫīp libbi* "Heartbreak"

Text	Psychological	Physiological	Behavioural
***Libbu* 1**	*ḫuṣṣa* *ḫīp libbi*	protruding epigastrium yellow stomach lining *ḫuṣṣa* sexual dysfunction	
***Libbu* 2**	*libbašu itteneḫpīšu* fear fit	fit	rubbing hands and feet
***Libbu* 3**	*libbašu itteneḫpīšu*	seized head neck pain chest pain changes in appetite	
***Libbu* 4**	*ḫīp libbi* *libbašu itteneḫpīšu* fear pondering foolishness grief	loss of appetite	crying out moaning

Because *ḫīp libbi* "Heartbreak" refers to anxiety, it is organised in the column for mental states, despite the multi-faceted nature of the *libbu* and the overlap between psychological states and their corresponding or associated somatic sensations. The term *ḫuṣṣa* has been organised under the columns for both mental states and somatic complaints due to the ambiguity – or overlap – in the types of pain to which it refers. Fit can similarly be understood as either a mental state (e.g., fit of panic or fear) or an epileptic fit, and both interpretations could suit the context in *Libbu* 2.

Despite the limited information that can be reconstructed from the core texts for *ḫīp libbi*, the following symptoms must be isolated for further discussion in Chapter 7: fear (*Libbu* 2), changes in appetite (*Libbu* 3 and 4), and abdominal symptoms (*Libbu* 1 and 3). The expression *ḫīp libbi* "Heartbreak", as well as the symptoms organised with it, introduce the importance of somatisation in the semantic framework for mental disorder in Akkadian medical texts.

Chapter 6: Texts for *ṭēmu šanû/nakāru* "The mind alters/changes"

Conceptualizations of madness in the Akkadian medical tradition emphasise both the mental and behavioural dimensions of symptoms that indicate disturbances in thought or thought processes. To try to identify specific diseases, such as schizophrenia, in these conceptualizations distorts the ancient ways of organizing patterns in the experience of these symptoms as recorded in the medical tradition. Thus, the projection of modern psychotic disorders onto ancient descriptions does not furnish an informative explanatory model. In the present chapter, as with previous ones, I avoid the use of specific disease or illness names in use today in favour of the more general, if archaic, "madness" to refer broadly to disturbances in thought and thought processes, and to the relevant symptoms that signal such disturbances. No single word that references "madness" in a clinical sense seems to have existed in Akkadian; rather modifications of the *ṭēmu* as the faculty of reasoning seem to form the preferred method of denoting abnormal mental states or disturbances in cognition (Schaudig 2014: 395).[254]

This chapter will explore two related expressions that are difficult to pin down in English translation but that frame madness in terms of a change in mental state: *ṭēmu šanû* "The mind alters" and *ṭēmu nakāru* "The mind changes". Because the *ṭēmu* is framed as changed in both *ṭēmu šanû* and *ṭēmu nakāru*, although employing a different verb, and because *ṭēmu šanû* only occurs in isolation in the *Diagnostic Handbook* in a series of entries that immediately precedes references to *ṭēmu nakāru*, the two expressions are treated together. Following the format of previous chapters, the first section of this chapter will give an overview of the individual components of the

[254] See also Deller 1989 for other terms that denote madness.

expression *ṭēmu šanû/nakāru* "The mind alters/changes". The bulk of this section will address the term *ṭēmu* "reason, intelligence; will, intention; decision" (CAD Ṭ 85) in order to demonstrate its function as the seat of thought and thought processes. In addition, two related expressions that appear in therapeutic texts, *šinīṭ ṭēmi* and *demmakur(r)û*,[255] will briefly be discussed in order to provide further background on the core symptom in question and the symptoms with which such expressions are organized.

The second section will set forth the core texts for these terms and will identify the relevant vocabulary for mental symptoms in each passage. As with *ašuštu* "Depression" and *ḫīp libbi* "Heartbreak", the discussion of symptom patterns will follow in Chapter 7 once the repertoire of symptoms organised with all three of the core symptoms is established. Many of the symptoms of the disorders described by each term remain remarkably consistent throughout the medical diagnostic and therapeutic corpus, and as with *ašuštu* "Depression" and *ḫīp libbi* "Heartbreak", the descriptions of abnormal behaviour and states of mind associated with these expressions often recur in parallel clusters.

6.1. Individual Components of Terms in Medical Texts

6.1.1. *ṭēmu* "mind, reason"

The relevant translations given in modern dictionaries of Akkadian treat *ṭēmu* as a substantive that refers to the faculty of reasoning and thought. Translations include "decision, deliberation, (divine) counsel, will, discretion, initiative"; "plan, intention", "reason, intelligence" (CAD Ṭ 85); "Planungsfähigkeit, Entschluß(kraft); Verstand;

[255] Hereinafter, spelled *demmakurrû* following Schaudig 2014.

Anweisung, Bescheid" (AHw 1385). It is related to the verb *ṭêmu* "to inform, give information, to command" (CAD Ṭ 86).[256] It also refers to the "mind" (Stol 2009: 1; Heeßel 2000: 425; Labat 1957-1971: 196) or to thought processes (Scurlock 2006b: 13). In her recent study of conceptions of the self, Steinert offers similar translations of "Verstand, Intellekt" (2012: 385f.). Foster's review of Steinert's treatment of the word *ṭēmu* in her study notes that "'reason', in the double sense of the cause for something and the power of reason, is an attractive translation for *ṭēmu,* perhaps more so than intelligence" (Foster 2013: 316). Conceived of as having a divine origin, the *ṭēmu* can also represent the faculty that separates human beings from animals (Schaudig 2014: 394).[257]

The semantic range of the *ṭēmu* and difficulties in translating this term as it appears in medical contexts in particular is summarised succinctly by Chalendar:

> Le terme *ṭēmu* est toujours difficile à traduire dans ce type de contexte, car il revêt des significations très larges, référant à la fois à des notions abstraites telles que l'esprit, le jugement, la raison, l'intelligence voire même les capacités mentales comme à des notions beaucoup plus concrètes telles que le rapport, l'information. Il suppose dans tous les cas des activités intellectuelles de raisonnement et sera ici traduit par « raison », « esprit », « raisonnement ». (Chalendar 2013: 20)

Unlike the *libbu*, the meaning of *ṭēmu* seems to be more restricted to the mental phenomena associated with reasoning, will, intention, decision-making, and consciousness more generally. In fact, Steinert notes that the *ṭēmu* is not an organ, but rather a skill or capacity whose location in the body remains an unresolved question

[256] Semitic root *ṭaʾm* (AHw 1385).
[257] This divine aspect and application of *ṭēmu* will not be discussed in this overview and is treated in Steinert 2012: 395-404 and Schaudig 2014: 394-395.

(2012: 385).[258] For this reason, only a brief overview is needed to establish its function in medical descriptions, such as *ṭēmu šanû/nakāru* "The mind alters/changes", and to narrow down the nuances of this particular core mental symptom. As with the discussion of the meaning of *libbu* in Chapter 5, the word *ṭēmu* will be left in the original Akkadian throughout this brief discussion of its meaning.

A brief look at the occurrences of *ṭēmu* in the lexical material and in some non-medical contexts will help to clarify the orthography and meaning of this term and its relationship to the Sumerian equivalent dimma, and may further clarify the intended referents in descriptions of mental states in medical contexts. What is the subject or object of change in the expression *ṭēmu šanû/nakāru* and related expressions *šinīt ṭēmi* and *demmakurrû*? A better understanding of this subject or object will shed light on the way that madness, derangement, and loss of control was experienced and understood in the *Diagnostic Handbook*. The following discussion aims to answer this question in order to elucidate the usage of the Akkadian term *ṭēmu* in the symptom under consideration as it occurs in the diagnostic corpus.

6.1.1.1. Akkadian *ṭēmu* and Sumerian dím-ma/dimma in Lexical Texts

Only a brief review of the lexical evidence is necessary, as these equivalences and their implications are not at stake. The reading of KA.Ḫ I as dimma, on the one hand, and the equivalence of both KA.Ḫ I and dimma/dím-ma with *ṭēmu*, on the other, as

[258] Recent scholarship has proposed that a connection between the *ṭēmu* and the head can be posited from textual evidence that links injuries to the head with cognitive dysfunction. See Schaudig 2014: 396-398; Westenholz and Sigrist 2006; Worthington 2003: 3-4. See also Steinert 2012: 385-387. Note also the connection between *ṭēmu* and *eṭemmu* "ghost, spirit" (CAD E 397) in Steinert 2012: 390, noted also by Schaudig 2014: 395.

appears in bilingual lexical texts, have been established in previous studies.[259] Etymologically, dimma/dím-ma seems to be an Akkadian loanword into Sumerian (Westenholz and Sigrist 2006: 8). In Proto-Nabnītu, *ṭēmu* is given as a translation for both dím-ma and dimma:

181. dím-ma = *ṭe*-[*e-mu*]
182. dimma = *ṭe*-ʾ*e*ʾ-[*mu*].

(Proto-Nabnītu III (=A), 181-182)[260]

In Antagal Tablet A, the latter equivalence is listed together with another set of terms that deal with thought and cognition:

200. dimma = *ṭè-e-mu*
201. galga-sù = *mil-ku*

(Antagal Tablet A, 200-201)[261]

The equivalent for the Sumerian galga-sù in the second line excerpted is the Akkadian term *milku* "advice, instruction, decision (of a deity); intellectual capacity, mood, spirit; conscious intent, consent" (CAD M II 66).[262] In fact, *ṭēmu* and *milku* have a similar semantic range in that both entail some type of intellectual capacity responsible for reasoning, instruction, intention, and decision-making.

[259] The lexical evidence for KA.ḪI, dimma, dím-ma, *ṭēmu*, for the phrases dimma-kúr-ra and Akkadian equivalents is discussed in great detail most recently in Chalendar 2013: 14-18.
[260] MSL XVI: 66. These lines are referenced in Reiner 1958: 58 in her commentary to *Šurpu* V/VI 148/149.
[261] MSL XVII: 188.
[262] Note that galga-sù is also attested with the meaning of "counsellor". See also Sjöberg 1973: 353. See CAD M II 66-67 for other lexical references to *milku*.

Lexical texts also provide evidence of the relationship between dimma and terminology for its disruption. Following two entries in Igituḫ Short Version that list vocabulary for epilepsy, the following sequence appears:

170. ˹KA˺$^{\text{di-ma}}$ḪI = [*ṭè-mu*]
170a. dimma-kúr-ra = *šá-né ṭè-mu*

(Igituḫ Short Version, 170 and 170a)[263]

In this set of entries, the Akkadian translation of *ṭēmu* is followed by reference to the condition *šanê ṭēmu*, an expression that refers to madness and employs the same terminology as the core symptom of *ṭēmu šanû* "The mind alters". More specifically, the condition is given as the Akkadian equivalent of dimma-kúr-ra. Similarly, in Igituḫ I:

200. KA$^{\text{di-im-ma}}$ḪI = *ṭè*-[*e-mu*]
201. ˹dimma˺ = DA-[x]-x-[x]
202. dimma-kúr-ra = *ši-nit ṭè-mu*

(Igituḫ I 200-202)[264]

In the lexical series Antagal, the same gloss is given for KA.ḪI, where another term that relates to reason or intention, *šibqū* (pl. tant.) "stratagem, plot, trick" (CAD Š II 381-382), is given as an equivalence:

116. $^{\text{u-muš}}$ku = *šib-* ˹*qú*˺
117. KA$^{\text{di-im-mu}}$ḪI = *šib-* ˹*qú*˺

(Antagal Tablet G 116-117)[265]

[263] Lambert and Gurney, *AfO* 18 (1957-58): 81-86. 170a replaces 170 in K. 8631 + Sm. 1674.
[264] An edition of this text is being prepared by Christopher Woods, to be published in MSL XVIII: *Igituḫ, Idu, Lanu, and the Group Vocabularies* (Rome: Pontificium Institutum Biblicum). The same lines are also referenced in Reiner 1958: 58.
[265] MSL XVII: 224.

The lexical evidence shows the equivalence between dimma and *ṭēmu* and, further, that the *ṭēmu* is organised not only with other terms that describe faculties of thought and reasoning, but also with expressions that denote madness.

6.1.1.2. Akkadian *ṭēmu* and Sumerian dím-ma/dimma in Literary Texts

Further elucidation of the relationship between dím-ma/dimma and *ṭēmu* comes from literary texts, particularly the Sumerian city laments. The *ṭēmu* or dím-ma/dimma and its disruption also figure prominently in Sumerian literature from the Old Babylonian period, and a look at these occurrences and their literary and ideological significance will help to establish the wider context for the use of the term *ṭēmu*/dimma in compound expressions in medical contexts. The condition of a loss or disturbance in reason brings about madness, and this phenomenon forms a part of stock descriptions of disorder that precede the destruction of cities by the gods. In their article on evidence for the recognition of the physiological brain as one possible seat of cognition, Westenholz and Sigrist note that a disturbance in reason can affect both an individual and a community or nation:

> It is a favorite literary trope from Sumerian to modern times…The derangement of human qualities dím-ma // umuš 'good sense, intelligence' precede their destruction by the gods. (Westenholz and Sigrist 2006: 7)

Three examples of the occurrence of dím-ma/dimma in Sumerian and Akkadian literary texts will suffice to supplement our understanding of the relationship between dím-ma/dimma and *ṭēmu* in expressions for mental disturbance.

The first two examples come from *The Nippur Lament*, a work of Sumerian literature whose known manuscripts date to the Old Babylonian period. In the first passage, which precedes the first kirugu, the final steps in the destruction of the city are described as follows:

44. úru-bi è-a ki-tuš-bi kar-ra
45. sig_4 úru zé-ba-šè im-ši-kešda.kešda-e-ne-eš
46. ér du_{11}-ga balag-di-ne-ne-éš
47. á-è lú-è-da umuš-bi nu-zu-gin_7
48. [ùg b]a-sìg dím-ma-bi ba-sùḫ

44. Their city gone, their dwellings robbed,
45. Because of those who were singing to the brickwork of the good city,
46. Because of the wailing of their lamenters,
47. Like the foster-children of the ecstatic, unaware of their (own) intelligence (umuš),
48. [(That) people] was smitten, its mind (dím-ma) thrown into disorder (sùḫ).

(*The Nippur Lament*, 44-49)[266]

In his commentary to line 48, Tinney notes that the confusion (sùḫ) of the mind or intelligence (dím-ma) of the land is often used to express the "rupture of the daily routine of life" (1996: 140). The next passage from the same lament revisits these final steps in Enlil's destruction of the city, which had begun with the destruction of the temple and abandonment of rituals, killing of wives and children, carrying off of the city's possessions, and finally:

102. úru gál-la-bi nu-gál-la mi-ni-in-ku_4-ra-àm
103. dím-ma-bi gìri íb-ta-na-kúr-ra-àm
104. umuš-bi in-sùḫ-àm líl-e bí-in-sìg-ga-àm
105. ú-bi a-bi íb-ta-na-kar-ra-àm
106. ga zu kaš zu-a u_4-bi mi-ni-ib-til-la-àm

[266] Transliteration and translation by Tinney 1996: 98-99.

102. The city which used to be there, (Enlil) turned into one no longer.
103. He made its mind (dím-ma) wander (lit. alter its path).
104. He threw its intelligence (umuš) into disorder (sùḫ) and made it haunted.
105. He took away its food and its water!
106. He brought to an end its days of familiarity with milk and beer!
(*The Nippur Lament* 102-106)[267]

The sequence thus ends with Enlil's stripping the land of any semblance of civilization, including the human qualities of intelligence and reason, and human needs of food, water, beer, and milk.[268]

To turn to the Akkadian context, in an Old Babylonian Recension of *Naram-Sin and the Enemy Hordes*, the following passage describes the progression of the destruction of the city:

4′. x x x *ša* ^{d}IŠKUR *is-su-ú e-li ma-*[*tim*]
5′. *ḫu-bu-ur-ša ik-ta-ba-ás ṭe*$_4$*-em-ša is-pu-uḫ*
6′. *a-la-ni ti-la-ni ù* BÁRA.MEŠ *is-pu-un*
7′. *mi-it-ḫa-ri-iš ka-li-iš uš-te-mi*
8′. *ki-ma a-bu-ub me-e ša ib-ba-šu-ú*
9′. *i+na ni-ši* [(x)] *ma-aḫ-ri-a-ti*
10′. *ma-at a*[*k-ka*]*-di-i uš-te-mi*
11′. *uḫ-ta-al-li-iq ma-tam*

4′. The … of Adad roared over the land.
5′. It trampled its activity, it confused its mind (*ṭēmu*).
6′. It flattened cities, tells, and sanctuaries.
7′. Equally and totally, it transformed
8′. ′like the Flood of water that had come into existence
9′. among the first peoples.
10′. It transformed the land of Akkad,
11′. it destroyed the land.
(*Naram-Sin and the Enemy Hordes*, OB Version I iv 4′-11′)[269]

[267] Transliteration and translation by Tinney 1996: 104-105.
[268] See also examples in Jaques 2006: 228-236.
[269] Following Westenholz 1997: 267-279.

The passage describes the culmination of destruction of the land of Akkad. The first step in the destruction is the confusion of human intelligence, "the cessation of all physical and mental activities", a trope essential in the catastrophe imagery of the Deluge (Westenholz and Sigrist 2006: 8).

In the Akkadian and Sumerian city laments, the loss of or disruption in reason – that most human of qualities – represents the final stroke of destruction. The expression used to describe this disruption in both languages hinges on the concept of a change or alteration in thought processes, mind, intention, and reason represented by the words dimma and *ṭēmu*, as well as related terms like umuš and *ḫubūru*. Having now considered the relationship between the Sumerian and Akkadian words that refer to the mind and its faculties, this discussion can now turn to the Akkadian *ṭēmu* specifically in order to further clarify its function in the expression *ṭēmu šanû/nakāru* "The mind alters/changes". In particular, the question of what faculty undergoes change in *ṭēmu šanû/nakāru* "The mind alters/changes" will be established as the mind, the seat of thought, thought processes, and will.

6.1.1.3. Akkadian *ṭēmu* as Seat of Thought and Intention

In the *Diagnostic Handbook*, the only processes consistently attributed to the *ṭēmu* seem to be change (*šanû/nakāru*), falling (*maqātu*), and not being seized (*lā ṣabit*). Therefore, before turning to the occurrences of *ṭēmu* in the core texts, it is useful to examine other types of states or processes that are predicated of this term in order to further establish its function in symptom descriptions of going mad and, more specifically, as the subject that undergoes change in the core symptom under

investigation. As Labat notes in a brief article on symptoms relating to the mind and reasoning, it is with the word *ṭēmu* that most expressions that denote mental confusion are formed (1964: 196). In addition to being changed, the *ṭēmu* can also experience, or be caused to experience, a number of mental states. This capacity reaffirms its status – and vulnerabilities – as the faculty of reasoning. Only a few examples need illustrate this, as the *ṭēmu* plays a less ambiguous role as the seat of reason than, for example, the *libbu*, which has a much wider semantic range with respect to the human body and faculties.[270]

Several verbs that denote confusion or disturbance appear with *ṭēmu*, including *ešû* "to confuse, trouble; to be or become troubled, blurred, or dark" (CAD E 378f.), *dalāḫu* "to stir up, roil; to disturb" (CAD D 43f.), and *parāru* D "to disperse" (CAD P 161f.). The verb *ešû* "to confuse, trouble" appears with *ṭēmu* in both a verbal and adjectival usage. Although thus far, the study of terminology has confined itself to works from the scholarly tradition, an exception may be made for a scholarly letter from an *āšipu* who presumably would have had access to the *Diagnostic Handbook* and related texts. In a letter from Adad-šumu-uṣur, the *āšipu* of King Esarhaddon, it appears that the king has remained in the dark and without food for two days. In response to this, the *āšipu* gives the following advice which, if not heeded, will cause confusion and illness:

14. ⌜*mil*⌝-[*ku dam*]-⌜*qu*⌝ *iḫ-ḫa-sa-sa*
15. *ka*-[*ru-u*] ⌜*ik*⌝-*ki*
16. *la a*-[*ka*]-*lu la šá-tu-u*
17. *ṭè-e-mu ú-šá-šá*
18e. *mur-ṣu ú-rad*

14. Go[od ad]vice is to be heeded:
15. short temper,
16. no food, (and) no drink

[270] See now Steinert 2012: 385f; Foster 2013.

17. will confuse the *ṭēmu*
18e. (and) illness will descend.

(ABL 5, rev. 14-18e)[271]

Another verb used to describe confused states of mind is *dalāḫu* "to disturb", which was also attested with *libbu* to express confusion.[272] This parallelism is instructive of the overlap in functions of the *ṭēmu* and *libbu* and helps to elucidate the way *ṭēmu* is used as the seat of reason and intention in expressions of derangement. Two Old Babylonian examples may contribute to the meaning of a disturbed *ṭēmu*, despite also deviating from the Standard Babylonian corpus to which the *Diagnostic Handbook* belongs. Both the *ṭēmu* and *milku* "intellectual capacity, mood, spirit" (CAD M 66) are affected in the following line from an Old Babylonian Prayer to Anūna: *it-ta-ad-la-aḫ ṭe*$_4$*-e-mi i-te-ši mi-*ʾ*lik*ʾ […*-ia*] "My mind has been confused, the counsel of [my…] has been made unclear" (CBS 19842, 117).[273]

The *ṭēmu* can also be "scattered" with *parāru* D to denote confusion.[274] In an Old Babylonian physiognomic text, several apodoses that centre on inner disorder are deduced from the appearance or behaviour of a man's eyes:

16. DIŠ LÚ *i-na na-ap-lu-sí-šu i-ni-šu za-qá-pa-am ú-gal-la-al-ma*
17. *la i-li-i* LÚ *šu-ú ṭé-em-šu pu-ur-ru-ur*
18. DIŠ LÚ *i-na na-ap-lu-sí-šu i-na-šu it-ta-na-za-az-za*
19. *di-li-iḫ ra-ma-ni-šu na-di-i-šu*

16. If a man, when looking, he rolls his protruding eye, and

[271] See now Parpola 1993: Text 196.
[272] Note also that a person, rather than his *ṭēmu* or *libbu*, can also be the subject of *dalāḫu* to express confusion, particularly *dalāḫu* Ntn. See CAD D 45-46 for this usage and examples.
[273] Following Lambert 1989: 325.
[274] "Scatter-brained" may offer a parallel in the English language that relies on the same metaphor of unity or coherence identified with reason, and scattering or de-coherence identified with confusion. Note that *parāru* N can also yield the meaning "to become distraught, confused" (CAD P 164 mng 4b). The word *ṭēmu* can be combined with *sapāḫu* "to scatter, disperse" to denote confusion (CAD S 152-153 mng 2).

17. does not rise,[275] that man, his *ṭēmu* is scattered.
18. If a man, when looking, he eyes continually stare,
19. confusion of his self (*ramānu*) is inflicted upon him.
(VAT 7525 ii 16-19)[276]

As in the Old Babylonian prayer, which used *ṭēmu* and *milku* in parallel, these lines describe the *ṭēmu* and *ramānu* "self" (CAD R 117) as both the subjects of disorder and confusion. The parallels relate the *ṭēmu* to the faculty of reason, expressed with *milku*, and the concept of the self, expressed with *ramānu*. In light of these analogues, sudden or recurring changes in the *ṭēmu* might be understood as affecting aspects of these faculties.

The *ṭēmu* is also described as being "fallen" or as "falling" (*maqātu*) in a genitival relationship, *miqit ṭēmi*, as well as in the verbal expression *ṭēmu maqātu*. The CAD translates this expression in the few available citations as desperation (CAD M II 104), depression (CAD Ṭ 96), and even derangement (CAD Ṭ 95 mng d). AHw gives a translation of "Verzweiflung" (AHw 1386), which seems to lean toward depression, a sense followed by Schaudig in his recent article on madness as expressed with *ṭēmu* (Schaudig 2014: 395). Labat explains *miqit ṭēmi* as signalling demoralization or weariness, and he translates it as "Mattigkeit des Geistes" (1964: 197). He favours a literal translation. Stol translates the phrase *ṭēmšu imtanaqqussu* (lit. "his *ṭēmu* continually falls for him") as "depression" in a therapeutic text *BAM* 202 (2009: 2).[277] Indeed, these interpretations of *maqātu* as describing depression when paired with *ṭēmu* accord with the association of the physical orientation of "down" with a corresponding

[275] Köcher and Oppenheim note in their edition of this text that lines 16-17 are obscure, citing *ú-gal-la-al-ma* as an interruption to the phrase *i-ni-šu za-qá-pa-am la i-li-i* (1957-1958: 65 n17).
[276] Following Köcher and Oppenheim 1957-1958: 65.
[277] In the same therapeutic text, Scurlock and Andersen translate as "his thinking continually fails him" (2005: 383).

depressed mood, as with *šapālu* "to become low" (CAD Š I 422f.).[278] The expressions *miqit ṭēmi* and *ṭēmu maqātu* have thus been understood in different ways based on context.[279] However, each interpretation seems to reflect some sort of impairment associated with a depressed or demoralized mood or, possibly, with a loss of reason that lacks the added connotation of a loss of control present with *ṭēmu šanû/nakāru* "The mind alters/changes".

In an incantation similar to those found in *Maqlû*, the expression *miqit ṭēmi* appears in the following context, listed with a series of other emotional complaints resulting from witchcraft and specific types of magic associated with witchcraft:

23. KA.DAB.BÉ.DA INIM.GÌR.RA ŠAR.ḪUN.GÁ IGI.NIGIN.NA I_7.GUR.⌜RA⌝
24. [É].GAL.KU_4.RA *mi-qit ṭè-mi ši-nit ṭè-mi* ŠU.DINGIR.RA
25. ŠU.^{d}INNIN.NA ŠU.GIDIM.MA ŠU.NAM.ÉRIM.MA ŠU.NAM.LÚ.U_{18}.LU

23. "Seizing-of-the-mouth" magic, slander, "Appeasing-of-anger"-magic, vertigo, returning from the river (ordeal),
24. "entering-the-palace" magic, loss (*miqit*) of *ṭēmu,* change in *ṭēmu* (*šinīt ṭēmi*), Hand of God,
25. Hand of Goddess, Hand of Ghost, Hand of a Curse, Hand of Mankind.
(*CMaWR* 8.3: 23-25)

The expressions *miqit ṭēmi* and *šinīt ṭēmi* appear consecutively, which suggests that these expressions refer to two different effects on the mind and reasoning.

The expression is also attested in therapeutic texts, such as *BAM* 202, whose symptom description includes *ṭēmu šanû* "The mind alters" and the related *demmakurrû*, as well as speech-related symptoms regularly associated with these mental states. The relevant line reads: *ṭé-em-šú* ŠUB.ŠUB-*su u ma-gal* DU_{11}.DU_{11}-*ub a-na ṭè-me-šú tur-r*[*i*]-*šú*

[278] See §3.1.3.3 on metaphors.
[279] See Chalendar 2013: 24-26 for other translations of these expressions.

"(If) his *ṭēmu* continually falls, and he continually speaks too much; to return his mind to him…" (*BAM* 202 obv. 2-3 // *STT* 286 ii 15-16).[280] The pairing of *ṭēmu* with *maqātu* may refer to a loss of reason, severe depression, or, as posited by Labat, demoralisation.

The *ṭēmu* thus forms part of expressions with other verbs and nouns that denote a disturbance in mental states, including *maqātu* "to fall" and *miqtu* "fall", *parāru* D "to disperse", *dalāḫu* "to disturb", and *ešû* "to confuse". These processes seem to disrupt the *ṭēmu* in its function as the seat of thought and reasoning, evidenced in the complaints that appear alongside it, as well as the abnormal or irrational behaviour that is observed as a result. A translation of "mind" or "reason" would be appropriate in such compound expressions as general terms that capture the seat of mental processes, as well as the processes themselves.

6.1.2. *šinīt ṭēmi* and *demmakurrû* "Madness"

Now that the relationship between dím-ma/dimma and *ṭēmu*, as well as the mental faculties associated with these terms, have been reviewed, it is possible to consider the meaning of dím-ma/dimma-kúr-ra in relation to other expressions for madness. There is an obvious overlap in terminology between the core symptom of *ṭēmu šanû/nakāru* "The mind alters/changes", on the one hand, and the related expressions *šinīt ṭēmi* "alteration in mind (i.e., madness)" and dím-ma/dimma-kúr-ra, on the other. For this reason, the latter two expressions shed light not only on the meaning of the core symptom and the behaviours observed with it in the medical texts, but also on the tendency to express madness as a change.

[280] See now Chalendar 2013. This text is revisited in §6.1.2 below and §7.2.1.2.1.

Another equivalence in the lexical material that is given for dimma-kúr-ra is worth noting in that it relates to speech, which forms a key component in diagnostic descriptions for *ṭēmu šanû/nakāru* "The mind alters/changes". This connection between external verbal communication and internal thought processes becomes clearer in the core texts for this symptom. Two examples of the equivalence of dimma-kúr-ra with a reference to speech are attested:

100. dimma-kúr-ra = *du-ub-bu-bu*
101. du_9^{du}-du_9^{du} = MIN

(Proto-Nabnītu IV-IVa, 100-101)[281]

12′. dimma-kúr-ra = *dub-bu-bu*

(Antagal Tablet E iv 12′)[282]

In these entries from Proto-Nabnītu and Antagal Tablet E, the verb *dubbubu* can be understood as the D stem of *dabābu*, the same verb that occurs with *libbu* to describe thought processes. The verb *dubbubu* can have a number of possible meanings relating to speech and thought. In the D stem, it may mean "to grumble, to pester a person, to complain to a person, to entreat, to rave (said of a madman)" (CAD D 11-13). Kouwenberg notes that the verb can also have the general sense of talking a lot or too much (1997: 100; cf. AHw 147). The meaning of "to rave" is largely inferred from its occurrence in the lexical texts excerpted here.

An adverbial form from *dubbubu* appears in the *Babylonian Theodicy* with *ṭēmu*, and this usage seems to anchor it to altered or confused mental states:

[281] MSL XVI: 80. See also Chalendar 2013 for a more detailed study of these lines.
[282] MSL XVII: 212.

34. *sa-an-qa pi-ia ša-du-ú iš-*[…]
35. *sa-ad-ri pak-ka-ku dub-bu-biš* ˹*tu*˺-[...]
36. [*sa*]-*ap-ḫu* ˹*la*˺ *ṭè-me te-te-mid* x […*-ka*]
37. [*sa*]-*miš ur?-qa-ka nu-us-su-qa* ˹*tu*˺-[*maš-šil*?]

34. My words are checked, […] …
35. But you […] your balanced reason *like a madman*,[283]
36. You make [your …] frustrated and without reason,
37. You [turn] your choice … like one undecided.
(*Babylonian Theodicy* 34-37)[284]

It is possible to interpret this adverbial form as stemming from the intransitive use of the D stem of the verb; in such a use, *dubbubu* belongs to the group of intransitive D stems that denote sounds, as with grumbling or complaining (Kouwenberg 1997: 100).[285]

The semantic overlap between dimma-kúr-ra and speech is also noted by Chalendar in her detailed study of the lexical material in support of her interpretation of *demmakurrû*: "Le champ sémantique de ka.ḫi.kúr.ra est donc à situer dans le domaine de l'expression verbale et plus précisément celui de « parler beaucoup »" (2013: 15). With respect to the equivalences between dimma-kúr-ra and *dubbubu* in the lexical material cited above, Chalendar observes the connection between logorrhoea and the concept of wandering that may help to interpret this lexical grouping: "ce terme est mis en lien avec le verbe *dâlu* (AHw 154 « umhergehen, herumlaufen ») qui traduit un comportement agité, verb qui pourrait être utilisé pour désigner le comportement d'un aliéné mental et qui correspond au verbe plus fréquent *rapādu* (errer, aller sans but, vagabonder) dans les textes médicaux" (2013: 16).

[283] This translation is proposed by Lambert in *BWL*: 73.
[284] Following *BWL* 72.
[285] See Kouwenberg 2010: 276: "In still other transitive verbs, the D-stem seems to be intensive, i.e., to underline a more prolonged or forceful action … This seems to be marginal, however, and usually it is quite difficult to establish such a nuance from the context in a sufficiently objective way. And original contrast has been lexicalized in *dabābu* G 'to speak', D 'to talk much' or 'to talk loud' > 'to complain, grumble' (intr.) and 'to pester, harass, entreat' (trans.) …"

It would be appropriate to add to this lexical evidence an entry from a medical commentary on a text that deals with Ghost-induced illnesses.[286] The gloss appears in an entry that explains the relationship between terms for speech and mind: E : *qa-bu-ú* : K[A$^{de\text{-}e}$]$^{m4\text{-}ma}$ḪI : *ṭè-e-me* "To speak (Sum.) is translated by to speak (Akk.); the mind (KA.ḪI = dimma) (Sum.) is translated by the *ṭēmu*" (*SpBTU* I 49, 37). Further along in the commentary, the text elaborates DIB.RA.AḪ with the verb *rapādu* and the noun from the same root (*r-p-d*), *ripittu* "unrest, commotion" (CAD R 365). Another word that describes wandering, *dâlu* (CAD D 58), is also grouped with *dubbubu* in Diri II, where both terms are given as equivalences for du-du (du$_9$-du$_9$) (52, 54).[287] In fact, in Antagal E, the equivalence of dimma-kúr-ra with *dubbubu* is followed by DU$_9$$^{du\text{-}du}DU_9$ = min (=*dub-bu-bu*) *šá da-a-lum* (Antagal E iv 13′).[288] The lexical texts and medical commentaries – keeping in mind that the latter come from the Late Babylonian period – seem to corroborate an established connection between speech, wandering, and madness.[289]

These references demonstrate the connection between the mind, its disruption, and abnormal speech, particularly as captured in the verb *dubbubu*. The activity of wandering may be preliminarily added to this picture as another behaviour associated with madness, though perhaps not as closely in the lexical evidence as speech acts – seemingly, both internal and external. As the lexical texts provide little more information on the type of mental disruption represented by dimma-kúr-ra, evidence must be added to these references from other genres and from its relationship with *šinīt ṭēmi* "madness".

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[286] The text to which this commentary refers is not specified in the edition (*SpBTU* I 49).
[287] Following MSL XV: 122-124.
[288] Following MSL XVII: 212.
[289] See §7.2.2.

Until recently, the question of whether or not to consider *demmakurrû* a loanword from Sumerian into Akkadian, or to treat it as a Sumerian compound logogram equivalent to *šinīt ṭēmi* "madness" remained undecided. In the lexical material dimma-kúr-ra is equated with *šanê ṭēmu* (Igituḫ Short Version, 170a) and *šinīt ṭēmi* "madness" (Igituḫ I, 202). Based on these occurrences, it would seem the two were considered equivalent. In fact, Scurlock and Andersen make no distinction between the two in their study of diagnoses in Mesopotamian medicine (2005: 374 ff.). In addition, the word *demmakurrû* is not attested in syllabic spellings on medical tablets and therefore would have to be "reconstructed from glosses in ancient commentaries" (Stol 2009: 1).

However, Stol following Borger (1981: 627) convincingly demonstrates that this strict identity between dím-ma/dimma-kúr-ra and *šinīt ṭēmi* "madness" proves problematic in medical texts. In contexts where the term appears in sequence with *šinīt ṭēmi* or *šanê ṭēmu*, it would lead to a tautology or redundancy in a diagnostic description or diagnosis (Stol 2009: 1). Furthermore, in some contexts, the logographic writing has a phonetic complement, which suggests that the term is intended to be read in Akkadian. In the incantation section of a therapeutic text against witchcraft, the two terms of *demmakurrû* and *šinīt ṭēmi* "madness" appear consecutively as part of the list of ills levelled by the witch against the supplicant:

9'. *ru-še-e up-šá-še-e la* DU_{10}.GA.MEŠ
10'. *nap-šá-šá-ti na-áš-pa-ra-a-ti*
11'. ˹ḪUL˺.KI:IK *zi-kur*$_5$*-de*$_8$*-e* KA.DAB.DA.KAM
12'. DI.BALA-*e* DÍM.MA.KÚR-*e*
13'. *u ši-ni-it* ˹*ṭé*˺*-mi e-pu-šá*

13'. who performed **9'** sorcery, evil (magical) procedures,

10′. salves, messages[290]
11′. hate-magic, cutting-of-the-throat magic, seizing-of-the-mouth magic
12′. distortion-of-justice magic, madness (DÍM.MA.KÚR-*e*),
13′. and alteration of mind (*ši-ni-it ʾṭéʾ-mi*).

(*BAM* 214 rev iii 9′-13′)[291]

In their edition of this text, Abusch and Schwemer transcribe DÍM.MA.KÚR-*e* as *dimmakurrê* and translate as "confusion" in line 12′ while *šinīt ṭēmi* is "madness" in line 13′ (2011: 253). In their commentary to this line, they note, "dima.kúr.ra usually serves as the logogram for *šinīt ṭēmi*, but here the Sumerian loanword *dimmakurrû* and its Akkadian equivalent are treated as two different ailments caused by witchcraft" (2011: 255). Their treatment of the two terms as they appear side by side is instructive.

In an earlier published collection of witchcraft literature, Abusch addresses the problem of redundancy that would result if the terms were indeed equivalent. In this earlier study, he acknowledges that DIMMA.KÚR.RA is probably *šinīt ṭēmi* "madness", but notes the lines from *BAM* 214 rev iii 12′-13′ as a possible counter-example to this equivalence: "While we hesitate to posit an additional Akkadian value for KA.HI.KÚR.RA on the basis of *BAM* 214, because *u šinīt ṭēmi* there might conceivably be a misunderstood gloss… the phonetic complement in DÍM.MA.KÚR-*e* is unexpected if this ideogram represents *šinīt ṭēmi*, and this complement is, therefore, most suggestive" (Abusch 1987: 62 n83). It seems in his later edition, he has leaned more toward accepting a new reading for DÍM.MA/DIMMA.KÚR.RA that accounts for its usage alongside the syllabically spelled *šinīt ṭēmi* "madness".

The two appear consecutively in another therapeutic text for symptoms of madness and epilepsy, part of which was excerpted above to provide an example of *ṭēmu*

[290] These are presumably bewitched or otherwise affected by witchcraft. See *CMaWR*: 253.
[291] See now *CMaWR* 8.1, 84"-88".

maqātu: DIŠ NA DIM[MA.KÚR].˹RA˺ DAB-*su ṭè-en-šú ˹iš˺*-[*ta-nu*] (*BAM* 202, obv 1). The restoration of these lines is based on the duplicate to this text (*STT* 286 ii, 14-17) and can be accepted with confidence. Such examples support the interpretation of DIMMA.KÚR.RA as a loanword *demmakurrû* into Akkadian – recalling, at the same time, that the word dimma is probably a loan into Sumerian from the Akkadian *ṭēmu* – in order to separate the expressions (Stol 2009: 1), a reading earlier proposed by Borger (1981: 627) and addressed by Schramm (1991: 162).

The term *demmakurrû* does not always appear alongside *šinīt ṭēmi* "madness". The term appears with similar symptoms as those which appear with the core symptom of *ṭēmu šanû/nakāru* "The mind alters/changes" in the core texts below. For example in a ritual incantation addressed to Ištar, several conditions that consistently appear with mental symptoms are listed at the beginning of the text, including Hand of Ghost, various epilepsies, Hand of God, and Hand of Goddess, and these are followed by *demmakurrû* (*BID* IA, 4).[292] The cause given is divine anger (l. 5). The text goes on to list several mental symptoms, including roaring ears (l. 6); *ḫīp libbi* "Heartbreak" (l. 6); two speech-related symptoms of forgetting his words and talking to himself (ll. 6-7); apathy, expressed through the topos of the mind's not being seized (l. 7); fear (l. 9); anxious silence (l. 9); strife and quarrelling (l. 10); and having foolish thoughts (l. 12). While the symptomatology section of such an incantation is not intended to describe a single illness, the complaints listed have a shared mental dimension and describe related experiences.

Furthermore, the introductions to texts that include *demmakurrû* list a consistent set of conditions or types of magic from which a person might be suffering. For example, BMS 12 is directed toward ḪUL.GIG DI.BAL.A ZI.KU$_5$.RU.DA KA.DAB.BÉ.DA DÍM.MA.KÚR.RA

[292] Following Farber 1977: 56.

"Evil sickness, "distortion-of-justice"-magic, "cutting-of-the-throat"-magic, "seizure-of-the-mouth"-magic, *demmakurrû*" (BMS 12 obv. 1).

The expression *šanê ṭēmu* also appears several times in the canonical incantation alongside mental symptoms, including in *Maqlû*. In the incantation, ^{d}*Šamaš annûtu ṣalmū ēpišīya* "Oh, Šamaš, these are the images of my sorcerer" in *Maqlû* I, which comprises the first section of the *Maqlû* ceremony (Abusch 2002: 25), the many ways in which witches have unjustly harmed the supplicant are listed. Among these are various indications of mental disturbance:

87. [^{d}]^{r}*Nusku*$^{\neg}$[293] *da-a-a-nu* ZU-*šú-nu-ti-ma ana-ku la i-du-šú-nu-ti*
88. [*šá kiš-pu ru-ḫu-u r*]*u-su-u up-šá-še-e lem-nu-ti*
89. *ip-šá bar-tu*$_4$ [*a-mat*] *le-mut-ti* KI.ÁG.GÁ ḪUL.GIG
90. DI.BAL.A-*a* ZI.KU$_5$.RU.DA KA.DAB.BÉ.DA ŠÚR.ḪUN.GÁ
91. ŠÀ.BAL.BAL-*a ṣu-ud pa-ni ša-né-e ṭè-mu*
92. *e*$^{?}$*-pu*$^{?}$-[*šu-ni ú-še-pi*]-^{r}*šu*$^{\neg}$*-ú-ni is-ḫu-ru-ni ú-šá-as-ḫi-ru-ni*

87. Nuska, judge, you know them, but I do not know them
88. who witchcraft, sorcery, sorcerous deeds, evil deeds,
89. sorceries, revolt, evil words, love-magic, hate-magic,
90. "distortion-of-justice"-magic, "cutting-of-the-throat"-magic, "seizing-of-the-mouth"-magic, "appeasing-of-anger" magic,
91. confusion, vertigo, madness (*šanê ṭēmu*),
92. *they performed* [against me], they [caused to be performed] against me, turned against me, caused to be turned against me.

(*Maqlû* I 87-91)[294]

The same sequence of ills listed in *Maqlû* I 89-91 is repeated at *Maqlû* IV 13-15. At the same time, a more literal interpretation of the pairing of *ṭēmu* and *šanû* is attested, as in the incantation, "My warlocks, and witches" in *Maqlû* V. This incantation comprises the third section of the core *Maqlû* ceremony, in which statues set ablaze in a previous

[293] See Abusch 2002: 136-137 on the appearance Nusku here, rather than Šamaš as expected from the incipit for *Maqlû* I 73ff.
[294] Following Meier 1937: 10.

section of the ceremony (V 89-94) are extinguished in order "to extinguish any spark of life and malicious impulse left in the witches." (Abusch 2002: 19).

The symptoms and diseases recorded with *šanê ṭēmu, šinīt ṭēmi*, and *demmakurrû* echo those observed with *ṭēmu šanû*/*nakāru* "The mind alters/changes" such that the conditions do appear to refer, if not to the exact same thing, then to a similar experience defined by severe confusion or disturbance in thought processes. It is possible that *demmakurrû* and *šinīt ṭēmu* "madness", as substantives, refer to an established illness or condition akin to madness. On the other hand, the verbal expressions of *ṭēmu nakāru* "the mind changes" and *ṭēmu šanû* "the mind alters" may describe related symptoms, rather than illnesses or conditions in their own right.

6.1.3. *šanû* and *nakāru*

The paradigm of a change in mind, thought, or reasoning is favoured in the medical corpus to capture the experience of madness, both in substantive and verbal expressions. One of the two verbs that are used with *ṭēmu* in the medical corpus to express madness, derangement, or disordered thought processes is *šanû*, sometimes written logographically as MAN. In the basic stem, this verb can have the intransitive meaning "to become different, strange, to change" or the transitive "to change one's mind, mood, to change loyalty, to defect, to become deranged, insane" (CAD Š I 403).[295] The other verb used is *nakāru,* also written logographically as KÚR, which in the basic stem has a number of meanings, including "to become hostile, to become an enemy, to become estranged", as well as "to change one's mind, to become deranged" (CAD N I

[295] See also AHw 1164-1167.

159).[296] In denoting change, it can have the added connotation of change for the worse, and when used with other body parts, such as *pānu* "face" and *zīmu* "appearance, countenance", an unhealthy appearance, or a change in mood for the worse is meant (CAD N I 159).[297]

In the core texts, the two verbs for change that appear with *ṭēmu* are attested in three verbal forms: 1. the G stem stative (e.g., KÚR-*ir, šá-ni-šum-ma*); 2. the Gtn stem durative (e.g., KÚR.KÚR, KÚR.KÚR-*ir*, MAN.MAN-*ni*); and 3. the Gtn stem durative with an accusative pronominal suffix in the third person singular that should be treated as emphatic and not translated (e.g., KÚR.KÚR-*šú*, MAN.MAN-*šú*).[298] In all uses, the subject is the *ṭēmu* "mind, reason", rather than the patient; the mind undergoes the change, rather than the patient changing his own mind or reasoning (as with Tiamat in *Enūma eliš* IV, 88, cited in §6.1.4). In terms of the overall pattern of the use of *nakāru* (KÚR) as opposed to *šanû* (MAN), *nakāru* written logographically with KÚR appears more often in the *Diagnostic Handbook*. The only occurrences of *šanû*, also written logographically as MAN and once syllabically, appear in one set of entries in SA.GIG 22 (*Ṭēmu* 1).[299]

Parallel expressions that employ the same paradigm are known from other Semitic languages, and a brief examination of these parallels in Aramaic and Biblical Hebrew is instructive of the Akkadian use of this expression. In his study of 1 Sam 13:1, Bhayro notes that the use of the verb "to change", and in particular the root *š-n-ʾ*, with reference to insanity is well attested in Semitic languages (2003-2004: 290). Bhayro offers examples in support of his interpretation of a particular term that occurs in the

[296] See also AHw 718-721.
[297] See also Gruber 1980: 358-362. See also Schaudig 2014: 395.
[298] See Worthington 2010: 130.
[299] On the other hand, in the therapeutic texts, *šanû* is favoured over *nakāru* and is usually spelled syllabically.

Targum to Saul's second experience of ecstatic prophecy in 1 Sam. 19:24.[300] The crux of the argument for a meaning that would justify Bhayro's reading of the elusive passage relies on the use of the root *š-n-ʾ* for madness. The use of this root to express madness is, in fact, attested in Hebrew, Jewish Babylonian Aramaic, Syriac, Ethiopic, and possibly even Arabic (Bhayro 2003-2004: 290), and the salience of this idiom in Semitic languages is relevant to the present discussion.[301]

In the Hebrew context, the idiom *šinna ṭaʿam* is used with reference to David in 1 Sam 21:14 where he feigns madness before the king of Gath: "And he made himself insane (*šinna ṭaʿam* lit. "changed the mind") in their eyes." (Bhayro 2003-2004: 290; Olyan 2008: 66).[302] Olyan addresses the expression briefly in his study of disability in the Bible (2008: 65-77). His interpretation of 1 Sam 21:11-16 takes the idiom to refer to "persons displaying behaviors associated with severe mental disturbance" (Olyan 2008: 68). As Olyan notes, the idiom appears more frequently in Akkadian literature than its cognate idiom in Hebrew, and in both languages, suggests a "loss of self-control" (Olyan 2008: 67).

In Syriac, a number of nouns for madness derive from the root *š-n-ʾ* "to change".[303] An example from the *Syriac Book of Medicines*, a 12th century CE medical compendium whose content is drawn from translations from late antiquity of scientific

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[300] The Targum to this line includes the word *barśan,* a unique word that is meant to explain a term for "naked". Bhayro cites evidence from various lexicons for the Talmud and Midraš that treat this term as relating to madness. In Levy's *Wörterbuch über die Talmudim und Midraschim*, the term is understood as a compound composed of two elements: *bar* "son" and *šnʾ* "to change" (Levy 1924: vol.1, 272). Levy gives the meaning "Wahnsinniger" (1924: 272). Jastrow divides the word into the same elements in his *Dictionary of the Targumim, the Talmud Bavli and Yerushalmi, and the Midrashic Literature* (1950: vol. 1, 198). Further, as noted by Bhayro, "The use of 'son' to indicate one who displays the characteristics of the word that follows is well known in Aramaic" (2003-2004: 291).

[301] Regarding the possibility in Arabic of the related root *ṯ-n-ʾ* "to double", see Bhayro 2003-2004: 290. Gordon briefly addresses the alleged Arabic word *šāna* associated with insanity (1987: 40).

[302] The idiom occurs again at Ps. 34:1 (Olyan 2008: 66).

[303] Cited in Bharyo 2003-2004: 290 n39.

works written in Greek (Bhayro 2013: 125-126), grouped together black bile with mental disturbance: "And anxiety and a grievousness of the mind, which is even almost like insanity (*šnāyā*), appear whenever an excess of such a thing as this is emitted into the mouth of the belly" (Budge 1913: 396).[304] The word translated by Budge as insanity in this line is *šnāyā*.[305] In fact, a number of terms for madness derive from the root *š-n-ʾ* in Syriac. The participial form of the verb is used to refer to one who is insane (Smith 1903: 586-587).[306] Bhayro has recently noted the value of this work from late antiquity as a source not only for Syriac medical terminology, but also for the mechanics of the reception of Galenic medicine in Mesopotamia (2013: 123). Although this text has a complicated history, for the present purposes, it suffices to note the overlap in the paradigm of change used to express madness or derangement.[307]

It seems from the meaning of *šanû* and *nakāru*, as well as from information that may be gleaned from cognate expressions in later Syriac and Biblical Hebrew, that the concept of change provided a salient metaphor for expressing the experience of going mad. The state of mind and accompanying behaviours were understood to be the result of an alteration in thought processes, and this aspect of the phenomenon is highlighted through the language used to describe it.

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[304] Cited in Bhayro 2003-2004: 290. Black bile is briefly discussed with reference to mental disturbance in Babylonian medicine in Stol 1993: 31-32; Geller 2010: 152.
[305] I am indebted to Salam Rassi (University of Oxford) for his generous assistance with the original Syriac in this passage.
[306] Cited in Bhayro 2003-2004: 290. In addition, two other nouns that derive from the same root have related meanings of "madness, insanity" and "frenzy, raving madness" (Smith 1903: 586-587).
[307] See Bhayro 2013 for a study of the textual history and context of the *Syriac Book of Medicines*. For a brief overview of Syriac medical terminology, especially material medica, and of Syriac medical literature, see Bhayro 2005.

6.1.4. *ṭēmu šanû/nakāru*

Thus far, the discussion has focused on the individual components of the core symptoms *ṭēmu šanû/nakāru* "The mind alters/changes". The meaning and usage of *ṭēmu* has been discussed, including information about its Sumerian equivalents, as listed in bilingual dictionaries and as attested in works of literature, and its function in other verbal and nominal expressions that denote disturbed mental states. To elucidate the use of verbs that denote change with the *ṭēmu* to express madness and loss of control, examples were given from cognate expressions in Semitic languages. With this background, the discussion may now turn to the expression *ṭēmu šanû/nakāru* "The mind alters/changes".

Modern translations for the verbal phrase *ṭēmu šanû/nakāru* have tried to capture the idea of an alteration in some sort of mental state. In his article on Babylonian psychiatry, Kinnier Wilson interprets the term *šinīt/šanê ṭēmi* as reflecting a condition associated with mood, translating it as "change of mood" (1965: 292), but offers no further discussion of this term or of *ṭēmu šanû/nakāru* "The mind alters/changes". Olyan interprets *ṭēmu* as discernment, and frames the Akkadian expression *ṭēmu šanû* and *šinīt ṭēmi* as a loss of control (2008: 67-69). The concept of "mentation" is introduced by Scurlock and Andersen, who translate the expression as "mentation is altered" and the related term *šinīt ṭēmi* as "alteration in mentation" (2005: 374-375). Stol offers the translation of a "the mind is altering" or "is altered" (2009: 1f.). Similarly, Schaudig translates "sein Verstand sich verändert" (2014: 400).

The translations for the *ṭēmu šanû* and *ṭēmu nakāru* that are adopted here aim to capture these expressions as literally as possible, as this seems to be the best way to

preserve the original paradigm and to reflect the technical language used in the original texts. In order to reflect the difference between the two verbs for change that are used in each expression, *šanû* will be translated by "to alter" and *nakāru* by "to change". It is, however, understood throughout that such language expresses a disturbance – or change – in thought or thought processes equivalent to the concept of "madness" or derangement. The use of the paradigm of change to express madness or confusion is well-attested in Akkadian, and a few examples from some key works of literature, incantations, and historical texts written in the Standard Babylonian dialect may help to illustrate the meaning and usage of this expression in non-medical contexts.

Tiamat's reaction to Marduk's confrontational speech in *Enūma eliš* IV, in which he levels against her accusations of wrongdoing and challenges her to battle, is described as follows:

87. *Ti-amat an-ni-ta i-na še-mé-šá*
88. *maḫ-ḫu-tíš i-te-mi ú-šá-an-ni ṭè-en-šá*
89. *is-si-ma ti-amat šit-mu-riš e-li-ta*
90. *šur-šiš ma-al-ma-liš it-ru-ra iš-da-a-šú*

87. Tiamat, upon hearing this,
88. became frenzied, she caused her mind to change (i.e., went mad)
89. She cried out, Tiamat, (her voice) wildly rising
90. By her roots, her foundations trembled equally.

(*Enūma eliš* IV, 87-88)

In this rendering of the expression, the verb *šanû* appears in the causative stem with Tiamat as the subject and her *ṭēmu* as the object of change. The terminative *maḫḫûtiš* "into a frenzy", which is the adverbial form of *maḫḫûtu* "condition of an ecstatic" (CAD

M I 91),[308] is used to described frenzied behaviour or states of mind. Its use alongside *ṭēma šanû* (D stem) suggests the behaviour or state of mind described by this expression as reflecting a similar mental disturbance. The description of her mental state is accompanied by a vivid physical reaction of crying out and trembling to her very foundations, which completes this picture of loss of control.[309]

One context frames the entire experience of emotional and mental distress as a change for the worse, though madness is not the intended meaning in this particular passage. In *Ludlul* II, the protagonist tries to express the fickle nature of life and the inevitability of suffering and death:

39. *šá ina am-mat ib-lu-ṭu i-mut* U$_4$*-de-eš*
40. *sur-riš uš-ta-dir za-mar uḫ-ta-bar*
41. *ina ṣi-bit ap-pi i-za-am-mur e-li-la*
42. *ina pi-it pu-ri-di ú-ṣar-rap lal-la-re-eš*
43. *ki pe-te-e u ka-ta-mi ṭè-em-ši-na šit-ni*

39. The one who lived by might, died in distress,
40. In one moment, he darkened, suddenly he is boisterous,
41. In one moment, he sings a song
42. In another (lit. from the start), he cries out like a mourner,
43. Like opening and closing, their mind is conflicting.
(*Ludlul bēl nēmeqi* II, 39-43)

The lines in this passage present opposing experiences that change from one moment to the next. The verb *šanû* in the last excerpted line appears in the Gt stative, which has a meaning of "to be changeable, conflicting" (CAD Š I 406).[310] The use of *šanû* with *ṭēmu*

[308] From *maḫḫû* "ecstatic" (CAD M I 90).
[309] In the Atra-ḫasīs epic, Enki's reaction to the flood and its destruction is framed in similar terms in a series of couplets that describe the devastated reaction of different gods: [^{d}*En-ki*] *ʾiš*ˀ*-ta-ni ṭe*$_4$*-ʾe*ˀ*-em-šu* / [x] *ma-ru-šu ub-ʾbu*ˀ*-ku* [*a*]-*ʾna*ˀ *ma-aḫ-ri-šu* "Enki, his mind was changed (i.e., Enki went mad) / [seeing that] his sons were thrown down before him." (Atra-ḫasīs III iii 25-26; Following Lambert and Millard 1969: 94-95.)
[310] For the meaning of *šanû* Gt, see Streck 2003: 35.

here does not denote madness or loss of control; rather, the changeable or conflicting quality of this uniquely human faculty of thought and reason seems to sum up the changeability of life.

In a therapeutic text against witchcraft, an incantation to Šamaš includes a section with a long list of complaints, including a number of emotional disturbances. Among these, various nouns that represent the mood or the mind are described as changing.

> **75.** *ṭè-mi mil-ki* ˹*ik*-[*ki*] *ši-kin* SU.G[U_{10} *it*]-*ta-na-*˹*ki-ru*˺ *u iš-ta-na-an-nu-ú*[311]
> ˹*ṭè*˺-[*em r*]*a-ma-ni-ia*$_5$ ˹*ù*˺ [*m*]*il-ki-ia*$_5$ *la i-du-u*
>
> **75.** My mind, my intelligence, my mood, the appearance of my body continually change (*nakāru*) and continually alter (*šanû*). I do not know the mind of my self or my intelligence.
>
> (*CMaWR* 8.2, 75)[312]

The parallelism between this change in mood (*ikku*), understanding (*milku*), and mind (*ṭēmu*) in the first part of the excerpted line, and a loss of control over one's mind, self, and thoughts in the second part, suggests that the two describe a similar phenomenon; a change, in effect, translates to changing for the worse or becoming strange.

The differences between *ṭēmu šanû* and *ṭēmu nakāru*, and a proposed understanding of *demmakurrû*, have recently been discussed in a short article by Stol (2009) and by Chalendar (2013), but several of their points regarding these expressions deserve to be revisited and elaborated. In his analysis of the use of this expression in the *Diagnostic Handbook*, Stol notes that there is a difference in degree between the use of *šanû* and *nakāru*, such that the two expressions are not simply synonymous:

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[311] Variant: ŠÀ-*bi m*[*il-ki ṭ*]*è-e-mì iš-ta-na*-[*nu-u*] "My heart (*libbu*), my intelligence, my mind continually alter" (VAT 13609 + VAT 13665, rev. 11; see *CMaWR*: 260).

[312] On this passage and its implications for an understanding of *ṭēmu šanû* and *ṭēmu nakāru,* see also Chalendar 2013: 20.

> The normal expressions for 'insanity' and 'to be insane' use the Akkadian words *šinītu* and *šanû,* basically referring to an 'alteration' of the mind. The second set of expressions use the verb *nakāru*…The authors of medical texts adopted *nakāru* to indicate a mild type of insanity, possibly in its initial stage. They coined the name dimma kúr.ra = *demakurû* for this milder form. (Stol 2009: 12).

While I agree with Stol's assessment that there must have been a difference in the states of mind reflected in the choice between *šanû* and *nakāru* in the textual record, the evidence from the *Diagnostic Handbook* may not support his conclusion that *nakāru* is a milder form.

I propose drawing the distinction along a different line. The phrase *ṭēmu nakāru* in the core texts cited below occurs not only with mental symptoms, but also with such physiological symptoms as fever and dizziness. However, *ṭēmu šanû*, in its sole attestations in SA.GIG 22, occurs exclusively with mental symptoms. Seemingly, *ṭēmu nakāru* has a wider range of applications as a form of derangement associated with both mental disturbance and physiological illness, while *ṭēmu šanû* may exclusively refer to going mad.

Another pattern of distribution should be noted with respect to the choice between *šanû* and *nakāru* that may be seen to bear out this nuance. In non-medical texts such as the ones excerpted in this section, *šanû* is more widely attested as the verb for alteration paired with *ṭēmu* to describe a loss of control or severe confusion – going mad – as a reaction to events that might be expected to generate a mental disturbance; in other words, it seems to refer strictly to a disturbance in emotion or cognition, rather than a result of physiological dysfunction, such as delirium. The same observation may be made

of *ṭēmu šanû* in medical therapeutic texts. Conversely, *ṭēmu nakāru* can be distributed with both mental and physiological symptoms. Perhaps due to its flexibility, *ṭēmu nakāru* seems to be favoured in medical diagnostic texts. Regardless of the source of difference between the two expressions, both describe some sort of severe disruption to mental faculties, framed as a change.

6.2. Texts for *ṭēmu šanû/nakāru*

6.2.1. *Diagnostic Handbook* 22, 47-52 (*Ṭēmu* 1)

Tablet 22 of the *Diagnostic Handbook*, which forms part of the Chapter on epilepsy, deals extensively with mental symptoms, some of which have already been encountered in *ašuštu* 2 and *ašuštu* 4. The entries that precede those excerpted here include several descriptions of unusual behaviour that may possibly be associated with mental disturbance, such as removing one's garment (ll. 44-46). SA.GIG 22, 47 introduces *ṭēmu šanû*, which then forms the primary symptom in each of the protases for entries that follow.

47. [DIŠ] ⌜UŠ$_4$⌝-*šu šá-ni-šu-ma* UŠ$_4$-*šú* NU DAB ŠU GIDIM *mur-tap-pi-du* GAM
↙ DIŠ UŠ$_4$-*šu* MAN.MAN-*šu uz-zi* DINGIR
48. [DIŠ UŠ$_4$]-*šu* MAN.MAN-*šu u* EME-*šú ir-ta-nap-pu-ud* GAM
49. [DIŠ UŠ$_4$]-*šu* MAN.MAN-*ni* DU$_{11}$.DU$_{11}$-*šú* KÚR.KÚR *mim-mu-ú i-qab-bu-ú i-ma-áš-šú* IM *ku-tal-*⌜*li*⌝
50. DAB-*su ana* ma pap iš[313] GAM
51. DIŠ UŠ$_4$-[*šú* MAN[?].(MAN[?])-*šu*] [314] ⌜INIM⌝.MEŠ-*šú it-te-né-ep-rek-ka-a* GIDIM *mu-šam-šu-ú* DAB-*su*

[313] The reading of these signs remains elusive. In her review of Heeßel's edition of the SA.GIG, Scurlock suggests a reading of 1-*ma* KÚR-*iš* GAM "he will die alone like a stranger" (2003: 401). Stol makes no comment on this reading, save citing it (2009: 5 n22).
[314] Heeßel (2000: 255) does not insert this either in transliteration or translation, but Stol (2009: 5) inserts this in his translation, and the manuscript indeed has space for two signs, especially ones as narrow as MAN

52. [ ] KI.SIKIL.LÍL.LÁ *šum*$_4$*-ma* LÚ.LÍL.LÁ

47. [If] his [mi]nd is altered and his mind is not seized, Hand of a Wandering Ghost, he will die ↙ If his mind continually alters, anger of god.
48. [If] his [mind] continually alters, and his tongue continually wanders, he will die.
49. [If] his [mind] continually alters, and his speech continually changes, whatever he speaks, he forgets, wind from the back
50. has seized him, … he will die.
51. If his mind [(continually) alters (and)] his words continually stop, a Ghost Wandering at Night has seized him,
52. […] Ardat Lilû, or alternatively, Lilû.

(SA.GIG 22, 47-52 = *Ṭēmu* 1)[315]

The entries are followed by a series of related entries that deal with madness as a change in mind, using the verb *nakāru* (see below *Ṭēmu* 2).

As Stol notes in his commentary to these lines, the first symptom in line 47 describes a "state of the mind", indicated by the use of the stative "is altered, changed", whereas in lines 48-49, the symptom is described as occurring at intervals, indicated by the used of the Gtn stem of the same verb *šanû* (2009: 3). The symptom described by the phrase, "his mind is not seized" (UŠ$_4$-*šú* NU DAB), remains unclear but may perhaps be understood to denote apathy or a lack of initiative.[316]

Speech disturbances are described in four ways in these entries. Like the Ghost of line 47, the tongue is described as continually wandering (l. 48). Speech is described as continually changing in an expression that employs the same verb for change that

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and ŠÚ. Depending on the verb that might have been used – MAN or KÚR – this line could belong to *Ṭēmu* 1 or 2. Given the sequence of entries before and after lines 51-52, it is reasonable to assume that either *šanû* (MAN) or *nakāru* (KÚR) is meant. Since the first entry for *ṭēmu šanû* (line 47) has the verb in the stative, and line 53 has *nakāru* in the stative, it is possible that the stative is meant to introduce entries that begin with the symptom of a change in mind, which then gets elaborated in the active-intransitive frame. For this reason, line 53 is taken as the start of the entries for *ṭēmu nakāru* in *Ṭēmu* 2, and lines 50-51 are grouped here under *Ṭēmu* 1.

[315] Following Heeßel 2000: 255; Scurlock and Andersen 2005: 16.34-6, 19.33, 19.281-2, 20.5, 16.40, 13.252, 20.7, 19.22.

[316] See Stol 2009: 3-4.

describes speech in *ašuštu* 1 and describes the change in mind in *Ṭēmu* 2-9 (*nakāru*, l. 49). The patient also forgets his words (l. 49). Perhaps related to this inability to remember, or perhaps reflecting changed thought processes, is interrupted speech, described as his words continually hindering or tripping over each other, a (literal and figurative) figure of speech translated in this study as "stopping" (*naparkû* Ntn, l. 51). This symptom may also describe a stutter. Whatever the precise meanings of these behaviours, disordered or disturbed speech figures prominently alongside core symptom of *ṭēmu šanû* "The mind alters" in these entries.

Given the association of wandering about and mental disturbance observed in *ašuštu* 1, a ghost defined by this behaviour, as appears in the apodosis to line 47, is a likely candidate for the cause of mental disturbance, or the label assigned to such a disturbance. Similarly, Ghost Wandering at Night is named in the apodosis of line 51. Another aetiology or possible diagnosis included in these entries is "wind from the back" in line 49. Heeßel notes in his commentary that such wind is the causal agent, it "könnte es sich um einen Wind handeln, der von hinten an den Erkrankten herangeweht ist" (2000: 269). Wind is not a commonly attested disease agent or cause in the *Diagnostic Handbook*. Other causes for symptom clusters with *ṭēmu šanû* "The mind alters" include Lilû and Ardat Lilû.

Symptoms:	mind alters (*ṭēmu šanû*), mind not seized (*apathy*), wandering tongue, changed speech, forgetting speech, interrupted speech
Diagnosis/Aetiology:	Hand of Wandering Ghost, divine anger, wind from the back, Hand of Ghost Wandering at Night, Ardat Lilû, Lilû

6.2.2. *Diagnostic Handbook* 22, 53-57 (*Ṭēmu* 2)

Even though these entries immediately follow those excerpted above for *Ṭēmu* 1, they deserve to be treated separately because the verb *nakāru* is used rather than *šanû* to describe the change.

> **53.** DIŠ $UŠ_4$-*šú* KÚR-ʳ*ir*ˀ ʳxˀ x ud[317] INIM.MEŠ-*šú it-te-né-ep-rek-ka-a* $GIDIM_7$ *mut-tag-gi-šú* DAB-*su*
> **54.** [ ].MEŠ-*ma* TIN KI.MIN ŠU LÚ.LÍL.LÁ
> **55.** DIŠ $UŠ_4$-*šú* KÚR.KÚR-*šú* ŠU ^{d}UTU AZAG GU_7 ≮ DIŠ NÍ-*šú i-*$^{ḫi\text{-}pí\ eš\text{-}šú}$ GAM
> **56.** DIŠ AL.ZU.BI NAM.BA.ZU.BI *u* DU_{11}-*šú* KÚR.KÚR-*ir* GAM
> **57.** DIŠ *ú-rap-pad ú-ma-aq* ʳitˀ*-ta-na-an-di* ≮ ŠUB.ŠUB-*ut* GAM
>
> **53.** If his mind is changed, … his words continually stop, a Roaming Ghost has seized him,
> **54.** […] … continually(?) he will live; if *ditto*, Hand of Lilû.
> **55.** If his mind continually changes, Hand of Šamaš, he has committed (lit. consumed) a taboo; if his self [new break], he will die.
> **56.** If he does not recognize his acquaintance, and his speech continually changes, he will die.
> **57.** If he wanders about, he tires, and is continually thrown down; he continually falls, he will die.
>
> (SA.GIG 22, 53-57 = *Ṭēmu* 2)[318]

As with *šanû* above in the first line of *Ṭēmu* 1 (SA.GIG 22: 47), a state of mind is indicated by the use of the stative for *nakāru* (KÚR-*ir,* l. 53) in the first line in this sequence of entries.[319] Speech disturbances take the form of speech that continually stops (l. 53) and speech that continually changes (l. 56), though the latter does not appear in the same entry as the core symptom. Once again, a Roaming Ghost is encountered as the possible cause, or diagnostic label, for the symptoms (l. 53). Both Hand of Šamaš and

[317] Scurlock and Andersen offer a reading of x *maš-u-tú,* the abstract noun formed from the nominalized adjectival root of *mašû* "to forget" in order to yield a meaning of "forgetfulness", which indeed fits the context well (2005: 375, Text 16.37). However, as Stol notes, this word is not attested (2009: 5 n23).
[318] Following Heeßel 2000: 256; Scurlock and Andersen 2005: 16.37-8, 19.34, 19.1, 16.42, 16.50, 20.74.
[319] See also Stol's commentary to this line in (2009: 3).

committing a taboo appear in the apodosis in line 55, which may suggest that one functions as the illness label – including information about the general cause – and one explicitly defines the aetiology.

Ostensibly, the grouping should end at line 55, but two more lines have been included to provide context for these entries as they appear in SA.GIG 22. Although the primary symptoms of the final two entries included here are not *ṭēmu nakāru* "The mind changes", the lines continue to describe mental symptoms, as do at least the next eleven entries.[320] The protasis in line 56, as noted by Stol, is unusual in that it "is written in a learned artificial Sumerian which is highly unusual in the Handbook" (2009: 5). The phrase is explained in a commentary to SA.GIG 19, edited by Heeßel (2000: 234). The relevant lines read: ˹AL˺.ZU.BI ˹NAM˺.[BA.ZU.ZU] / ˹*mu*˺*-da-a-šú la ú-*[*ad-da*] "His acquaintance, he does not re[cognize] (Sum.) (means) / "He does not re[cognize] his acquaintance] (Akk.)" (*SpBTU* I 38, 6-7). Heeßel further notes that the inability to recognize persons is also covered in SA.GIG 16, 11; 17, 73; and 19/20, 21′ (Heeßel 2000: 241), though not in the same archaic language.[321] Finally, in line 57, wandering about is described, which occurs to such an extent as to cause exhaustion. No diagnoses or aetiologies are offered in the last two excerpted lines.

Symptoms: mind changes (*ṭēmu nakāru*), interrupted speech, failure to recognise acquaintance, wandering about, falling
Diagnosis/Aetiology: Roaming Ghost, Hand of Lilû, Hand of Šamaš, committing taboo

[320] To give a few examples, crying out (*i-leb-bu* and GÙ.GÙ-*si*) in lines 58-59, laughing (*iṣ-ṣe-né-eḫ*) in line 62, alternating from joy to fear in line 63, being downhearted (*ud-daḫ-ḫa-as*) in line 64, and being darkened and depressed or worried (*ú-te-te-eṭ-ṭe* ZI.IR.MEŠ) in line 68. To cite all of these lines as part of *Ṭēmu* 2 would stray too far from the original core symptom being dealt with, so only two lines have been included to illustrate the context for the entries for *ṭēmu nakāru* in SA.GIG 22 as one defined by mental symptoms.
[321] See Heeßel 2000: 241, commentary to SA.GIG 19/20, 21′ for further references.

6.2.3. Diagnostic Text 2N-T 336, obv. 21-24 (*Ṭēmu* 3)

This addition to the corpus is an exception to the other sources used, as it is a diagnostic text that does not form part of the canonical *Diagnostic Handbook* but comes from an earlier, or perhaps supplementary, tradition.[322] Nevertheless, it has been included since it addresses madness with other mental symptoms and includes a parallel to one of the lines in *Ṭēmu* 2 above. The canonical *Diagnostic Handbook* is drawn from a much earlier tradition, and such a parallel provides an example of one of the "threads" of knowledge to which Esagil-kīn-apli refers in his colophon to the later canonical version.[323]

The primary symptom that introduces each entry describes deafness as a symptom, specified as occurring on the day that the patient falls ill, which may suggest that deafness in these entries does not refer to a long-term disability.

21. [DIŠ] ˹GIG˺ MIN (= *marṣu ina ūmi ša imraṣu sukkukma*)[324] GÙ.GÙ-*si it-ta-na-ak-na-an u i-ta-˹na˺-*[*ša*$^{?}$*-aš*$^{?}$]
22. [DIŠ GIG] ˹MIN˺ *šit-˹tum˺* DAB.DAB-*su* [(x)]
23. [DIŠ GIG] ˹UŠ$_4$˺-*šú* KÚR.KÚR-*šum* [(x)]
24. [DIŠ GIG MIN] *u* ˹UŠ$_4$˺-*šú* NU DAB-*it* [(x)]

21. [If] he is ill, *ditto* (=the patient, (and) on the day that he falls ill, he is deaf and) continually cries out, continually curls up, and is continually dep[ressed …].
22. [If he is ill], *ditto* sleep continually seizes him, […].
23. [If he is ill] (and) his mind continually changes, […].
24. [If he is ill, *ditto*] his mind is not seized, […].

(2N-T 336 obv. 21-24 = *Ṭēmu* 3)[325]

[322] For an edition of the text, see Labat 1956. See also Rutz 2011; Attinger 2008.
[323] See Rutz 2011: 294. For an edition of the colophon, see Finkel 1988: 148-149.
[324] See Labat 1956: 124 and n10.
[325] See Labat 1956: 121-126.

If we accept the reconstruction of the partly broken sign, line 23 corresponds to the beginning of SA.GIG 22, 55. Based on the available space in line 23, the remnants of the partly damaged sign, and the contents of the following line, it is possible to read an $UŠ_4$, but there does not appear to be space for a MIN, and the first complete sign is a *-šú*. In line 24, the partly damaged sign is more clearly an $UŠ_4$, which fits well with the following phrase NU DAB-*it* "is not seized", based on attestations of this expression throughout the later *Diagnostic Handbook*. In addition to *ṭēmu nakāru* "The mind changes" and apathy, this group of lines includes other mental symptoms, such as crying out, curling up, and possibly being continually worried (restored) or, perhaps, simply distressed (*ašāšu*).

It is unclear, however, if these symptoms would have been interpreted as mental symptoms by the original observer or recorder. As a long-term disability or as a sudden consequence of illness or accident, deafness may have been observed with the same types of behaviours and impaired faculties associated with madness, but these external observation may not reflect the actual inner life of the deaf patient, whose reasoning may not have been impaired, but whose ability to communicate effectively would have been. Although the symptom of deafness is not observed with *ṭēmu nakāru* "The mind changes" in SA.GIG 22, it does appear in SA.GIG 8 (cited below), which deals with symptoms relating to the ears.

Symptoms: deafness, crying out, curling up, *depression*, fatigue, mind changes (*ṭēmu nakāru*), *apathy*
Diagnosis/Aetiology: [missing]

6.2.4. *Diagnostic Handbook* 3, 41-44 (*Ṭēmu* 4)

SA.GIG 3 deals with symptoms of the head, such as the forehead and temples, and these entries are particularly interesting for what they possibly reveal about the connection between the head and reasoning.

41. DIŠ SAG.DU-*su* DAB.DAB-*su u* KÚM ŠUB.ŠUB-*su* ŠU ˹d˺XV
42. DIŠ SAG.DU-*su* DAB.DAB-*su u* KÚM NU TUKU ŠU ˹d˺XV
43. DIŠ SAG.DU-*su* DAB.DAB-*su u* KÚM TÉŠ.BI UNU-*su* GIG-*su* TAK$_4$-*šum-ma* NÍG.NIGIN TUKU-˹*šum*˺-[*ma* KI]˹LAL˺-*šú* LAL-*šú*
44. UŠ$_4$-*šú* KÚR-*šum-ma ina* NU ZU-*ú ú-rap-pad* GIN$_7$ DAB-*it* GIDIM$_7$ ^{d}DIM$_{11}$.˹ME˺ ˹DAB˺-[*su uš*]-*te-zib*

41. If his head continually seizes him and fever continually befalls him, Hand of Ištar.
42. If his head continually seizes him and he has no fever, Hand of Ištar.
43. If his head continually seizes him and at the same time he has fever, it hurts[?] him, his illness leaves him, but he has vertigo [and] he suffers from a fit,
44. his mind changes, he wanders about without knowing (it), (it is) like seizure of Ghost, Lamaštu seizes [him; he will] come through.

(SA.GIG 3, 41-44 = *Ṭēmu* 4)[326]

The first two lines of this excerpt vary the core symptom of a seizing head with the presence or absence of fever. Hand of Ištar is blamed, or given as a label, in both cases.

In line 43, the protasis specifically notes that the illness has left the patient – perhaps, referring to the physiological component – yet a group of mental symptoms remains. These include vertigo, which often occurs with other mental symptoms,[327] and a fit. It is likely that the latter refers to a fit of fear or panic, as an epileptic fit would have been accompanied by symptoms specific to epilepsy and seizures, such as spittle in the mouth, stretched-out fingers, and turning about. The entry continues into line 44, where

[326] Following Labat 1951: 22, ll. 34-37; Scurlock and Andersen 2005: 19.254, 19.12, 3.25, 19.227.
[327] See Section 7.3.3.

the core symptom appears alongside the patient wandering about. The added qualification of wandering about "without knowing (it)" only adds to the general picture of a loss of control.

That *ṭēmu nakāru* "the mind changes" occurs in the context of symptoms relating to the head is suggestive of the relationship between the head and cognition. A seizing head is observed with madness, even if no causal relationship is posited.[328]

Symptoms: seizing head, fever, illness absent, vertigo, fit (of fear or panic), mind changes (*ṭēmu nakāru*), wandering about without knowing it
Diagnosis/Aetiology: Hand of Ištar, comparison to seizure of Ghost, Lamaštu

6.2.5. *Diagnostic Handbook* 3, 89-90 (*Ṭēmu* 5)

Another passage from SA.GIG 3, which may further suggest that a connection between ailments of the head and impaired cognitive faculties was observed in the Akkadian medical tradition, also pairs *ṭēmu nakāru* with a seized head and several other physiological symptoms with which mental disturbance is known to be organized.

89. DIŠ *ina* SAG.DU-*šú* SÌG-*iṣ-ma* ˹MIR˺.SES ŠUB.ŠUB-*šú u* ˹IGI˺.MEŠ-*šú* SA_5 *u* ˹SIG_7 GIN_7 DAB˺-*su* ŠUB-*su*
90. ˹$UŠ_4$˺-*šú* KÚR-*šum-ma i-ṭa-mu* DAB-*it* $^{d}DIM_{11}$.ME.˹LAGAB˺ U_4-*me-šú* GÍD.DA˹^{me}-*ma*˺ GAM

89. If he is struck on his head and chills continually befall him and his face turns red and turns pale, when his seizure befalls him,
90. his mind changes, he spins, seizure of *aḫḫāzu*-demon his days will be long, and he will die.

(SA.GIG 3, 89-90 = *Ṭēmu* 5)[329]

[328] On the possible connection between injuries to the head and cognitive problems, see Worthington 2003: 3-4.
[329] Following Labat 1951: ll. 82-83; Scurlock and Andersen 2005: 13.127, 19.187.

The verbal form in the symptom of *ṭēmu nakāru* "The mind changes" appears in line 90 in the G stem Durative, rather than displaying the -tan- infix of the iterative stem, and the same spelling as appears in *Ṭēmu* 4 (l. 44) is used (KÚR-*šum-ma*).[330] From the description in that line, it appears that the change in mind or reasoning occurs with the seizure.

In addition, chills (MIR.SES), which are encountered in *ašuštu* 1, as well as in disease lists that include *ašuštu* (e.g., *KAR* 233, rev. 7),[331] accompany the core symptom. The patient's face is described as changing colour, from being red to being pale, the latter of which may be viewed as a topos for changes in mood or depression (Gruber 1980: 358).[332] Seizure of *aḫḫāzu*-demon is given in the apodosis of the entry.

Symptoms: struck head, chills, red face, pale face, mind changes (*ṭēmu nakāru*), spinning
Diagnosis/Aetiology: Seizure of *aḫḫāzu*-demon

6.2.6. *Diagnostic Handbook* 8, 13-14 (*Ṭēmu* 6)

The following passage comes from SA.GIG 8, a short tablet in its extant form that deals with symptoms affecting the ears.

13. DIŠ GEŠTU.II-*šú i-šag-gu-mu u* UGU-*šú i-šam-ma-am-ma-šu* ŠU ^{d}XV
14. DIŠ GEŠTU.II-*šú kab-ta-šú* UŠ$_4$-*šú* KÚR.KÚR-*šú u* INIM.INIM-*šú it-te-né-ep-rek-ku* GAM

13. If his ears roar and his skull goes numb, Hand of Ištar.
14. If his ears are heavy (i.e., he is deaf), his mind continually changes, and his speech continually stops, he will die.

[330] The verbal form KÚR-*šum-ma* could alternatively be interpreted as a stative with a dative ending; however, it seems that the stative of KÚR and other verbs is written with a phonetic complement in the *Diagnostic Handbook*. This is corroborated for example by Heeßel's reading of KÚR-*šum-ma* in SA.GIG 26, 5′ and 16, 93′-94′.
[331] See §4.1.3.1.
[332] See § 4.1.3.2.

(SA.GIG 8, 13-14 = *Ṭēmu* 6)[333]

The symptom of roaring ears, frequently associated with other mental symptoms, and a numb skull appear with Hand of Ištar in the apodosis. The relationship between symptoms affecting the head and madness is also observed in *Ṭēmu 4*, where an injury (seizure) or other affliction of the head was associated *ṭēmu nakāru* "The mind changes".

Once again, a disturbance in speech, which is here described as stopping and may indicate interrupted speech or a stutter, is organised with *ṭēmu nakāru* "The mind changes". This same type of disturbance was associated with a change in mind in the excerpts from SA.GIG 22 above (*Ṭēmu* 1 and *Ṭēmu* 2). Such interrupted speech may indicate an interruption in thought processes. It is also possible that a disturbance in speech may be linked to deafness, the symptom described by the idiom "his ears are heavy" (GEŠTU.II-*šú kab-ta-šú*). However, if the disturbance relates to the patient's hearing, interrupted speech would not be expected; rather, the resulting symptom would most likely be related to the level of coherence of speech. Thus, I take the interrupted speech to reflect an interruption in thought processes resulting from a disturbance in thought processes. As with the Middle Babylonian diagnostic text (*Ṭēmu* 3), it is possible that deafness was mistakenly associated with mental symptoms due to the appearance of impaired faculties.

Symptoms: roaring ears, numb skull, deafness, mind changes (*ṭēmu nakāru*), interrupted speech
Diagnosis/Aetiology: Hand of Ištar

[333] Following Labat 1951: 70, ll. 13-14; Scurlock and Andersen 2005:19.287, 13.220.

6.2.7. *Diagnostic Handbook* 19/20, 13′-14′ (*Ṭēmu* 7)

This tablet is so broken that very few complete entries can be extracted from it; however, in the interest of presenting a complete catalogue of the usage of *ṭēmu šanû/nakāru* "The mind changes/alters" in the *Diagnostic Handbook*, it is necessary to include these lines from SA.GIG 19/20.

13′. [ ] ˹DAB˺-*su* KÚR.KÚR-*ir* UŠ$_4$-*šú* KÚR.KÚR-*ir* ŠU ^{d}XXX [ ]
14′. [ ] *u da-bab-šú* KÚR.KÚR-˹*ir*˺ U$_4$ 3-KÁM GIG ˹ŠU ^{d}˺[ ]

13′. […] his seizure continually changes; his mind continually changes, Hand of Sîn […]
14′. […] and his speech continually changes, he will be sick (for) three days, Hand of (the god) […]

(SA.GIG 19/20, 13′-14′ = *Ṭēmu* 7)[334]

The core symptom under consideration appears in line 13′, where Hand of Sîn is blamed, or given as the label, for a symptom cluster that includes *ṭēmu nakāru* "The mind changes". It possibly follows a description of his seizure's continually changing. Speech might offer a compelling example, given that it appears in the next excerpted line and that it can be described as both changing and being seized. The following line has been included, even though the core symptom does not feature in it, because speech disturbances are described in the same terms as *ṭēmu nakāru* – namely, as continually changing – along with the Hand of another deity (or ghost, demon, etc.), which is missing.

Symptoms: changed seizure, mind changes (*ṭēmu nakāru*), changed speech
Diagnosis/Aetiology: Hand of Sîn, Hand of [X]

[334] Following Heeßel 2000: 227.

6.2.8. *Diagnostic Handbook* 13, 19′-20′ (*Ṭēmu* 8)

These entries come from SA.GIG 13, which deals with ailments of the *libbu*, including a technical term for epigastrium that is represented by a compound expression *rēš libbi*. Symptoms relating to the epigastrium are organized with a number of mental symptoms in both the diagnostic and therapeutic traditions and, in such cases, should be taken seriously as a mental symptom in the organizational patterns used in the Akkadian diagnostic tradition.

19′. DIŠ SAG ŠÀ-*šú za-qir* KÚM NU TUKU UŠ$_4$-*šú* KÚR.KÚR ŠÚ.ŠÚ A.GA.NU.TIL-*le-e*
20′. SI-*šum-ma ina* U$_4$-*um* BI.IZ AN-*e* GAM

19′. If his epigastrium is protruding and he has no fever, his mind continually changes, overwhelming dropsy,
20′. it is *full* for him, on the day of dripping from the sky, he will die[335]
(SA.GIG 13, 19′-20′ = *Ṭēmu* 8)[336]

In the first excerpted line, an epigastrium that is protruding (*zaqāru*) but without the presence of fever is paired with the core symptom, as well as with oedema, or excess water retention (dropsy).[337] The prognosis, given in the second line, is death on the day that it rains, which poses an interesting connection between water retention and rain.[338] Although a protruding epigastrium often appears in descriptions of anxiety in therapeutic texts, it seems more likely that this symptom forms part of the description of oedema in these entries. Scurlock and Andersen suggest that the oedema forms part of congestive

[335] The verb bi--iz "to drip, trickle" (Thomsen 2001: 297) is usually said of rain, written SE$_7$.
[336] Following Labat 1951: 112, ll. 20′-21′; Scurlock and Andersen 2005: 8.22.
[337] Dropsy (in Sumerian, a-gal-nu-til-la) follows dimma-kúr-ra "madness" in Igituḫ Short Version: 170-171 (Chalendar 2013: 16; Landsberger and Gurney 1957-1958).
[338] This may suggest that the relationship between protasis and apodosis here derives not from empirical observation, but from wordplay or analogy. The medical commentary explains that death is due to the cold (*SpBTU* I 31, 27; Scurlock and Andersen 2005: 710 n23.

heart failure (2005: 170). If this is the primary condition being described, then a change in reason or mind may simply refer to delirium, confusion, or loss of control associated with this physiological condition, in which case the symptoms organised with it may not be informative for a reconstruction of patterns in the description of mental symptoms.

Symptoms: protruding epigastrium, absence of fever, mind changes (*ṭēmu nakāru*)
Diagnosis/Aetiology: dropsy

6.2.9. *Diagnostic Handbook* 13, 32′-33′ (*Ṭēmu* 9)

In the same tablet, SA.GIG 13, which deals with symptoms originating in or located in the abdominal region, *ṭēmu nakāru* "The mind changes" appears yet again with epigastric symptoms:

> **32′.** DIŠ SAG ŠÀ-*šú* KÚM *ú-kal* UŠ$_4$-*šú* KÚR.KÚR-*šú* A ^{giš}BAL I$_7$ NAG *ana* ˹MÁ.ÚR.RA˺ TAG-*ma* GAM
> **33′.** DIŠ SAG ŠÀ-*šú* GIG ZI-*bi u* TUŠ-*ab* GIDIM$_7$ ŠEŠ *u* NIN DAB-*su*
>
> **32′.** If his epigastrium has heat, his mind continually changes, he drank water from a hoisting device of the river, on the … he will die.
> **33′.** If his epigastrium is sick, he gets up and (then) sits down, the Ghost of a Brother or Sister has seized him.
>
> (SA.GIG 13, 32′-33′ = *Ṭēmu* 9)[339]

In the first line, a hot epigastrium is paired with the core symptom, along with a somewhat unexpected aetiology of having drunk from the hoisting device of a river. It is possible that the madness described here is some sort of delirium brought about by drinking water that has been contaminated – symbolically or literally – which might also

[339] Following Labat 1951: 114, ll. 33′-34′; Scurlock and Andersen 2005: 15.31. The hoisting device of a river (^{giš}BAL I$_7$) also figures in SA.GIG 17, 14-65 (see Heeßel 2000: 201).

be accompanied by abdominal symptoms. It is also possible that the patient has committed some sort of taboo by ingesting water from a specific part of the river and as a result is experiencing psychosomatic and mental symptoms.

Although the second line excerpted does not reference the core symptom of *ṭēmu šanû*, it does pair epigastric pain with the unusual behaviour of getting up and sitting down. Note that this topos of agitation is described with fear elsewhere in the *Diagnostic Handbook* (e.g., SA.GIG 17, 23-24) and will be discussed in §7.1.1.

Symptoms: hot epigastrium, mind changes (*ṭēmu nakāru*), sick epigastrium, restlessness
Diagnosis/Aetiology: drinking from the hoisting device of a river, Ghost of a Brother or Sister

6.3. Summary

In the expressions *ṭēmu šanû/nakāru* "The mind alters/changes", the *ṭēmu* may be understood to represent the mind as the locus of mental faculties and in particular of thought, thought processes, and reason. In this capacity, it undergoes change tantamount to madness or derangement, observed with some recurring behaviours, such as disturbances in speech and wandering about. From the types of symptoms configured with each, some differences may be pointed out. As noted above, the source of difference between the two expressions might be one of degree (Stol 2009) or one of flexibility. In light of the core texts, *ṭēmu nakāru* "The mind changes" seems to have a wider range of applications as a form of derangement associated with both a psychiatric disturbance and physiological illness, while *ṭēmu šanû* "The mind alters" exclusively refers to the psychiatric disturbance of going mad. Despite these posited differences, both types of

madness are expressed as a change and both are organised with similar behavioural symptoms. For this reason, and for ease of reference, the two are grouped together in this study.

The following table summarises the symptoms organised with the core symptom in the *Diagnostic Handbook* and in the Middle Babylonian diagnostic text:

Table 7 Summary of symptoms organised with *ṭēmu šanû/nakāru* "The mind alters/changes"

Text	Psychological	Physiological	Behavioural
***Ṭēmu* 1**	*ṭēmu šanû* apathy		wandering tongue changed speech forgetting speech interrupted speech
***Ṭēmu* 2**	*ṭēmu nakāru*		interrupted speech failure to recognise acquaintance wandering about falling
***Ṭēmu* 3**	*ṭēmu nakāru* apathy depression	deafness[340] fatigue	crying out curling up
***Ṭēmu* 4**	*ṭēmu nakāru* fit (of fear or panic)	seizing head fever absence of (physical?) illness vertigo	wandering about without knowing it

[340] This should be distinguished from the usual somatic complaints that are grouped under the rubric of "Physiological" throughout Chapters 4, 5, and 6, such as abdominal discomfort, weakness, fever, chills, or even fatigue. Deafness is, however, a disability that arises from physiology and therefore fits best in this category.

***Ṭēmu* 5**	*ṭēmu nakāru*	struck head chills red face pale face seizure	
***Ṭēmu* 6**	*ṭēmu nakāru*	roaring ears numb skull deafness	interrupted speech
***Ṭēmu* 7**	*ṭēmu nakāru*	changed seizure	changed speech
***Ṭēmu* 8**	*ṭēmu nakāru*	protruding epigastrium absence of fever	
***Ṭēmu* 9**	*ṭēmu nakāru*	hot epigastrium sick epigastrium	restlessness

In some cases, *ṭēmu šanû/nakāru* "The mind alters/changes" is the only symptom that directly describes an abnormal mental state recorded in the entry or entries with which it occurs. Apathy (lit. "his mind is not seized") appears twice, including in the Middle Babylonian diagnostic text, and a fit of fear or of panic is observed once. Where physiological symptoms are present, these consistently refer to the head, ears, and abdominal region, particularly the epigastrium. Fever is described as present or absent in some entries. However, the majority of symptoms recorded with *ṭēmu šanû/nakāru* "The mind alters/change" are behavioural.

With these core texts set out, a preliminary repertoire of mental symptoms observed with *ṭēmu šanû/nakāru, ḫīp libbi*, and *ašuštu* has now been identified and may be investigated further to determine patterns that recur in the types of complaints and behaviours organised with the three core symptoms.