As Below So Above: Reconstructing the Neo-Babylonian Worldview

Heather Marie Burrow
Claremont Graduate University

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As Below So Above:
Reconstructing the Neo-Babylonian Worldview

By
Heather Marie Burrow

Claremont Graduate University
2023
Approval of the Dissertation Committee

This dissertation has been duly read, reviewed, and critiqued by the Committee listed below, which hereby approves the manuscript of Heather Marie Burrow as fulfilling the scope and quality requirements for meriting the degree of Doctor of Philosophy in Religion.

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ABSTRACT

As Below So Above: Reconstructing the Neo-Babylonian Worldview

By
Heather Marie Burrow

Claremont Graduate University: 2023

To add to our knowledge about a Near Eastern culture, this project examines through textual evidence how the early first millennium BCE Neo-Babylonians thought, reasoned, and wrote in order to partially reconstruct the shared, generally held worldview of the Neo-Babylonian people using the transdisciplinary approach of worldview analysis. Worldviews are what we use to think with, not what we think about. Underlying surficial cultural behaviors are deeper levels of cognition regarding how to reason, perceive the world, prioritize values, prescribe behavior, and explain all of life. Specifically, this work examines the language and logic reflected in the textual archive, believing that this is the foundational level of any worldview. I argue that one finds two related components: (1) that they were linguistically programmed to be attuned to the full context over particularities, verbal actions over agential subjects, the continuity of substances over discrete objects, the standard use of maleness over femaleness, and the affective power of spoken or written words, and (2) that they were logically programmed to prefer gradations over distinctions, functional properties over inherent attributes, radials and/or rhizomes over linearity, and relationships and/or comparisons over abstractions and algorithms. By addressing this underlying, implicit cognitive software the Neo-Babylonians used, one is better able to understand the society’s more observable and obvious religious, ethical, legal, political, and social features. This has the potential to present a more contextualized view of Neo-Babylonian civilization. Reconstructing the ancient Neo-Babylonian worldview allows scholars to compare and contrast the linguistic and logical features to other
ancient nearby cultures in order to understand continuities and differences and what accounts for them. One can open a dialogue between these ancient societies at a deeper level. It demonstrates the uniqueness of Neo-Babylonia. And it provides a basis for understanding how Neo-Babylonians contributed to the roots of Western civilization and thought. Most current worldview analysis examines modern or postmodern worldviews. By examining an ancient worldview, one can begin to more clearly understand any common aspects which exist for all worldviews and any elements that exist in ancient ones which are missing from cataloging more modern worldviews. Thus, the cataloging of an ancient worldview helps to open new vistas within worldview studies. This study invites similar ones within ancient Near Eastern studies and within ancient studies in general.
DEDICATION

This dissertation is dedicated to my parents, Bill and Idona, who have always encouraged me, supported me, and loved me. It is because of them that I am the woman I am today.
ACKNOWLEDGMENTS

If I have seen further than other men, it is because I have stood on the shoulders of giants.

– Isaac Newton

There is not an academic work that does not blossom, ascend, or percolate from what went before. My work is no exception. Just as Neo-Babylonian culture stood in a long stream of tradition of thoughts, attitudes, and behaviors, I stand among a family, a university, a community, a nation, and a culture that informs so much of my being—some of whom I would like to thank.

I would like to thank all of my family and friends for their unwavering support and encouragement of me throughout this process.

I would like to thank my professors who formed my dissertation committee, Matt, Dan and especially Tammi for encouraging me, guiding me, and listening to me through a long process. Each one brought out something different in my work.

I would also like to extend my thanks to Claremont Graduate University for awarding me the 2021-2022 Doctoral Dissertation Grant which financially blessed me during the last year of dissertation writing.
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<th>Description</th>
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<tbody>
<tr>
<td>AGA</td>
<td><em>A Grammar of Akkadian</em></td>
</tr>
<tr>
<td>CAD</td>
<td><em>The Assyrian Dictionary of the Oriental Institute of the University of Chicago</em></td>
</tr>
<tr>
<td>CANE</td>
<td><em>Civilizations of the Ancient Near East</em></td>
</tr>
<tr>
<td>CDA</td>
<td><em>A Concise Dictionary of Akkadian</em></td>
</tr>
<tr>
<td>JAAR</td>
<td><em>Journal of the American Academy of Religion</em></td>
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<tr>
<td>OHCC</td>
<td><em>The Oxford Handbook of Cuneiform Culture</em></td>
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**Chronological Periods/Linguistic Designations**

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<tbody>
<tr>
<td>Old-Bbl</td>
<td>Old Babylonian</td>
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<tr>
<td>Mid-Bbl</td>
<td>Middle Babylonian</td>
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<tr>
<td>Std-Bbl</td>
<td>Standard Babylonian</td>
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<tr>
<td>Neo-Bbl</td>
<td>Neo-Babylonian</td>
</tr>
<tr>
<td>Late-Bbl</td>
<td>Late Babylonian</td>
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<tr>
<td>ANE</td>
<td>Ancient Near East</td>
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**Language Abbreviations**

<table>
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<td>Akk</td>
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<tr>
<td>Arb</td>
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<tr>
<td>Eng</td>
<td>English</td>
</tr>
<tr>
<td>Grk</td>
<td>Greek</td>
</tr>
<tr>
<td>Hbw</td>
<td>Hebrew</td>
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Šum    Šumerian

**Translational Abbreviations**

m.  masculine
f.  feminine
PN  personal name
DN  divine name
GN  geographical name
ca.  circa
r.  reigned
lit.  literal
mod.  modern
trslit.  transliteration
trslat.  translation

**Miscellaneous Abbreviations**

NSM  Natural Semantic Metalanguage

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PART ONE: OVERVIEW & BACKGROUND

But there are some people, nevertheless—and I am one of them—who think that the most practical and important thing about a man is still his view of the universe.

—G.K. Chesterton, *Heretics*

I. CHAPTER ONE: THE CONTEXT OF THE STUDY: An Introduction

Most people’s first thoughts about Babylonia and Babylon usually summon images of hanging gardens, cuneiform tablets, and the biblical story of the Tower of Babel. More negatively, the name of Babylon has come to represent a sinful, depraved place destined for destruction—a stand-in term applied to many worldly cities, including Rome, London, and most recently Hollywood. For many, not much else is known. Yet, scholars who study the ancient Near East have produced a plethora of material on this fascinating civilization.

1.1 Statement of the Problem: An Information Gap Exists

Ancient Greece with its city-states, self-rule democracy, philosophical traditions, and subsequent Hellenistic cultural diffusion have always been of interest to the Western\(^1\) mind. To that end, there is much scholarship that traces developmental origins, especially of Western Civilization, starting with the Greeks.\(^2\) In contrast, the much more ancient civilizations of Mesopotamia were buried, forgotten, and almost dead for over a millennium, until archaeological excavations began in the mid-nineteenth century in today’s Iraq. Within the last fifty years there has been a notable

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\(^1\) I use the label ‘Western’ to refer to those nations and associated cultures located in the northwest of Europe (including the United Kingdom, France, Germany, Spain, Italy, Norway, Sweden, Finland, etc.) and the British-descendant nations and associated Anglo cultures (including the United States, Canada, New Zealand, and Australia).

increase in scholarly interest and popular references to ancient Near Eastern societies within the Tigris-Euphrates Valley, including Sumer, Akkad, Babylonia, and Assyria.³

Many prominent Assyriologists have claimed that Mesopotamia is a dead civilization, as A. Leo Oppenheim’s classic 1964 book shows, which is entitled Ancient Mesopotamia: Portrait of a Dead Civilization.⁴ How can such a civilization truly be dead if we are still studying it, referencing it, inspired by it, and retelling its stories 3,000 years later? Yet, there is still so much we do not know or understand about these ancient Near Eastern cultures, especially regarding how they perceived reality and linked beings, events, objects, and other recognized phenomena into an overall framework for living their lives.

The problem this study addresses is this lack of analysis and subsequent understanding regarding how and why the Neo-Babylonians thought, reasoned, and spoke as they did—their underlying worldview. To my knowledge there are no monographs focused on reconstructing the Neo-Babylonian worldview in its entirety (or the worldview of any of the ancient Near Eastern cultures). There are studies that deal with only specific aspects of ancient Near Eastern worldviews—especially their view of space, time, divinity, magic, and ethics. For instance, Thorkild Jacobsen examines the changing theological conception of divinity within Mesopotamia.⁵ A collection of scholars examine ANE values related to religion, death, institutions, health, and learning.⁶ Carly Crouch examines ANE ethical systems, arguing that all

³ For instance, in Marvel Comics the Sumero-Akkadian demigod Gilgamesh, who sought after immortality, is one of the Eternals, a race of immortal beings. The Mesopotamian primordial goddess Tiamat is a five-headed dragon goddess in the game Dungeons and Dragons. Babylon is referenced in the title of the sci-fi show Babylon 5 that focuses on a pivotal space station at the crossroads of galaxy intrigue. For many more recent examples see Lorenzo Verderame and Garcia-Ventura Agnès, eds., Receptions of the Ancient Near East in Popular Culture and Beyond (Atlanta, GA: Lockwood Press, 2020).
of the ANE shared a common cosmological outlook which generated similarities in ethical
thinking.\textsuperscript{7}

There are also studies on specific cultural aspects that situate their analysis within a
cosmological framework focused on the ancient view of time and space. Ann Jeffers examines
magic and divination in ancient Israel, beginning by re-evaluating the ways the Western world
has viewed magic. She argues that magic and divination are part of a complex cosmological
system of religious intermediation where all the components of the cosmos interrelate. She
concludes that in this regard the Israelites shared the same worldview with its neighbors.\textsuperscript{8} Other
scholars have focused on the development of numerical measurements and its relationship to
symbolism, time, cosmology, ritual, and religion in many ancient societies. In particular, Denise
Schmandt-Besserat focuses on the token system of the ANE and how it led to writing and
abstract numbers.\textsuperscript{9} Wayne Horowitz examines Mesopotamian ideas of the physical structure of
the universe and its constituent parts and how it relates to their overall cosmological
understandings.\textsuperscript{10} Henriette Groenewegen-Frankfort examines depictions of space and time in
the representational art of the ANE, showing how the Mesopotamians were concerned with
order, measure, and relations and less concerned with space-time actualities.\textsuperscript{11} Lastly, Nicolas

\textsuperscript{7} Carly L. Crouch, \textit{War and Ethics in the Ancient Near East: Military Violence in Light of Cosmology and
History} (Beihefte Zur Zeitschrift Für Die Alttestamentliche Wissenschaft; Bd. 407; Berlin: Walter de Gruyter, 2009).

\textsuperscript{8} Ann Jeffers, “Magic and Divination in Ancient Israel,” \textit{Religion Compass} 1, no. 6 (2007): 628–42.

\textsuperscript{9} Denise Schmandt-Besserat, “The token system of the ancient Near East: Its role in counting, writing, the
economy and cognition” in \textit{The Archaeology of Measurement: Comprehending Heaven, Earth and Time in Ancient
Societies} (ed. Iain Morley and Colin Renfrew; Cambridge: Cambridge University Press, 2010), 27-34.

\textsuperscript{10} Wayne Horowitz, \textit{Mesopotamian Cosmic Geography} (2nd print with corrections and addenda;

\textsuperscript{11} Henriette A. Groenewegen-Frankfort, \textit{Arrest and Movement: An Essay on Space and Time in the
Wyatt examines Mesopotamian concepts of space and time, especially in reference to the human body, celestial objects, and local landmarks.\textsuperscript{12} There are also studies approaching from the other direction by focusing on the Israelite or Hebrew worldview which situates this worldview within a generalized ancient Near Eastern background. John Walton compares the ANE common cognitive environment with ancient Israel’s understandings to highlight continuities and discontinuities between the Israelites and their neighbors.\textsuperscript{13} Others compare and contrast foundational creation stories among ANE cultures.\textsuperscript{14}

But as of yet, none have attempted to truly and integratively understand the underlying language, logic, conceptual categories, perceptions, and assumptions of the Neo-Babylonians which encompass their worldview. Many of these scholars of Neo-Babylonia and the wider ancient Near East address some worldview-related aspects that undergird ancient thoughts and actions in their works, but without grounding it in a theoretically-based, fully fleshed out reconstructed worldview. These works are isolated into different research traditions and subject matters with little attempt to develop an integrated approach based on a robust theory that draws insights from them all.

It is my contention that one cannot broadly and fully understand Neo-Babylonian culture without understanding why they thought and reasoned as they did. One must first understand their worldview.

Thus, an information gap exists. This has been noted by recent scholars, including those focused on ancient Mesopotamian religion\(^\text{15}\) and Akkadian literature\(^\text{16}\) who state that we do not possess much deep analytical understanding of the pantheon, deities, or literature associated with these cultures or the historical transformations that occurred.

1.2 A Proposed Solution: A Centering Thesis

This study attempts to fill this gap in knowledge by exploring the Neo-Babylonian worldview. As many worldview scholars have noted, worldviews are what we use to think with, not what we think about. Underlying surficial cultural behaviors are deeper levels of cognition regarding how to communicate, reason, perceive the world, prioritize values, prescribe behavior, and explain all of life.

Thus, the purpose of this work is to partially reconstruct the shared, generally held worldview of the Neo-Babylonian people, focusing on the underlying substructure of implicit linguistic and logical parameters utilized, which encompass their foundational orientations to reality and life, using the transdisciplinary approach of worldview analysis. The work’s most basic question is: what kinds of linguistic logic and reasoning logic did the Neo-Babylonians most often default to using within the the most foundational level of their encoded cognitive software?

Based on my research, I argue that one finds at the foundational level of the ancient Neo-Babylonian worldview: (1) that they were linguistically programmed to be attuned to the full context over particularities, verbal actions over agential subjects, the continuity of substances


over discrete objects, the standard use of maleness over femaleness, and the affective power of spoken or written words, and (2) that they were logically programmed to prefer gradations over distinctions, functional properties over inherent attributes, radials and/or rhizomes over linearity, and relationships and/or comparisons over abstractions and algorithms.

1.3 Rationale for the Study

I agree with Ann Taves that Ninian Smart’s call for repositioning some of what we are doing as scholars of religion under the broader rubric of worldview studies is highly relevant, advantageous, and timely. Worldview analysis is centered on an insider point of view which allows us to focus on how groups characterize themselves. This approach provides a more neutral starting point for analyzing a culture. Worldview analysis encourages a multidisciplinary approach that bridges the sciences-humanities divide. And it is attentive to different levels of analysis.

Using worldview analysis to reconstruct the ancient Neo-Babylonian worldview has the potential to present a more contextualized view of Neo-Babylonian society. It allows us to better understand the society’s more observable and obvious cultural features—its particular historical, legal, religious, political, economic, social, and technological characteristics and developments. It demonstrates the uniqueness of the Neo-Babylonian socioculture and the Neo-Babylonian worldview. It allows scholars to compare and contrast the linguistic and logical features to other ancient nearby cultures, including Egypt, Assyria, and Israel, in order to understand continuities and differences and what accounts for them. One can open a dialogue between these ancient

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cultures at a deeper level. Lastly, it provides a basis for understanding the cross-cultural diffusion between Neo-Babylonia and one of its successors, the ancient Greeks, and how Neo-Babylonians contributed to the roots of Western civilization and thought, in order to shake up the traditional dominant narrative of civilizational developmental origins.

Most current worldview analysis examines and catalogs modern or postmodern worldviews. By examining an ancient worldview, one can begin to more clearly understand any common aspects which exist for all worldviews. For instance, many past scholars have viewed traditional societies as ‘primitive’ or less evolved than modern ones by assuming an evolutionary model in which there are progressive stages through which societies and religions develop, with democracy, capitalism, and Protestantism used as the highest marks on the yardstick by which to judge the level of the politico-economy and religion. For these reasons, we have not easily or readily been able to appreciate the continuities and similarities our modern societies and worldviews have with these ancient societies and their worldviews. This study hopes to bridge that divide.

Relatedly, a study of this nature allows us to also understand any elements that exist in ancient worldviews which are missing from cataloging more modern worldviews. Conversely, analyzing an ancient worldview also assists in understanding elements that may be included in all modern or postmodern worldviews but is largely absent in ancient ones. For instance, while some fundamental questions are relevant to modern worldviews—such as ‘when did the universe begin?’—this is not a question the ancient Neo-Babylonians asked.

Lastly, as many scholars of worldview studies have noted, one often sees and understands one’s own culture or worldview more clearly after immersing oneself in another culture, either physically or mentally, especially one so ancient. One is also better able to understand the nature
of humanity and the human tendency to order and construct a perceptual frame for reality by analyzing a multitude of differing cultures and worldviews across time and space.

Thus, the cataloging of an ancient worldview broadens our understanding of the composition of any and all worldviews in general. It helps to open new avenues of research within worldview studies. This study invites similar ones throughout the vast expanse of ancient Near Eastern studies and within ancient studies in general.

1.4 Emic Labels

Part of my worldview-based methodology utilizes emic, insider understandings and labels whenever possible which can be compared against etic outsider academic or modern terminology. See section 3.4.2 for details on my full methodology. A few emic labels utilized require comment upfront.

I use the term Akkadûm rather than Akkadian to refer to the language spoken and written. I also use the term Šumerûm to refer to the language of the people of Šumerum, though this is the Akkadûm term rather than the emic term (Šum: EME.GIR) used by that people group. I use the term Bâbilîm (Eng: gate-of-gods) to refer to the city of Babylon. I use the term Māt Kaldîm (Eng: land of-Chaldeans) or Kaldi (Eng: Chaldean) to refer to Neo-Babylonia of the first millennium. I use the term Birît Nārāti (between rivers) to refer to the region of Mesopotamia. See section 4.1 for details on the history and academic usage of these terms.

The term ‘worldview’ is not an etic term per se. Rather it is an academic term that represents an outdated understanding of the phenomena by which someones construct an outlook on reality. See section 2.1 for the history and academic usage of the worldview concept. While I will occasionally still utilize the term ‘worldview,’ I mainly use the coined term ‘lifeframe’ to
refer to this concept within my own theory and methodology. See section 3.2 for details on the lifeframe concept.

1.5 Recurring Themes

There are a few themes that recur throughout this work that function as catalysts for many of my thoughts, including the necessity of embodiment, the mechanism of continua, the crossing of boundaries, and the software inherent in the mind.

**Embodiment.** It has been found that human embodiment influences our perceiving, thinking, and explaining in important ways. Our body is the first and best model we use to understand and relate to the world around us. With the use of our body, our mind can be extended into our surroundings.

**Continuums.** Much of a worldview consists in orientations existing along continuums with two opposite poles held in tension. Continuums pervade our life-worlds.

**Boundaries.** While I discuss some clear and distinct boundaries, such as those found in word meanings, many other areas under discussion involve concepts, domains, substances, and beings without clear and distinct boundaries. At other times, distinct boundaries are continually crossed, such as in pollutions.

**Mental Software.** As a former computer programmer, the metaphor which I think best describes how the mind works is one that relates the mind’s operations to that of computer software. Both encompass known data and executable programs that output results.
1.6 Circumscription of the Topic

The scope of the study cannot include all of the ancient Near East in terms of place, people, or time frame for many practical reasons. I have relied on three principles of selection in order to choose and cordon the culture under study and related worldview analysis: the quality of evidence, quantity of evidence, and availability of this evidence.

**Limited in Time and Place.** Firstly, I have sought to examine a particular ancient culture that was full, flourishing, and vibrant. Thus, the study is geographically limited to the central and southern area of the Birīt Nārāti region known as Babylonia, from approximately modern-day Baghdad in the north to the Persian Gulf shore in the south. It is chronologically limited to the early part of the first millennium (900-539) BCE. This represents the last period of the region’s flourishing, when it was at its finest, and under the rule of the last native dynasty, the Kaldi Empire (Neo-Babylonia) before it was conquered by Persia. As there is a direct correlation between socioeconomic centralization and document production and preservation, this empire is an ideal choice for it became the largest and most powerful native empire of the region in ancient times. As Marc Van de Mieroop states, “Babylonian culture was extremely strong by the time the dynasty was overthrown.”

**Limited to Available Literary Culture.** Secondly and relatedly, this scope is one of the best documented in terms of artifacts, buildings, and texts. Yet, fittingly, many ANE scholars have noted the scarcity of overall data, especially the imbalance in the available evidence we have to work with in terms of locations, time periods, and types of artifacts. There are also problems related to lack of provenance, damage, and wars preventing new discoveries.

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Nonetheless, every year new artifacts are unearthed and shelved evidence is translated, digitally archived, and made accessible. Regarding sources, for the most part, the utilized evidence comes from textual sources. While this mainly textual study is not an exhaustive survey, I have tried to investigate diverse examples, including divine lexical lists, epics, law codes, and divinatory omens. I rely most often on this textual evidence from the literary culture, with supporting evidence coming from the ethnographic accounts of similar contemporary traditional cultures.

**Limited to Elite Male Perspective.** A further constraint related to the evidence utilized is the types of sources one finds. This reconstructed Kaldi lifeframe reflects more of the elite male educated perspective as found in much of the textual evidence accessible to us; the long-ago scribal voices that consistently speak to us. Yet, we must also be careful not to assume a unity of perspective even among these voices. These voices reflect consistencies of thinking, as well as divergences, disagreements, nuances, and amplifications.

**Limited in Comprehension.** A related constraint is the nature of the cultural complex to be analyzed, as the Kaldi Empire is an ancient, inactive culture which cannot be interrogated interactively, which creates problems of comprehension. Many scholars have noted the great gap in terms of time and place between us and them that creates large conceptual barriers to understanding their world (see section 3.4 for more details). It is also true that the field of Assyriology is still a new and underdeveloped field, being only 150 years old. Yet, there are new scholarly breakthroughs occurring yearly. Likewise, I sometimes have found myself in unexplored scholarly territory or I was seemingly the first to put different research traditions into conversation regarding this ancient civilization. It will require other explorations to confirm newly identified understandings.
Limited to Generalized Sociocultural Macro-level. Similarly, this study is limited in scope to the sociocultural macro-level of analysis. The reconstructed generalized lifeframe represents the shared, dominant view of the people, not of any specific individual. My goal is also not to provide a comprehensive comparison between the Neo-Babylonian worldview and other neighboring worldviews close in time or place—or of how it historically evolved previously or subsequently. These comparisons await further research.

Limited to Lifeframe Foundational, Deep Level. Similarly, as my goal is to partially reconstruct a general outline of the Neo-Babylonian lifeframe, this work focuses on providing some general conclusions regarding certain components of their lifeframe supported by a few specific examples. My goal is not to provide in-depth analysis of all lifeframe components. I will occasionally provide specific comparisons when such a comparison proves helpful in explaining the aspect under consideration. I will be focusing on the foundational level’s default linguistic and logical orientations, as this area encompasses the most significant and foundational preconceptions of any lifeframe (see chapters five and six for explications). Other orientative dimensions await further research.

Limited by Researcher. In addition, each researcher has a distinctive voice, particular interests, and a held lifeframe that aids her work. More often than not, these researcher-generated fingerprints go unacknowledged and unexamined. I agree with many postmodernists and feminists that it is impossible to adopt a worldview-neutral stance or value-free reading or interpretation in any study—because the intellectual background and biography of the researcher on any project is relevant, and in many cases, informative. As Frymer-Kensky notes, “one working principle is that if the reader is crucial to the interpretation, then the reader should be
revealed.” Just as I utilize etic and emic methods that serve as optical lenses that work at differing levels of zoom within this project (see section 3.4), I also utilize my own eye’s lens—to extend the optical metaphor—to interpret the texts, iconography, and artifacts of the ancient Kaldi culture and also the other cultural anthropological research into similar premodern contemporary societies. This personal lens combines with my own combination of skills, interests, and methods to create a personal hermeneutic or interpretative filter.

As such, I will lastly introduce myself and the reasons for the choice of this work’s main methodology (worldview analysis) and subject (Neo-Babylonia) for readers. I came to decide on the methodology utilized because of my many years of interest in theology and religion. I have been exposed to many Christian philosophers and apologists—such as Francis Schaeffer, James Sire, and Nancy Pearcey—that have successfully utilized this methodology as a window into peoples’ thinking, lives, and culture. I decided to pair this main methodological tool with the subject of Neo-Babylonia for three reasons. To begin with, for many years I have felt a great affinity for and curiosity about the cultures and peoples of the ancient Near East. It is the arena of so many ‘firsts’ by people in many ways very much like me—who were also theists, creationists, and metaphysicists. Secondly, I have found myself compelled to be a speaker for the dead and a voice for the voiceless. I am a big fan of crime dramas for this very reason. One of the overriding motivations of these shows’ main characters is to be the voice for the deceased who can no longer speak directly for themselves. In this case, the departed is not just a person, but a whole civilization. In this way, I suggest the civilization can live on; its often-stated death is over exaggerated and not complete. And thirdly, there is so much work to be done in this realm that it excites me to no end.

1.7 Transliterations, Translations, and Markup

The following chapters use many transliterations and translations as part of the discussion. I also use markup to aid the organization of the material.

Transliterations. The original Akkadûm texts are logo-syllabic cuneiform scriptings using a script borrowed from Šumerûm (see section 5.4 for more details). Akkadûm possesses twenty consonants, of which 14 occur in English: b, d, g, k, l, m, n, p, r, s, t, w, y(j), and z. Six consonants require comment: ’, q, s, t, h, and š. The phoneme ’ is a glottal stop which only occurs between vowels (as in na ‘adum). The phonemes q, s, and t are emphatic consonants, such that q is pronounced like /k/ (as in Iraq), s is pronounced like /ts/ (as in fits), and t is pronounced like /t/ (as in tot). The phoneme h is pronounced like /ch/ with force (as in Bach or loch). The phoneme š is pronounced like /sh/ (as in shot). The vowels are a, e, i, and u with the long vowels marked with either a macron (as in ā) or a circumflex (as in ā).20

Transliterations convert into syllables the wedge-shaped cuneiform signs using a sign list with associated sound values (i.e., has a syllabic value of ti or tî). Signs representing the Šumerûm logographic loan words are converted into syllables with capital letters (i.e., MEŠ) to distinguish these from Akkadûm syllabogramic signs. All Akkadûm sign-by-sign transliterations of the cuneiform scripts are represented in italics with dashes inserted for syllabic separations (i.e., rû-qû-tu). All determinatives are represented as superscript elements before or after words (i.e., Bābilimki). These transliterations are then normalized using principles of Akkadûm grammar (i.e., rû-qû-tu becomes rûqîtu). See Figure 1 for an example.

Figure 1: Example Cuneiform with Accompanying Syllabic Transliteration & English Translation

Note: The first line represents the cuneiform script, sourced from Thureau-Dangin, available here: https://drive.google.com/file/d/13BoZbQ6pv-9v7AJ-1xrWTXhKA_t1AY0/view/. The second line represents the syllabic transliteration. The third line represent the normalized transliteration. The fourth line represents an English translation of the elements.

Translations. Once a sign-by-sign transliteration of signs into sound values has been made, a translation can be produced into a modern language using available dictionaries (i.e., šar is translated as ruler). All translations are my own unless otherwise indicated. My translations follow the general rule of adhering to the structure, sequencing, and literal wording of the original language as much as possible to represent the thought-world of the people, as I hold that language is a window into the lifeframe and culture of a people. This method results in more literal and less polished sentences in English. My goal is not to present an accurate English glossed version infused with our thought-world.

Markup. All chapter sections are designated with numerals (i.e., section 5.1.2) for ease of organization and reference. All important sectional ideas are indicated with a bold word or phrase at the beginning of the paragraph or section. All semantic primes (see chapter five) are represented in small capitalization (such as BODY) when first used in the discussion to denote the word or phrase has a special significance, in keeping with how these primes are marked in linguistic discussions. All non-English words are italicized except central emic terms such as Akkadûm, which I am using as the naturalized term in English.
1.8 Review of Chapter Contents

The work is organized into two parts. The first part is focused on the worldview concept as the object of study. The second part is focused on the people of the Māt Kaldi as the object of study. Chapter two positions the worldview concept in previous literature on the subject, reviewing the worldview construct’s use and development in many disciplines—ranging from the natural sciences to the social sciences to the humanities. Chapter three offers a three-construct entanglement theory between the constructs mind, lifeframe, and culture. Importantly, this chapter outlines the acquisition and foundational level of all lifeframes. It ends with an outline of the methodology utilized to examine and reconstruct the lifeframe of the Kaldi culture.

In part two focused on the Kaldi people, chapter four gives a brief history of Neo-Babylonia to orient the reader. Chapter five examines the Kaldi people’s foundational linguistic preconceptions, including innate concepts like semantic primes and the basic logical features of the Akkadûm language. Chapter six examines the foundational categorizing logical preconceptions they used to attribute and classify, the related taxonomies created, and the type of reasoning utilized. Chapter seven briefly explores the other three levels of components which constitute a lifeframe. Chapter eight offers a brief conclusion which restates my main findings and its implications. I end by suggesting areas for future research.
II. **CHAPTER TWO: POSITIONING IN THE LITERATURE: The Worldview Concept**

Thus, if we hope to understand the cultural maelstrom in which we presently live, then we must become better acquainted with the intellectual career of a central conception that elucidates it well—namely worldview, with its emphasis on the various ways in which human beings have sought to depict reality.

—David K. Naugle, *Worldview: The History of a Concept, p.xvi*

History is little more than the recording of the rise and fall of the great ideas—the worldviews—that form our values and move us to act.

—Charles Colson and Nancy Pearcey, *How Now Shall We Live?*

As with any subject, the ancient Near Eastern region and its pivotal historical changes can be examined in many ways and from many different perspectives. It follows, that how one decides to methodologically approach the Kaldi sociocultural environment has related consequences. While the traditional disciplinary-specific interpretive approaches—such as a politico-historical or archaeological approach—are necessary and fruitful, they can lead to insensitivity to data context or a lack of broader comparisons, which can lead to problems of interpretation, interdependence, and contextualization.

Unlike the humanities, disciplines in the natural sciences and social sciences are defined by specific levels of analysis that utilize a common set of theories and methods. Such that physics studies particles at the subatomic level in the physical universe. Psychology studies individuals and groups at the cognitive level in the social universe. And sociology studies collective processes at the group or societal level also in the social universe. The humanities, on the other hand, are subject-oriented disciplines—like religious studies, history, and literature—which have no specific, bounded level of analysis. Historian and scholar of religion Ann Taves has insightfully noted that religious studies as a subject-oriented discipline is “a raider discipline” when it comes to theories and methods. “We borrow whatever seems useful relative
to our subject matter from wherever we can find it.”¹ These disciplines that study the human universe are thus inherently multidisciplinary, intercultural, comparative, and multi-leveled in their analysis.

Taves and some other scholars of religion who have recognized the artificial formulation of many disciplinary boundaries across academia are now attempting to track processes of valuation by which people determine what matters, why it matters, and how they know, unbounded from one discipline to follow wherever those processes lead, thus bridging the sciences-humanities divide.² This focus on unbounded meaning-making has led to the study of worldviews, which subsumes many traditional disciplines, including religion, within its rubric, as it is a somewhat promiscuous methodology.

Scholars of religion are not alone in thinking worldviewishly. The concept of a worldview has emerged in the past few decades as a fruitful and widely utilized concept in many different and wide-ranging academic disciplines including philosophy, history, and anthropology.³ The worldview concept can not only be utilized by many different disciplines, but it also promotes interdisciplinary connections with its synthesizing capacities. At its core, worldview thinking assumes that overt and observable human behaviors are most often rooted in and expressions of some deeper, underlying substructure of conceptualization and interpretation of reality. A worldview-based methodology helps to open new vistas in the humanities and beyond. It adds one more fruitful way to methodologically approach any subject.

2.1 Historical Development of the Worldview Concept

First, I briefly outline the history of the usage of the worldview concept and how it has developed into a theory and a methodology to position the concept within the academic community. As Albert M. Wolters has noted, the history of a concept is significant because “it allows us to observe the matrix in which an important idea first arose, and the ideological company it has since kept.” As we will see, the worldview concept first appeared in philosophy, was bandied about in that discipline for over a hundred years, before migrating into other disciplines’ philosophical traditions, especially the philosophy of science, sociology of knowledge, and social philosophy.

Eventually, the concept entered into the broader community of anthropology, sociology, linguistics, and comparative religion, where it thrives today, especially as a methodology to guide research. Yet, we will also see that not many scholars have developed the worldview concept into a comprehensive theory and/or methodology.

2.1.1 Philosophy

It is not surprising that the worldview concept arose first in the discipline of philosophy for that discipline studies the totality of reality. After the Age of Exploration (1400-1700), the Renaissance (1400-1600), and the Enlightenment (1685-1815) and the subsequent rise of multiculturalism and pluralism the term ‘worldview’ emerged to explain the diversity of religious, philosophical, and cultural views encountered and espoused in Western societies. The English

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5 Naugle, Worldview: The History of a Concept, xvi.
word ‘worldview’ is derived from the German word *Weltanschauung*, coined in 1790 by the philosopher Immanuel Kant in his work entitled *Critique of Judgment*, though it no longer retains Kant’s original meaning as the perception of the sensible world. By the early 1800s many German idealist and romantic philosophers and theologians, including A. W. Schlegel and G. W. F. Hegel, were using the helpful term to denote a comprehensive point of view on the world. The worldview concept bore much fruit in European philosophy in the nineteenth and twentieth centuries. It went by many different names with such diverse thinkers as Sören Kierkegaard, Friedrich Nietzsche, and Michel Foucault (though with mixed results). But it was Wilhelm Dilthey (1833-1911), a German philosopher and historian, who made the worldview concept widely known by offering a theoretical foundation that expanded the concept through his *Collected Writings* published posthumously in multiple volumes starting in 1914, making him “the father of worldview theory.”

Wilhelm Dilthey

Wilhelm Dilthey’s philosophical theory of historical worldviews begins with the recognition that there is an innate human need to understand human existence or as he calls it, “the riddle of life.” He states that there is no attainable god’s-eye point of view, only specific standpoints. For Dilthey, a worldview begins as a ‘world-picture’ or a *Weltbilder*. A worldview or

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6 The term *Weltanschauung* is derived from the German term *Welt* meaning ‘world’ and *Anschauung* meaning ‘perception.’ See Naugle, *Worldview*, 64.
Weltanschauung forms through a complex interrelation between human consciousness and the external world which determines the nature of things. Worldviews are thus interpretations of reality that attempt to express the meaning and significance of the world. They attempt to explain this riddle or enigma of life—including such experiences as conception, birth, development, and death. As such, worldviews touch on life’s ultimate questions. Dilthey is known for characterizing different periods of history according to its Zeitgeist or ‘spirit of the times’ which gives a special quality to a period and is associated with a particular worldview.\(^\text{13}\)

Dilthey argues that the three structural aspects of worldviews—the metaphysical, moral, and axiological—are formed from and grounded in the totality of the three structural aspects of the human psyche—the mind’s intellectual cognition and representation of reality, the emotions’ affective appraisal of life, and the will’s volitional actions. The metaphysical component becomes the foundation for the moral component and the axiological results from the other two proceeding it. The uniform architecture of the human psyche—its ideas, values, and actions—necessarily form outlooks on life through the inescapable context of lived experience. We understand reality through the structures inherent in our minds.\(^\text{14}\) Dilthey’s theory of worldview became the foundation on which many others built.\(^\text{15}\)

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\(^{15}\) Dilthey’s theory was the first to connect certain human mindful capacities to a certain worldview structure. Yet, there is more to human mindfulness than a tripartite structure of cognition, feelings, and will. And there is more to a worldview than existential understandings forming a world picture of reality, moral values based on emotional evaluations, and willful prescriptions based on ideals to pursue. Dilthey’s theory is a good starting point, but too simplistic and too focused on philosophical content.
James W. Sire

American Christian philosopher, theologian, and apologist James W. Sire (1933-2018) is the best known contemporary scholar who takes a philosophical approach to worldview theorizing. He builds on insights by Wilhelm Dilthey, Abraham Kuyper, and Herman Dooyeweerd in his work entitled *The Universe Next Door: A Basic Worldview Catalog* (1976). For Sire, at the deepest root of a worldview is its commitment to and understanding of one ontological presupposition, the source of final reality—that is, what holds everything in existence. Sire draws on Kuyper’s idea that every worldview has a single starting unconscious commitment taken on faith as ‘just the way it is’ from which the whole worldview flows.

Sire catalogs the major worldviews or ‘ideological universes’ found in the Western world using eight ordered philosophical questions to express the worldview’s underlying propositions. The questions begin with the metaphysical or ontological question about the nature of ultimate reality, the really real. Based on the answer to this fundamental, all-determinative question all other answers proceed. “It sets the boundaries for the answers that can consistently be given to the other six questions.” In other words, what a person has determined the something *is* that exists as the source of reality (God, Nature, Self, etc.), provides the foundation to answer the other questions. These other questions cover the foundational issues in ontology, epistemology, and ethics.

**Basic Questions Every Worldview Must Answer**

1. What is prime reality—the really real?
2. What is the nature of external reality, that is, the world around us?

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16 In the second edition Sire adds postmodernism as an eighth worldview. In the fourth edition Sire modifies his definition of a worldview. In the fifth edition he adds Islam as a ninth worldview and an eighth question regarding core commitments.

17 Sire, *Naming the Elephant*, 14-16, 34.

3. What is a human being?
4. What happens to a person at death?
5. Why is it possible to know anything at all?
6. How do we know what is right and wrong?
7. What is the meaning of human history?
8. What personal, life-orienting core commitments are consistent with this worldview?

Sire is able to helpfully delineate many different worldviews using his sequence-of-questions approach. But it is also this sequential method and what he puts first that limits Sire’s theory. Do we really begin forming a worldview by first determining what is the source of existence? Are ontological questions always the beginning of a worldview? Or is it only a critical part for most American Christians and other monotheists? Sire himself combines questions one, two, and three for the worldview of Eastern pantheistic monism because the worldview questions “imply a set of categories that do not neatly fit the categories (or lack of them) that characterize Eastern thought.”¹⁹ Nor does Sire follow the specified sequence for the New Age or Postmodern worldviews for similar reasons.

Sire expands his thinking further on the worldview concept in his work entitled Naming the Elephant: Worldview as a Concept (2004). For Sire, the bulk of a worldview is unconscious and a matter of faith. “A worldview is a commitment, a fundamental orientation of the heart, that can be expressed as a story or in a set of propositions (assumptions which may be true, partially true or entirely false) that we hold (consciously or subconsciously, consistently or inconsistently) about the basic constitution of reality, and that provides the foundation on which we live and move and have our being.”²⁰ As he explains it, “the essence of a worldview lies deep in the inner

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²⁰ Sire, The Universe Next Door, 20; Sire, Naming the Elephant, 141.
recesses of the human self.” It is a matter of the heart understood in biblical terms as encompassing one’s wisdom, intellect, emotions, desires, and will.21

Sire has been ruminating on the worldview concept for over thirty years. Yet his theorizing is less helpful for non-Christians who do not hold to his same worldview commitments.22

Brian J. Walsh and J. Richard Middleton
Like Sire, theologians Brian J. Walsh (1953- ) and J. Richard Middleton (1955- ) in their work entitled The Transforming Vision: Shaping a Christian World View (1984) claim that worldviews are founded on ultimate faith commitments (in God, nature, human reason, etc.). Where a person places his faith determines the worldview adopted, it sets the contours of the worldview. They argue that this faith commitment arises from the answers given to four basic questions facing everyone.23

Basic Faith Questions

1. Who am I? What is the nature, task, and purpose of human beings?
2. Where am I? What is the nature of the world and universe I live in?
3. What’s wrong? What is the basic problem or obstacle that keeps me from attaining fulfillment as I see it or how do I understand evil?
4. What is the remedy? How do I overcome this hindrance or how do I find salvation?

21 Sire, Naming the Elephant, 141-143.
22 Sire’s often-cited worldview definition encompasses the ‘biblical heart’ which is based on Dilthey’s tripartite structure for a mind and a worldview. But unlike Dilthey, Sire makes a worldview a pretheoretical faith commitment rather than just a set of intellectual and moral precepts, like many other Christian thinker’s definitions. Like Polanyi, Sire’s ideas regarding intuited givens taken on faith are helpful. Yet, Sire’s theory is limited by his myopic focus on religious commitments and propositional truths.
Unlike Sire, they do not begin with metaphysics and God; they begin with the self, the nature of humanity. For them, the answers to these four questions are most often presupposed or held unconsciously. From these faith commitments a worldview is formed which becomes a ‘transforming vision’ or a ‘perceptual framework.’ When a whole society is dominated by this shared vision, a cultural pattern emerges expressed in its institutions, legal decisions, and arts.24 Yet, like Sire, Walsh and Middleton limit the worldview concept by their religious and/or philosophical assumptions and focus, especially regarding the problem of evil and the remedy of salvation.

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Many philosophers who have attempted a theory have ethnocentrically focused on ideational aspects of the human psyche, broadly understood, such as beliefs and pre-theoretical, unconscious assumptions produced by people in their minds that are of emphasis in Western cultures.

2.1.2 Natural Sciences

In the latter half of the twentieth century the worldview concept migrated from its philosophical roots to other disciplines, including the natural sciences, where more academics began to see how one’s way of viewing the world and humanity’s place in it affects how one understands and studies these disciplines.25 The concept was used by scientists-turned-philosophers Michael Polanyi and Thomas S. Kuhn in their theories within the sub-discipline of the philosophy of science to demonstrate how human factors play a role in what is being known, the workings of normal science, and in scientific revolutions.

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25 Naugle, Worldview, 187.
Michael Polanyi

For Michael Polanyi (1891-1976), a Hungarian-British polymath, the inescapable starting points for the human knowing process are our underlying assumptions, faith, and intuited doings or embodied know-how. Thus, he argues in his work entitled *Personal Knowledge: Towards a Post-Critical Philosophy* (1958) that knowledge is both tacit and personal. As Naugle sums it, Polanyi’s aim was “a rehumanized epistemology” which challenged the modern ideal of scientific detachment and objectivity.\(^\text{26}\) As Polanyi states it, “into every act of knowing there enters a passionate contribution of the person knowing what is being known, and that this coefficient is no mere imperfection but a vital component of his knowledge… Any attempt rigorously to eliminate our human perspective from our picture of the world must lead to absurdity.”\(^\text{27}\) Polanyi’s idea of tacit knowledge is similar to many others understanding of worldviews as implicit, intuited constructs that consist of a set of presuppositions.\(^\text{28}\)

Thomas S. Kuhn

Thomas S. Kuhn (1922-1996), a physicist and philosopher of science, argues in his work entitled *The Structure of Scientific Revolutions* (1962) that the historical record of scientific discoveries and inventions presents a very different story than told in science textbooks—one of revolutionary upheavals, rather than linear development-by-accumulations when it comes to the gaining of scientific knowledge. He argues that new scientific knowledge does not replace

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\(^{28}\) While Polanyi was not focused on worldview theorizing but rather the process of human knowing, he understood perspectivism and subjectivism. I have integrated Polanyi’s insights into my own theory regarding innate mental capacities (pre-installed programs) and innate mental understandings (pre-installed data). See section 3.3.4.2.
ignorance; it replaces knowledge of an incompatible, irreconcilable sort in a human endeavor, which requires a shifting of paradigms. Kuhn defines a paradigm as a transmittable technical tradition that gives a perspective on reality which is shared by a scientific community—much like others define a worldview.\textsuperscript{29} Shared paradigms in particular research traditions that study a group of related phenomena are “universally recognized scientific achievements that for a time provide model problems and solutions to a community of practitioners.”\textsuperscript{30} Like others previously discussed, Kuhn gives these paradigms a pre-theoretical, given, or accepted status, a status prior to that of shared rules and generalizations, from which these are derived.

Over time numerous perceived scientific anomalies in the fit between theory and data or violations of paradigm-induced expectations are produced that cannot be forced into the dimensions of the paradigm-provided model, nor ignored, creating a crisis. This crisis is resolved through what he calls ‘a paradigm shift,’ a reconceptualization\textsuperscript{31} of the accepted paradigm model, which transforms the world within which scientific work is done so that the anomalous becomes the expected.\textsuperscript{32}

A well-known example is the recognized celestial discrepancies and eventual replacement of Ptolemy’s astronomical geocentric system of compound circles (an ancient paradigm) with the Copernican heliocentric system of the sixteenth century (a medieval

\textsuperscript{29} In a 1969 postscript Kuhn further clarifies the paradigm term in response to relativistic claims by stating that the term paradigm is used in two different senses. In the first sociological sense, a paradigm “stands for the entire constellation of beliefs, values, techniques, and so on shared by the members of a given community,” or what he terms a disciplinary matrix. In the second philosophical sense, “it denotes one sort of element in that constellation… employed as models or examples.” Thomas Kuhn, \textit{The Structure of Scientific Revolutions} (Third ed.; Chicago: Univ. of Chicago Press, 1996), 175-187.\
\textsuperscript{30} Kuhn, \textit{The Structure of Scientific Revolutions}, x.\
\textsuperscript{31} Interestingly, Kuhn notes that it is usually the young or the very new to the field who achieve these reconceptualizations of a new paradigm. See Kuhn, \textit{The Structure of Scientific Revolutions}, 90. One can surmise that it is their lack of indoctrination into the prevailing paradigm and its commitments that allows them to conceive it differently.\
\textsuperscript{32} Kuhn, \textit{The Structure of Scientific Revolutions}, 1-6, 52-53.
paradigm), in what is now termed the Copernican Revolution. After Copernicus’ new paradigm was accepted, the sun, moon, planets, and earth were grouped differently and perceived to behave differently than before.

While the worldview-like paradigm concept is helpful for our discussion, for Kuhn the worldview concept itself is taken literally to mean ‘a view of the world’ following Kant’s original meaning, which can change as a result of a paradigm shift which causes “scientists to see the world of their research-engagement differently.” This paradigm shift or “conversion experience” is a transfer of allegiance from paradigm to paradigm. An early adopter of a new paradigm makes this decision only “on faith,” echoing Sire, Walsh, and Middleton’s argument regarding underlying faith commitments.

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Kuhn’s historically oriented concept of scientific revolutions as worldview-like paradigm shifts in the natural sciences upended the scientific community and its image of the scientific enterprise as purely rational and objective. Polanyi and Kuhn’s contributions further worldview conceptualization, while not providing any robust theorizing. As Naugle points out, outside of the philosophy of science arena which is concerned with the foundations, methods, and implications of scientific activity, such intellectual models as worldviews have not been the object of study in the natural sciences, as it studies discrete things within the physical world rather than totalities within the social or human world.

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34 Kuhn, *The Structure of Scientific Revolutions*, 111.
35 Kuhn, *The Structure of Scientific Revolutions*, 150-158.
36 I agree with Kuhn’s analysis regarding how and why paradigm shifts occur, though I argue these are really shifts of the communally held worldview as understood in other disciplines. Kuhn’s analysis is helpful in understanding the acquisition and shifting of worldview orientations among a community.
2.1.3 Social Sciences

It is within the social sciences—especially cultural anthropology—that the worldview concept has been an underlying foundation, a methodological tool, and an object of study. These disciplines investigate the social, human world and thus seek to define, analyze, and theoretically understand such powerful and formative forces as worldviews. Thus, it is within these disciplines that the concept has become deeply influential, especially within these disciplines’ socio-philosophical reflections. Such sociologists as Talcott Parsons, Peter L. Berger, and Thomas Luckmann have focused on the sociology of knowledge, specifically, the sub-discipline that studies the extent and limits of social influences on the way people view the world and the socio-cultural determinants of human knowledge about the world.

Sociology

Talcott Parsons, et. al

American sociologist Talcott Parsons (1902-1979) and eight other social science colleagues published a collected work entitled *Toward a General Theory of Action* (1951) which further develops Parsons’ 1934 theory of social action focused on a social systems’ network of relationships between individuals, groups, and institutions. They theorize three orientative systems of action (cognitive, cathetic, and evaluative) with the evaluative system regarded as the integrative core because it makes decisions that leads to actions and judges the other two systems, echoing Dilthey’s tripartite worldview structure. The evaluative system judges the

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38 Naugle, *Worldview*, 211.
cognitive to determine what is true and false, it judges the affective to determine what is beautiful and ugly, and it judges itself to determine what is right and wrong.\textsuperscript{39}

Types of Orientative Components of Action

1) Cognitive systems of ideas and beliefs
2) Cathetic systems of expressive symbols
3) Evaluative systems of value-orientations

Within the third evaluative system there are five value orientations.\textsuperscript{40} Each dichotomous dilemma offers two choices of action.\textsuperscript{41}

Value Orientations of Evaluative System

1) Affectivity-versus-Affective Neutrality
2) Self-versus-Collectivity
3) Universalism-versus-Particularism
4) Ascription-versus-Achievement
5) Specificity-versus-Diffuseness

Florence Kluckhohn and Fred Strodtbeck’s 1961 anthropological Values Orientation Theory, based in part on the collective work of Parsons and colleagues, focuses on values that people have with regard to five existential or universal categories with three potential options.\textsuperscript{42}

Value Orientations

1) Human activity orientation (being, being in becoming, or doing)


\textsuperscript{40} The self-collective orientation is applicable to both personality systems and social systems. The affectivity-neutrality and specificity-diffuseness orientations are peculiarly applicable to personality systems. The universalism-particularism, and ascription-achievement orientations are primarily applicable to social systems.


2) Human nature orientation (good, good and bad, or bad)
3) Person to nature relational orientation (harmony, mastery, or submission)
4) Person to others relational orientation (hierarchical, equal, or individualistic merit)
5) Time orientation (past, present, or future)

These systems of action and value orientations have been built on by many succeeding sociologists, anthropologists, and psychologists and incorporated into many theories regarding worldview components.43

Peter L. Berger and Thomas Luckmann

Peter L. Berger (1929-2017) and Thomas Luckmann (1927-2016), both Austrian-American sociologists, have also taken up the discussion regarding the sociology of knowledge and led it in new directions. They argue in their work *The Social Construction of Reality* (1966) that much of human knowledge, especially about reality, is sociologically generated, especially at the pre-theoretical taken-for-granted level. Berger and Luckmann are not studying reality as it is, but reality as it is understood by a society in its socially constructed form or what passes for knowledge in a society. In their outline of the sociology of knowledge they define worldview at the formal, theoretical level of conscious constructs that are created only by a limited group of intellectuals.44 Thus, it is not their main concern.

Berger follows up this work with his own work entitled *The Sacred Canopy* (1967) in which he pursues an understanding of religion, society, language, (and worldview) as historical, human products. Berger begins his analysis by stating that humanity has very few inherent

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43 I also have integrated some of the value orientations into my worldview structure, though as continua not dichotomies or trichotomies, allowing for more flexibility which reflects life’s messiness. See section 3.3.4.2.
instincts or specific responses to particular stimuli patterned into us. This leads him to surmise that we must choose how to interact with the world or ‘externalize’ ourselves through our ‘world-building ability.’

Interestingly, worldview, as usually defined, functions in a similar way to the ‘sacred canopy’ that Berger describes—it is a socially constructed stable, symbolic universe that provides order, shields the society from the ultimate terrors of an unconceptualized and meaningless world, and guides activity of everyday life.

By conceptualizing knowledge as arising out of and determined by collective social conditions (rather than the mind) and worldviews as highly conscious, theoretical constructs Berger and Luckman stand apart from most other previous worldview scholars.

**Anthropology**

Cultural anthropologists have also found the worldview concept useful to describe common cultural complexes and cultural diffusionism, for they study peoples around the world and the cultural lifeways they create, which can be very similar or very different creations.

Franz Boas

Implicit in much of the anthropological tradition since German-American Franz Boas’s (1858-1942) work in the early twentieth century is the idea that a culture is not a random collection of traits, but an integrated, coherent patterned way of making sense of the world that makes the

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47 While I agree with Berger that humans have world-building capacities and a need for a worldviewish sacred canopy, I disagree that only elite intellectuals create and externalize worldviews which are internalized by everyone else. Yet, Berger and Luckmann’s emphasis on external factors rather than internal, mental factors as the catalyst for knowledge is a valuable insight.
culture unique and distinct. Boas was the founder of a distinctively American anthropology that stressed culture as the key unit of analysis and emphasized field research using particularized ethnography, so he studied people in their own contexts, striving to describe them in their own terms. Boas was interested not just in culture, but in specific cultures, which eventually led him to study the unique underlying patterns or distinctive elements of cultural areas. Importantly, Boas also held that no culture is superior to another and there are no ‘higher’ or progressive cultural forms, rejecting the idea of evolutionary, hierarchic cultural stages of development.\(^\text{48}\) For Boas, culture does not entail just a society with its social units, kinship patterns, or legal system, but a wider, more comprehensive system of ideas, customs, attitudes, motives, symbols, activities, and institutions.\(^\text{49}\)

Boas influenced successors who developed variations on this basic configurational method. As Kearney later concludes about Boas, “he established an intellectual milieu in which the study of world view was an almost inevitable outcome.”\(^\text{50}\) Boas’ interest in the integrated underlying patterns of cultures led others to an interest in the worldview concept.

Ruth Benedict

One of Boas’ students, American novelist and anthropologist Ruth Benedict (1887-1948) argues in her work entitled *Patterns of Culture* (1934) that there is an integrated, characteristic structure or pattern which links traits into a coherent whole underlying explicit culture—a kind of ‘group


\(^\text{49}\) While I disagree with Boas’ inclusion of nonmaterial elements in what constitutes a culture, I agree with his methodological approach being focused on context and emic descriptions. See section 3.4.2 for my use of an emic-etic approach.

personality’ or national character describable in psychological terms (i.e., paranoid, neurotic, or megalomaniac) that shapes peoples’ worldviews. Unlike many, Benedict was interested in the overall affective theme of a culture. Subsequent scholars have recognized that this approach can be too simplistic because complex cultural behavior is not so easily categorized into a single overriding characteristic, especially in terms of individual psychological traits.51

Robert Redfield

An American anthropologist-turned-linguist who contributed significantly to worldview theory is Robert Redfield (1897-1958) in his work entitled The Primitive World and Its Transformations (1953). Unlike Benedict’s one-psychological-pattern approach, Redfield’s approach focuses on the ways all people everywhere conceptually divide up and categorize the phenomena that they perceive. For Redfield, worldview is defined as “the way a people characteristically look outward upon the universe.” While ‘culture’ suggests how a people appears to an anthropologist, ‘worldview’ suggests how everything looks to the people.52 Worldviewing is a universal and innate human characteristic, being as old as humanity itself. It consists of cognitive forms of thought and affective attitudes toward life. It does not include the evaluative dimension, its system of values. Redfield also distinguishes between a commonly shared implicit worldview and the systemization of that worldview into a structured and articulated cosmology by the more reflective within ‘civilizations.’53

51 Hiebert, Transforming Worldviews, 16-17; Pals, Nine Theories of Religion, 297; Kraft, Worldview for Christian Witness, 251, 517; Kearney, World View, 28-29.
53 Redfield, The Primitive World and Its Transformations, 88-89. Redfield differentiates between pretheoretical, implicit worldviews and theoretical, explicit levels of human cognition found in articulated cosmologies. In this way, Redfield agrees with philosophers like Sire who posit that most worldviews are implicit, while also agreeing with sociologists like Berger that some aspects of worldviews are explicitly created by intellectuals.
While those in the philosophical vein have used ontology or metaphysics, anthropologists like Redfield use human-centered categories to classify cognitive worldview components.

Redfield utilizes four high-level dichotomous domains: (1) Self-All Else, (2) Man-Non Man, (3) Nature-Divine, and (4) Space-Time. See Figure 2 for a relational outline of these components.

**Figure 2: Redfield’s Universal Cognitive Categories Outlined**

<table>
<thead>
<tr>
<th>SELF</th>
<th>ALL ELSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I / Me</td>
<td>^</td>
</tr>
<tr>
<td>I / Me</td>
<td>Man / Not-Man</td>
</tr>
<tr>
<td>Young / Old</td>
<td>Observable Nature (/)</td>
</tr>
<tr>
<td>Male / Female</td>
<td>Invisible Beings and Powers</td>
</tr>
<tr>
<td>We / They</td>
<td>Space and Time</td>
</tr>
<tr>
<td></td>
<td>Common Life Experiences</td>
</tr>
</tbody>
</table>

As Redfield explains it, first there are the conceptions of Self (which encompasses the I/Me categories) and All Else. The crucial perception and distinction of the All Else otherness outside of Self Redfield labeled ‘world view,’ for it stands for how a person at the center of things looks out upon the universe. This interaction between Self and All Else is the axis of a worldview and is how worldviews develop, by the Self perceiving the not-self All Else and structuring those perceptions accordingly. Like many philosophers, Redfield focuses on the cognitive dimension and on the triangular relations between humanity, divinity, and nature, upon which he holds all worldviews can be related. Though he does note that primitive and ancient cultures further divide the All Else category into more detailed sub-categories differently (mingling the concepts of divinity and nature) than contemporary modern Western cultures.\(^{54}\)

While Redfield provides a theory of worldview structure, he does not much discuss causes of differing worldview contents. In focusing on the cognitive dimension he also disregards Dilthey’s affective and evaluative dimensions.\(^{55}\)

Clifford Geertz

Many others have built on Redfield’s theory, including American cultural anthropologist Clifford Geertz (1926-2006) in his 1957 essay entitled “Ethos, World View, and the Analysis of Sacred Symbols.” Geertz, like Redfield, differentiates between ethos (the evaluative, normative elements of moral, aesthetic style and mood) and worldview (the cognitive, existential elements which include “their picture of the way things in sheer actuality are, their concept of nature, of self, of society”). A worldview “contains their most comprehensive ideas of order.” He holds that ethos (the approved style of life) and worldview (the assumed structure of reality) complement each other and give each other meaning and taken together are the core of religion.\(^{56}\)

Interestingly, Geertz defines religion like many others define worldviews, especially in part three.\(^{57}\) For him, religion is “1) a system of symbols which acts to 2) establish powerful, pervasive, and long-lasting moods and motivations in men by 3) formulating conceptions of a general order of existence and 4) clothing these conceptions with such an aura of factuality that sensitive to some non-Western ways of differently viewing things, he does not seem to account for how non-individualistically oriented cultures would view the Self in more collectivistic terms.


\(^{56}\) Clifford Geertz, “Ethos, World View, and the Analysis of Sacred Symbols,” in *The Interpretation of Cultures: Selected Essays* (New York: Basic Books, 1973), 126-129, 89-90. It has been pointed out that Geertz’s fusion of ethos and worldview in primitive cultures is strongly reminiscent of Redfield and contains little that is new on the theoretical level, although Redfield is not cited. See Griffioen, “The Worldview Approach to Social Theory,” 93.

\(^{57}\) While I disagree with separating the evaluative and moral aspects into an ‘ethos’ which is complimentary to the held worldview, Geertz’s worldviewish definition of religion is tantalizing as a definition of a worldview. See section 3.3.4 for my definition of a lifeframe, which incorporates Geertz’s insights.
5) the moods and motivations seem uniquely realistic.” Unlike Redfield and his quest for universals, Geertz stresses the particularity of cultures, like Boas did before him. In his ‘thick description’ interpretive approach no two instances of humanly created meaning should become a general theory, as all knowledge is local knowledge.59

Michael Kearney

Another American anthropologist, Michael Kearney (1937-2009), further develops Redfield’s nascent worldview theory from a distinctively Marxist perspective in his work entitled World View (1984). Kearney’s professed aim is to present a theoretical model of a shared human worldview that addresses issues related to “culturally organized macro-thought”—“those dynamically interrelated basic cognitive assumptions of a people that determine much of their behavior and decision making, as well as organizing much of their body of symbolic creations—myth, religion, cosmology.” More concisely Kearney states that “the overall cognitive framework of these ideas and behavior is that society’s world view.”60

Based on Marxist assumptions, atheist61 Kearney recognizes that there is no objective or value-free view. As such, a worldview—which is more often than not an outlook of a group or class that advances or perpetuates their social position—underlies every theory of worldview.62 In light of this, Kearney outlines the historical materialism-based assumptions he draws on to

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60 Kearney, World View, 1, 42.
61 Kearney states that monotheism “is false in presupposing the presence of a humanlike but suprahuman being somehow superior to human will and knowledge,” World View, 58. Kearney likewise assumes that the phenomenal world “is a single continuum of energy and matter in motion,” 41.
delineate the nature of worldviews and their relation to reality. Kearney begins with epistemology because for him a worldview is a dynamically interrelated system of knowledge about the material world. He astutely discerns that many cultural anthropologists focus on ideas, immaterial forces, or mental constructs as the primary features that determine reality. Thus, the ‘big questions’ come first and a worldview is a response to them.63

Like Berger, Kearney holds the opposite view of the relationship between ideas, material conditions, and reality. One of the basic axioms of historical materialism is that the ideas found in a society are to a great extent a result of their social origin within that society, especially the class in which they originate. For him, ideas in the mind are determined by the external conditions in which they appear and that the perceiving mind responds to via the senses, making the ideas more or less accurate reflections of the external world. Material and social conditions are the origins of any particular self-consciousness and of knowledge in general. Kearney argues that external causes are the main forces shaping the contents of worldviews in a partial feedback model. External causes are those noncognitive, environmental forces and conditions, including the natural environment, material living conditions, social organization, technology, and historical events that influence and shape thought. In addition, there are internal causes consisting of those inner psychological forces which attempt to achieve inner coherence and existential harmony among the cognitive categories.64 In other words, knowledge is gained only by actively interacting with the world.

Drawing on Redfield’s categories, Kearney holds that there are seven universal modes of conceptualization (see Figure 3), which constitute and organize fundamental categories of human

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63 Kearney, World View, 2, 10-19, 67.
64 Kearney, World View, 44, 52, 110-117.
thought necessary for worldview structural formation: (1) Self, (2) Other, (3) Relationship, (4) Classification, (5) Causality, (6) Space, and (7) Time.

Figure 3: Kearney’s Integration of World View Universals
(The lines indicate the main logico-structural linkages, with the weight indicating the strength)

CLASSIFICATION

SELF

RELATIONSHIP

OTHER

CAUSALITY

TIME —— SPACE

Note: Reproduced from Kearney, World View, 106.

Like Redfield, Kearney holds that some awareness of distinction between Self and Other (which usually contains an ultimate subdomain of Universe) is the fundamental structure of all worldviews and the primary poles of an organism-environment continuum, whether it be complete union or complete separation. Secondly, people must inevitably have some idea of the Relationship between Self and the various components of the Other based on the necessary interaction of Self and Other, whether it be one of harmony, subordinancy, or dominance in orientation. Thirdly, people must Classify their perceived realities into taxonomies or systems of classifications and organize these further into larger domains. Fourthly, people seek to explain their experiences in terms of Causality or causes and effects based on observations of nature and the use of common sense. Lastly, people have ideas about Space which includes geographical, sacred, moral, and personal space, as well as ideas about other worlds, heavens, and hells. And
people have ideas about Time which includes ideas of the past, present, and future, how these relate, and which is most important.\textsuperscript{65}

As Naugle concludes of Kearney’s model of worldview, “it is one of the most complete worldview models available today in any discipline.”\textsuperscript{66} While Kearney’s model is compelling, many of his Marxist-materialistic assumptions, especially regarding the directional relationship between environmental conditions and ideas, are not widely agreed upon.\textsuperscript{67}

Mary Douglas

Mary Douglas (1921-2007) was a British cultural anthropologist who is best known for her work entitled \textit{Purity and Danger: An Analysis of the Concepts of Pollution and Taboo} (1966).\textsuperscript{68} Douglas explains why all people recognize impurities—when the wrong thing and/or wrong person appear in the wrong place at the wrong time. What is in its place is ‘pure’ and what is not is ‘impure’ or as she also calls it, ‘dirt.’ As Douglas explains, “dirt is essentially disorder” or “matter out of place.” For example, in many cultures the left hand is used in bathroom functions, while the right hand is used for social functions like eating and greeting. This example shows that the hand itself is not what is dirty. What is at issue is not hygiene. It is the hand’s wrong placement—the wrong designated hand used for the wrong function is polluting.\textsuperscript{69}

Douglas assumes that humans have an innate urge for mental and social order which brings systems of classification into existence. She also assumes that the structuring of

\begin{footnotesize}
\begin{itemize}
  \item \textsuperscript{66} Naugle, \textit{Worldview}, 243-244.
  \item \textsuperscript{67} While I agree with Kearney (and Berger and Luckmann) that external conditions affect a worldview, I do not hold that the human mind is secondary to these externalities. Theories of embodiment and embedment upon which my own worldview theory is based give a nod to Kearney’s insights regarding material conditions. See section 3.3.2 for a discussion of the mind construct.
  \item \textsuperscript{68} Mary Douglas, \textit{Purity and Danger: An Analysis of the Concepts of Pollution and Taboo} (New York: Routledge, 1966), viii.
  \item \textsuperscript{69} Douglas, \textit{Purity and Danger}, 49, 2, 34-35.
\end{itemize}
\end{footnotesize}
experience often occurs through a system of paired opposites or antinomies, like male-female, purity-dirt, form-formlessness, being-nonbeing, order-disorder, and life-death (expanding possible conceptual categories). Based on her assumptions Douglas argues that all humans classify based on shared schema, but in organizing experience the human-devised classifications produce aberrations that do not fit the created schema. By examining what a culture thinks of as dirt or what it rejects and cannot recognize, one can understand its conceptual schema.\textsuperscript{70}

For Douglas, dirt defined as matter out of place implies two conditions: there exists a set of ordered relations and a breach of that order. As she famously explains, “Where there is dirt there is system. Dirt is the by-product of a systematic ordering and classification of matter, in so far as ordering involves rejecting inappropriate elements.”\textsuperscript{71} In other words, each schema of social or conceptual classifications produces certain aberrations that must not be included if the pattern is to be maintained. What is impure is that which does not respect set boundaries. Dirt defined this way is a residual category to the normal scheme of classifications. When recognized, these ‘dirty’ aberrations are seen as boundary crossing anomalies or ambiguities that must be reclassified, physically controlled by exile or elimination, avoided, labelled as dangerous, or used to enrich life.\textsuperscript{72}

While all people condemn and avoid dirt to some degree, there is no absolute dirt for Douglas. There is no specific kind of disorder or pollution that is universally recognized. Pollution, as well as purity, are socially constructed categories that can be changed as needed.

\textsuperscript{71} Douglas, \textit{Purity and Danger}, 35, 40.
\textsuperscript{72} Douglas, \textit{Purity and Danger}, 35-40, 162, 5.
which is why they are relative concepts. Douglas also affirms that the same organizing principle of pure-impure underlies all cultures, whether primitive or modern.⁷³

Many have called this thinking by Douglas ‘the anomaly theory.’ Much like Kuhn, Douglas recognizes that anomalies appear only against the background provided by the accepted paradigm or schema. As Kuhn remarks, “Paradigms provide all phenomena except anomalies with a theory-determined place in the scientist’s field of vision.”⁷⁴ While Kuhn speaks of nature-based anomalies that arise within scientific research that eventually lead to a paradigm shift, Douglas is speaking of humanly constructed social and conceptual anomalies seen as dirt which spark a number of possible responses.

In sum, Douglas was interested in the ideas and rules of purity and pollution and how they can work as an entry into the culture’s overall classificatory system, comparative religion,⁷⁵ and, I would argue, as an entry into the culture’s shared worldview.⁷⁶

Paul G. Hiebert

One of the more recent American missiological anthropologists to offer a comprehensive theory of worldview and associated methodology for its study is Paul G. Hiebert (1932-2007) in his work entitled Transforming Worldviews: An Anthropological Understanding of How People Change (2008). Hiebert argues that worldviews are not the foundation on which a culture is built, implying a one-way causality between two disparate levels. For him, cultures have three intersecting and interacting levels: (1) the surface sensory level of visible elements such as

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⁷⁴ Kuhn, The Structure of Scientific Revolutions, 65, 97.
⁷⁵ Douglas, Purity and Danger, 5-6.
⁷⁶ I agree with Douglas’ analysis regarding purity, dirt, and anomalies. I disagree that most classificatory schemas are produced via dichotomizing. See section 6.5 for a discussion regarding Douglas’ classificatory insights.
patterns of behavior, (2) the middle explicit level comprised of systems of beliefs that encode cultural knowledge, and (3) the lower implicit level of invisible elements of the worldview. Changes regularly occur at the surface explicit level, while changes at the worldview level are slower and less likely. As the deep level of a culture, worldviews tend to conserve old ways and provide stability in a culture over long periods of time. See Figure 4 for a diagram.

Figure 4: Hiebert’s Levels of Culture

Note: From Hiebert, Transforming Worldviews, 33.

Hiebert also identifies three interacting dimensions (drawn from Parsons, Shils, and group and reminiscent of Dilthey’s theory) which create the fundamental structure of a worldview: the cognitive, affective, and evaluative. As he explains it, people think about things, have feelings about things, and make judgments concerning right and wrong based on these

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77 Hiebert, Transforming Worldviews, 11, 30-50.
thoughts and feelings. Thus, Hiebert defines worldview in anthropological terms “as the fundamental cognitive, affective, and evaluative assumptions and frameworks a group of people makes about the nature of reality which they use to order their lives.” They are the ‘maps of reality’ that they use for living. Seventy-eight Cognitive, affective, and evaluative assumptions, logic, along with experiences create the deep structure of a worldview on which people construct explicit belief systems, value systems, social systems, and economic systems of the middle level (see Figure 5).

Figure 5: Hiebert’s World View Model

Note: From Hiebert, Anthropological Insights for Missionaries.

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78 Hiebert, Transforming Worldviews, 15, 25-26.  
79 Hiebert, Transforming Worldviews, 65, 85.
In particular, Hiebert’s cognitive dimension includes the held assumptions about the nature of reality, the mental categories (using Kearney’s categories), logic used for thinking, and the folk taxonomies created by the culture that tell the place and relation of things in everyday life. Thematic cognitive continuums include immanent-transcendent, supernatural-natural, and causality.\textsuperscript{80} The affective dimension includes the held assumptions regarding deep feelings and intuitions that underlie conceptions of beauty, style, and taste (aesthetics). Following Geertz, it includes the characteristic powerful, widespread, and enduring attitudes and sentiments within the culture. Thematic affective continuums include shame-guilt, emotional control-emotional expression, and optimistic-pessimistic orientations.\textsuperscript{81} Building on Parsons and colleagues, the evaluative dimension includes the held assumptions regarding values and oughtness that underlie conceptions of virtues, standards, morals, and manners (praxeology) that people use to make judgments regarding truth and falsehood, right and wrong, purity and pollution, and likes and dislikes. These give rise to the social and moral order (ethics). Thematic evaluative continuums include hero-villain, ascription-achievement, and individual-group.\textsuperscript{82}

In order to understand a worldview’s dimensions, Hiebert draws on Redfield and Kearney’s categories (time, space, self, other, nonhumans, causality, and common human experiences), stating that the worldview under examination must determine the conceptual categories’ nature and placement. It creates a world map to understand the cognitive, affective, and moral dimensions.\textsuperscript{83} I have utilized many of Hiebert’s insights within my own worldview theory and structural composition.\textsuperscript{84}

\textsuperscript{80} Hiebert, \textit{Transforming Worldviews}, 50-59.
\textsuperscript{81} Hiebert, \textit{Transforming Worldviews}, 59-60.
\textsuperscript{82} Hiebert, \textit{Transforming Worldviews}, 60-65.
\textsuperscript{83} Hiebert, \textit{Transforming Worldviews}, 26-27, 71, 335.
\textsuperscript{84} While I have utilized Hiebert’s focus on logics, taxonomies, and thematic continuums, I disagree with Hiebert’s fusion of worldview and culture into one phenomena. I have also utilized some of Hiebert’s recommended anthropological methods for analyzing worldviews. He states that the goal is to infer basic assumptions from explicit
Another American anthropologist who is a former colleague of Hiebert is Charles H. Kraft (1932- ). His seminal work on worldview is entitled Worldview for Christian Witness (2008). Kraft defines worldview as “the structuring of the central assumptions, values, and commitments that lie at the heart of culture” and “the agreed-upon perceptions of a group of people.” Like Hiebert, Kraft argues that worldview is not separate from culture. It is included within culture. Unlike Hiebert, Kraft highlights what he calls ‘the person factor’ or the importance of understanding that it is people as actors who act, while the culture (and the worldview) is the patterned script that provides structure, guidance, and cues. For him, culture and worldview are structures that do not do anything (although many scholars speak of them as pseudo-personal entities that do act); it is people who are the active agents creating, maintaining, and transforming these cultural and worldview configurations.

Kraft expands on Hiebert’s tripartite schema of the cognitive (thinking), affective (emoting), and evaluative (judging) dimensions. Kraft rightly points out that these are human functions, not characteristics of worldview structure. He argues that a worldview provides guidelines for at least three types of basic behavior. A held worldview teaches the socially approved ways of: (1) willing, emoting, wanting, or thinking, which produce meanings based on: (2) interpreting and evaluating, which invoke a response of: (3) explaining, relating, adapting, or beliefs and expressions within a culture, looking for patterns. He states that it is best to triangulate findings of any one method with those produced by other methods. Thus, we must study the language and how words are grouped into larger semantic sets, domains, and taxonomies using ethnosemantic analysis, pioneered by Sapir and Whorf. It opens the door into the way people think. A second method is ritual analysis because rituals are visible, explicit forms that communicate deep beliefs, intense feelings, and important values of a culture. A third method is the analysis of folklore and myths which provide the stories of their origins and destinies. A fourth method involves studying a culture’s heroes and villains in order to understand the normative themes and evaluative ideals. See Hiebert, Transforming Worldviews, 89-104.

85 Kraft, Worldview for Christian Witness, 12, 68. Also see 132.
integrating. Likewise, there are six universal categories, based on Redfield and Kearney’s work: (1) Person/Group, (2) Causality, (3) Time/Event, (4) Space/Material World, (5) Categorization, and (6) Relationship. See Figure 6 for how worldview functions relate to the universal categories.

**Figure 6: Kraft’s Flowchart of Worldview Functions and Universals**

<table>
<thead>
<tr>
<th>MAKING ASSUMPTIONS</th>
<th>CONCERNING REALITY</th>
<th>UNIVERSAL CATEGORIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANY GIVEN PERSON OR GROUP</td>
<td>1. That Underlie Willing, Emoting, Thinking, Habiting</td>
<td>Structured into Universal Categories</td>
</tr>
<tr>
<td></td>
<td>2. Producing Meaning Based On: - Interpreting - Evaluating</td>
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<td></td>
<td>3. And Response: - Explaining - Allegiancing - Relating - Adapting - Integrating</td>
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<tr>
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<td>G SPACE/ ← ← MATERIAL P</td>
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</table>


Many scholars have struggled with what is to be the entry point into worldview analysis (epistemology, ontology/metaphysics, social relations, or language). Kraft chooses to divide worldview types by the causality dimension, specifically spiritual causality, because he argues that spiritual causes are the most basic concern of the majority of the world’s peoples. Based on a

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87 Kraft, *Worldview for Christian Witness*, 151-158, 167-168. Kraft relabels Redfield’s Self category as Person/Group to highlight the fact that worldviews exist at both the individual and collective level. He also drops the Other category, viewing it as a cover term for all the other categories.
typology focused on who/what is the ultimate cause, authority, and power, three worldview types appear: Theistic Causality, Animistic Causality, and Naturalistic Causality.  

While Hiebert views culture as superorganic with a force of its own, Kraft views culture (and worldview) as simply structure. Yet, both agree on the basic understanding of worldview, the universal concepts it contains, and how it functions. As with Hiebert, I have utilized many of Kraft’s insights in my own theorizing regarding the composition of a worldview.

***

The above outline of the social sciences’ intersection with the worldview concept is in no way comprehensive. There are many other theorists not included because they do not add substantively to the discussion, theoretically, methodologically, or definitionally. Many sociologists discussed above have focused more on socioenvironmental generative aspects like social networks or systems that shape thought, especially at the shared communal worldview level. Many anthropologists have often utilized anthropocentric, human-centered dimensions to structure a worldview in terms of such aspects as thinking, feeling, and judging and/or such categories as self, world, and God. But much like philosophers’ ethnocentric focus on pre-theoretical assumptions and ontology, the research has focused on Western ways of perceiving, reasoning, and classifying, assuming these are universal modalities.

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90 In particular I have utilized Kraft’s ‘person factor’ idea, maintaining that a worldview functions as parameters for a person, rather than a pseudo-acting agent itself.
2.1.4 Psychology

Next, we must examine psychology’s intersection with the worldview concept within the social sciences. Psychology studies the human mind and its complex constellation of activities that impacts how people perceive and respond to reality.\(^1\) Beginning in the 1970s cultural psychologists began to discuss the worldview concept and investigate implications of worldview differences. As a result, worldview is one of the earliest mediating cultural variables integrated into psychological research, theory, and practice.\(^2\) In 1981 counseling psychologist Derald Wing Sue wrote *Counseling the Culturally Diverse: Theory and Practice* and followed it with a position paper which took the first step toward articulating a set of cross-cultural counseling competencies for psychologists, organized along dimensions of beliefs, knowledges, and skills in order to delineate worldview differences for psychotherapy.\(^3\)

Since then there have been many attempts, especially by counseling psychologists, to measure individually-held worldviews using qualitative approaches based on theory. There have been several assessment instruments created in the last fifty years, including the 1984 Scale to Assess Worldview (SAWV), 2005 Worldview Analysis Scale (WAS), and the 2021 American Worldview Inventory (AWVI).\(^4\)

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Mark E. Koltko-Rivera

Other sub-disciplines within psychology have also begun to focus on worldview as a helpful psychological cognitive construct related to theories of personality, cognition, or terrorism at the individual level and theories of cultural conflict or acculturation at the communal level. One such psychologist is Mark E. Koltko-Rivera (1956-) who outlines a worldview model comprised of seven topical groups, each comprised of multiple dimensions (see Table 1). Koltko-Rivera defines worldview as “a way of describing the universe and life within it, both in terms of what is and what ought to be … Worldviews include assumptions that may be unproven, and even unproveable, but these assumptions are superordinate, in that they provide the epistemic and ontological foundations for other beliefs within a belief system.”

Table 1: Koltko-Rivera’s Collated Model of Worldview with Grouped Dimensions and Options

<table>
<thead>
<tr>
<th>GROUP</th>
<th>DIMENSION</th>
<th>OPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Nature</td>
<td>Moral Orientation</td>
<td>Good, Evil</td>
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<td></td>
<td>Mutability</td>
<td>Changeable, Permanent</td>
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<tr>
<td>Human Will</td>
<td>Agency</td>
<td>Volition, Determinism</td>
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<td></td>
<td>Determining Factors</td>
<td>Biological determinism, Environmental determinism</td>
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<tr>
<td>Human Cognition</td>
<td>Knowledge</td>
<td>Authority, Tradition, Senses, Rationality, Science, Intuition, Divination, Revelation, Nullity</td>
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<tr>
<td>Human Behavior</td>
<td>Time Orientation</td>
<td>Past, Present, Future Action, Personality, Luck, Chance, Fate, Society, Divinity</td>
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<td></td>
<td>Control Location</td>
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<tr>
<td>Interpersonal</td>
<td>Otherness</td>
<td>Tolerable, Intolerable</td>
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<tr>
<td>Relationships</td>
<td>Relation to Authority</td>
<td>Linear, Lateral</td>
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<td></td>
<td>Relation to Group</td>
<td>Individualism, Collectivism</td>
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<td></td>
<td>Relation to Humanity</td>
<td>Superior, Egalitarian, Inferior</td>
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<td>Relation to Biosphere</td>
<td>Anthropocentrism, Vivicentrism</td>
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<tr>
<th>Correction</th>
<th>Truth</th>
<th>World and Life</th>
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<td>Scope</td>
<td>Universal, Relative</td>
<td>Ontology</td>
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<td>Possession</td>
<td>Full, Partial</td>
<td>Cosmos</td>
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<td>Availability</td>
<td>Exclusive, Inclusive</td>
<td>Unity</td>
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<td>Deity</td>
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<td>Nature-Consciousness</td>
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Note: Koltko-Rivera’s model, condensed, is from “The Psychology of Worldviews,” 29-31.

Like many other psychologists interested in application as well as theory, Koltko-Rivera created an instrument to assess selected aspects of personal worldviews, the Worldview Assessment Instrument (WAI) in 2000, which comprises a 150-item self-assessment. Koltko-Rivera’s theorizing is less known outside of psychology, though his worldview model is more robust and well-defined than most.

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Worldview is now one of the most studied constructs in the field of cultural, cross-cultural, and multicultural psychology. The worldview concept suggests theories and practices to guide culturally competent research and psychotherapy across cultures, ethnicities, genders, sexual orientations, religion, and spirituality. Yet, many of the worldview assessments utilize

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98 I agree with the inclusion of many of Koltko-Rivera’s dimensions in his worldview model, but I disagree with many of the options associated with these dimensions. Often the options are too dichotomized, limited, and simplistic. I also disagree that all these grouped dimensions are of equal importance, rather than being hierarchically composed and differentially valued.

99 Obasi, Tamkin, and Caldwell, “Worldview.” In 2002 the American Psychological Association Council of Representatives adopted a set of six guidelines related to multiculturalism which affirmed the needed awareness of the research participant or client’s worldview, as well as awareness of one’s own worldview, for cultural sensitivity and competency in research, training, and psychotherapy. These guidelines were updated in 2017 to encompass ten guidelines that broadened the focus from race and ethnicity as the significant variables to include other contextual factors of identity including such elements as religion, language, and culture, with intersectionality as its primary purview. Interestingly, the appendix of the APA multicultural guidelines defines ‘culture’ as “belief systems and
only a limited amount of worldview theorizing as found in cultural anthropology and philosophy, with no mention of some of the heavy hitters like James Sire, Michael Kearney, or Ninian Smart. Relatedly, none of these worldview assessments publish their measurement questions or full methodology, making them difficult to evaluate.

The above tracing of the worldview concept through philosophy, sociology, anthropology, and psychology seems to suggest a lack of consensus regarding the source, formation, components, function, measurement, and even definition of a worldview. Kuhn, when he wrote in the 1960s, questioned whether any parts of the social sciences possessed any full-fledged paradigms, being too young and undeveloped.100 Perhaps the nature of the disciplines, as being those that study in-depth the ever-changing human world of perception and interpretation, lend themselves to less consensus and a multiplicity of paradigms, rather than an agreed upon one.

2.1.5 Linguistics

In the past few decades there has been a ‘linguistic turn’ in social theory or the use of semiotics and other linguistic branches of inquiry as a source of models and methods for explaining cultural phenomena in which phrases like ‘the symbolic order’ have replaced ‘worldview’ as the reigning term.101 One such foundational theorist is Prussian philosopher and linguist Wilhelm von Humboldt (1767-1835) whose language theory states that “languages are living products of value orientations that influence customs, norms, practices, and social institutions… Culture has been described as the embodiment of a worldview through learned and transmitted beliefs, values, and practices, including religious and spiritual traditions.” Worldview itself is not defined. American Psychological Association, “Multicultural Guidelines: An Ecological Approach to Context, Identity, and Intersectionality,” n.p. Online: http://www.apa.org/about/policy/multicultural-guidelines.pdf.

100 Kuhn, The Structure of Scientific Revolutions, 15.
Humboldt argues that those who want to understand a worldview of a foreign language must not only amass words, grammatical rules, and basic concepts, but also the way the language’s people use, organize, and connect concepts. Each language explores reality by means and in a manner which are specific to the language, making it almost impossible for others to fully enter a foreign language and worldview because outsiders will continually try to translate foreign words and concepts into their own language. According to Humboldtian thinkers, when one dreams in a secondary language the person has truly immersed themselves in that new thought-pattern.

Edward Sapir and Benjamin Lee Whorf

Humboldt’s theory influenced many, including Edward Sapir (1894-1939), a student of Boas and an American anthropologist-linguist. Sapir studied the ways language and culture—sometimes defined as a ‘world outlook’—influence one another; how linguistic differences relate to cultural differences. His student, Benjamin Lee Whorf (1897-1941), an American linguist, developed this thinking further into the ‘principle of linguistic relativity’ (also known as the Sapir-Whorf hypothesis), based in part on von Humboldt’s theory. The principle states that the grammatical structure of a language and its associated forms of thought affect its speakers’ cognition and behavior, their world-picture or Weltbilder. How one thinks is related to, possibly determined by, the language in which one thinks. There are a variety of ways concepts evolve in different languages.

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102 Wilhelm von Humboldt, Theo Harden, and Daniel J. Farrelly, Essays on Language (Frankfurt am Main: P. Lang, 1997), ix-1.
104 Whorf, as a former insurance adjuster, had paid out claims to relatives of people who accidently blew themselves up by lighting matches too close to ‘empty’ gasoline drums. He noticed that within the English language
Stuart Chase sums up this theory well when he states in the foreword to a collection of Whorf’s essays entitled *Language, Thought and Reality* (1956), “Whorf as I read him makes two cardinal hypotheses: *First*, that all higher levels of thinking are dependent on language. *Second*, that the structure of the language one habitually uses influences the manner in which one understands his environment. The picture of the universe shifts from tongue to tongue.”\(^{105}\) Whorf thus treated language as an independent cultural agent. In other words, people who speak different languages have different ways of perceiving the world and different forms of thought that embody that linguistic group’s way of describing reality; it is a linguistically constructed world-picture. As Sapir says it: “Language and our thought-grooves are inextricably interwoven, are, in a sense, one and the same.”\(^{106}\) This principle seems to be claiming that each language system unidirectionally influences the formation of a unique view of the world (one step away from a worldview) or is in itself a conceptual world. Kraft argues that what Whorf was attributing to language (as a pseudo entity and independent variable) was actually attributable to humanly held worldview concepts reflected in language.\(^{107}\) Whorf’s ideas regarding a thought-world have influenced many subsequent theorists, especially within ethnolinguistics.\(^{108}\)

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:\(^{108}\) I agree with Whorf that someone’s language and its structure is foundational for thinking and communicating, and thus foundational for a worldview. With Kraft, I disagree with Whorf that a language system unidirectionally determines one’s held worldview and that a language is a pseudo agent. See section 5.4 for a discussion regarding linguistic features influential for worldview composition.
Another academic who focuses on language and the role metaphor plays in patterning ideas and thoughts is James W. Underhill (1967-) in his work entitled *Creating Worldviews: Metaphor, Ideology and Language* (2011). Based on his professional translator experience of building bridges between two conceptual worlds, Underhill focuses on metaphor as one of the primary modes of conceptual organization. He views metaphors as crucial for the construction of worldviews.\(^\text{109}\) In metaphor theory, abstract ideas are explained by reference to more familiar frames of reference. Utilizing metaphor theory, Underhill argues that fundamental conceptual metaphors frame thoughts. Exploring the concepts and categories engendered by metaphorical thinking can reveal how the human mind works. One way to study worldviews then is to compare and contrast conceptual metaphors, not just words, in different languages.\(^\text{110}\)

Specifically, Underhill argues that thought is embodied. The conceptual frameworks we create grow out of our bodily experience in the world and the concept of the body formed. Concepts are body-bound because nothing is more familiar to us than our bodies. Using the theory of embodiment, humans tend to map ideas and experiences onto physical experience in the real world to create metaphors. Certain aspects of bodily experience seem to be universal, while other aspects are culturally constructed (such as how we divide the body into parts).\(^\text{111}\)

While Underhill’s ideas regarding language and metaphors are compelling, his concept of worldview is underdeveloped or confusing, being largely based on Humboldt’s outdated and shallow conception of worldview. His attempts to connect language and metaphor with the

\(^{109}\) Underhill, *Creating Worldviews*, 3-16.  
\(^{111}\) Underhill, *Creating Worldviews*, 16-86.
worldview concept are ultimately unsatisfying as he comes at worldview mainly through language. Yet, we will return to the embodiment theory.

2.1.6 Religion

One area of study that has not been included—outside of theology—in many of the historical tracings of the worldview concept is the discipline of religious studies. Though, I would argue, the area of comparative religion is worldview analysis’ closest cousin in terms of family resemblances. This is why many scholars (somewhat mistakenly) study world religions (i.e., Christianity, Buddhism) as worldviews (i.e., Christian theism, Eastern pantheism).

Ninian Smart

Ninian Smart (1927-2001), an Episcopalian, Scottish university educator, recognizes that even the nonreligious have a worldview. Smart advocates the use of phenomenological methods (the study of what appears) that involve ‘informed empathy’ that respects the standpoint of the believer, attempts to understand the believing subject’s intended meaning, and endeavors to describe the structure of a believer’s world without introducing investigator bias or judgment.112

He thus promotes the study of six dimensions of life first outlined in his work entitled *The Religious Experience of Mankind* (1969): (1) the experiential and/or emotional, (2) the mythical and/or narrative, (3) the doctrinal and/or philosophical, (4) the ethical and/or legal, (5) the ritual and/or practical, and (6) the social and/or organizational. Smart later advocates the study of worldviews, both religious and secular, in his work entitled *Worldviews: Crosscultural*

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Eventually, Smart calls for an extension or transformation of the study of the philosophy of religion to the wider study of what he calls the philosophy of worldviews. For Smart it is only one more step from the study of world religions to the study of world views. In a sense, he is trying to spark a Kuhnian revolution or a paradigm shift in the field of religious studies—from a religious-based research paradigm to a worldview-based research paradigm. For this to occur, according to Kuhn’s theory, more persistent research-based anomalies would need to be felt by the academic community to initiate such a shift.

Because Smart’s ideas about worldview analysis are so vague and largely intertwined with religions in which one studies religions as worldviews, he has not been as influential in this area as he has been in other areas.

Ann Taves

Smart has been very influential as a mentor and colleague to a new generation of academics interested in the worldview concept, including Ann Taves (1952- ), a scholar of religious studies and former colleague of Ninian Smart. Taves explores in her work entitled Religious Experiences Reconsidered (2009) such things set apart as special, meaning-making processes, and the

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114 There have been others since Smart to call for subsuming Religious Studies under the larger framework of Worldview Studies, including Smart’s colleague Mark Juergensmeyer. Likewise, Andre Drooger, a cultural anthropologist of religion, and Anton van Harskamp, a philosopher of religion, have argued for this new course for the discipline, seeing religion, ideology, and spirituality as a sub-category of worldview. See Mark Juergensmeyer, “2009 Presidential Address: Beyond Words and War: The Global Future of Religion” JAAR 78, no. 4 (2010): 882–95; Droogers and Harskamp, Methods for the Study of Religious Change, 1-3.
115 Rather confusingly, Smart combines the study of religions and ideologies together under the rubric of worldview analysis, as he said both religious and secular systems of beliefs guide humanity regarding the meaning of life. Because Smart never stipulates a definition of religion in his works, he is never able to establish a theoretical distinction between religious and secular worldviews. Smart also never clearly defines worldview. Thus, he remains suspended between Religious Studies and a more fully realized Worldview Studies. See Taves, “Revisiting Ninian Smart’s Call for Worldview Studies.”
problem of studying non-religion or secularity. In subsequent articles, like Smart, Taves now calls for re-conceptualizing the overarching object of study in religion according to the wider rubric of worldview analysis, making Religious Studies a subset of Worldview Studies. As Taves explains it, in order to compare apples (religion), plums (paranormal), apricots (superstition), and oranges (nonreligion), one must specify an overarching rubric that encompassing them all, such as Fruit Studies.

Taves explores the worldview concept in terms of six big philosophical questions that humans ask and reflect on. These big questions are only asked by reflective humans which leads to worldview formation. On the other hand, ‘ways of life’ identifies implicit answers to big questions in the behavior of other animals without claiming that they have well-formed worldviews.

The Six Big Questions

1) Reality/Ontology (What exists? What is real?)
2) Knowledge/Epistemology (How do we know what is true?)
3) Situation (Who are we? What situation are we in?)
4) Goal/Axiology (What is the good that we should strive for?)
5) Path/Praxeology (What actions should we take?), and
6) Origins/Cosmology (Where do we come from and where are we going?)

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Unlike most others, she grounds human meaning-making capacities in species-independent biological processes which embeds worldviews in evolutionary theory, pushing the worldview concept into a more radical and naturalistic direction.\textsuperscript{119}

David Chidester

There have been some within comparative religion who have also turned to the worldview concept. One such well-known thinker is American David Chidester (1952-) who is another student of Smart’s who is based in South Africa whose work entitled *Salvation and Suicide* (1988) begins his more explicit worldview thinking. Chidester demonstrates how such an ‘evil’ (i.e., the mass murder-suicide of more than 900 Americans) could look inviting and good to those within the utopian socialist community at Jonestown in Guyana. Chidester argues based on Redfield’s work and utilizing Smart’s structured empathy approach that any religious worldview is negotiated in and through classifying persons and orientating in space and time. All religious people classify beings into superhumans who are more powerful than us who may be worshipped (gods), humans like us (self, we), and subhumans who are not like us who may be excluded, dominated, or degraded (other, them), creating a network of relations. Space and time ground classifications and orientations in reality. A sense of cosmic space, geographic space, and body space orient in space. And a sense of cosmic time, historical time, and body time orient in time. For him, a religious worldview is distinct from other worldviews in that it is infused with the

\textsuperscript{119} Taves claims to be ‘enlargening’ the worldview concept beyond just beliefs by including goals and purposes, but this belies her lack of awareness of its theorizing in other disciplines, especially philosophy and the social sciences. While I agree with Taves that superstitious and paranormal beliefs do not perfectly compare to religious beliefs and leaves room for Worldview Studies, I disagree that nonhumans form some kind of lifeways that are worldviewish, making the phenomena an evolutionary trait.
sacred or has a sense of the sacred.\textsuperscript{120} Though Chidester is clear about his method, research question, and argument, he never defines the worldview concept.\textsuperscript{121}

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Many other theorists of religion have employed aspects of worldview analysis when they have contended with the source of religion (subjective feelings and/or rational elements), the unit of analysis (individual, groups, and/or society), the structure of reality (sacred and/or profane and space and/or time), and the power of words (literacy and/or orality). All of these themes can be subsumed under a worldview rubric, for by its very nature worldview thinking is all-inclusive.

2.1.7 Concluding Remarks

This is not an exhaustive review of all the discussion, theorizing, and application happening around the worldview concept. Rather I have attempted to highlight a few bright and interesting lights in many different fields, especially those who have influenced my own thinking on the subject.

A few summary takeaways to note. The worldview concept has been used to differing degrees in philosophy, the natural sciences, the social sciences, and the humanities to enliven many theories, methodologies, and research projects over the last several hundred years, especially by Americans. As Naugle concludes in his philological genealogy of the term, it “has become one of the central intellectual conceptions in contemporary thought and culture.”\textsuperscript{122}


\textsuperscript{121} I agree with Chidester that classifying beings and spatio-temporal orientations form a large part of a worldview. Like Smart, Chidester’s empathetic methodology is more helpful than the actual analysis or conclusions.

\textsuperscript{122} Naugle, \textit{Worldview}, 66.
Thus, the worldview concept has been spoken of directly, inferentially, or metaphorically as an ideological universe (Sire), a vision of life and a perceptual framework (Walsh and Middleton), a paradigm (Kuhn), a sacred canopy (Berger), a group personality (Benedict), the perception of Other outside of Self (Redfield), conceptions of a general order of existence (Geertz), culturally organized macrothought (Kearney), maps of reality (Hiebert), agreed-upon group perceptions (Kraft), a world outlook (Sapir), or as ways of life (Taves).

Many disciplines have turned to the worldview concept as an explanatory mechanism because of its wide-ranging phenomenal nature with links to culture, society, language, philosophy, psychology, and religion—to name just a few. As for specific theorists, while Dilthey’s parallel tripartite structures of the human mind and a worldview echo throughout the discussion, Michael Kearney’s elaboration of Robert Redfield’s foundational work has undeniably influenced many subsequent scholars, including me.

Despite all the forward momentum, the concept lacks any comprehensive, integrative, and agreed upon definition, terminology, or theory that addresses its formation, components, or function—in any field, let alone across fields using an interdisciplinary approach. And this limits its applicability as a methodology for the identification and analysis of held worldviews (at any level of analysis). Many, especially philosophers, have ethnocentrically focused on ideational aspects of the human psyche, the cognitive, affective, and evaluative dimensions, produced by people in their minds that are of emphasis in Western cultures. These philosophers, not surprisingly, have more often utilized philosophically-oriented questions, such as ‘what exists?’ Others have focused more on socioenvironmental aspects like social organization, the natural environment, or bodily senses that shape thought. These social scientists have more often
focused on anthropocentric, human-centered dimensions to structure a worldview in terms of the bifurcation between self and not self.

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This is an age-old debate made famous in Raphael’s painting entitled *The School of Athens* (see Figure 7) in which the two central figures are the philosophers Plato and Aristotle whose gestures indicate the central aspect of their philosophy. Plato points vertically upward because for him the realm of unchangeable, abstract ideas has priority over visible physical matter that are merely imitations of timeless Ideas. Aristotle has his hand spread out horizontally because for him concrete particulars of the sensible world have priority.

In most cases, regardless of the discipline, the interest in and use of the worldview concept assumed the helper, secondary role in the formulation of a thinker’s philosophy, discourse, or research with a variety of other interests and purposes in mind.

Do these mentally and/or socially generative components fully encompass a worldview? It is my contention that a newer understanding of where and how perceiving, distinguishing, and thinking happen offers a solid foundation for worldview theory. To this we now turn.

*Figure 7: School of Athens by Raphael, ca. 1510 CE*

Note: With cropped focus on central figures. From public domain.
III. CHAPTER THREE: WORLDVIEW ANALYSIS: Toward a Theory and Methodology

We don’t see things as they are, we see them as we are.
—Anaïs Nin, Seduction of the Minotaur

As previously noted, most who use worldview analysis as a methodology only give a brief, vague definition of the concept and possibly a basic overview of its structure, components, and functions. None ground the construct in a well-developed explanatory theory that aligns well with the proffered data. This can lead to untrustworthy results. Kearney noted this lack when he wrote in 1984, stating that to-date “a coherent theory of world view is nonexistent.”¹ I would argue that this is still the case now, some forty years later.

I agree that more theorizing is needed and important, because worldviews are unique and integral to human functioning and flourishing in the reality we find ourselves in. To-date, most non-philosophical theorizing has focused on human-centered conceptual categories, especially the Self, I/Me, and Person concepts that are opposed to an All Else, Universe, or Other category.

Most philosophical theorizing regarding worldview composition has focused on ‘big questions’ related to what ontologically exists (only matter or matter-and-spirit), humanity’s cosmological origins (via a god, gods, or evolution) and/or our ‘problem’ that needs solving (such as living a worthy life, redeeming a perverted nature, overcoming socio-economic oppression)—all of which constrains and contours further theorizing with the use of the worldview-based stencil pattern brought forth regarding humanity’s features, purposes, and functions. Likewise, utilizing any of these elements as the opening salvo, entry point, or primary explanatory component that initially shapes a worldview, can, and most often does, muddy the

¹ Kearney, World View, 9.
theoretical waters inadvertently with specific worldview-based assumptions about general worldview conceptions.

Ironically, in studying worldviews I have come to realize how much theorizing in any discipline is shaped by the theorist’s own operational worldview or lifeframe. As most postmodernists have found, one can never truly stand apart from any subject at hand in order to analyze, speculate, and theorize about it objectively. With that said, I humbly attempt herein to provide a basic, working theory of lifeframe acquisition and composition that can act as the basis of a methodology for examining culturally shared macro-lifeframes of any time period and place.

3.1 Theories to Build Upon

I wrestled with the above conundrum for some time, while at the same time wrestling with mastering two foreign languages, Biblical Hebrew (with its right to left reading, triadic roots, and vowels above, inside, or below the main consonants) and the Babylonian dialect of Akkadûm (with its cuneiform script, logograms, and determinatives). As I began to slowly learn these highly-different-from-English languages, I also began to better understand the peoples’ habits of thinking and feeling. I began to wonder if some of the best evidence for a people’s high-level, shared lifeframe is their language’s lexicon and grammar (its structure, order, and combinations), as much as it is the myths, rituals, and histories their language encapsulates. Agreeing with von Humboldt, Sapir, and Whorf, I posit that language is our primary tool for all higher-level thinking and communication and the best reflection of our thought patterns, our thought-worlds. Knowing how thoughts are articulated—the word orders, the word choices, and the word structures—opens up the culture and its commonly held lifeframe to an outsider like me in ways I could not have expected.
It turns out words matter, a lot, to a people’s understanding of themselves and their mental interpretation of reality—and to my understanding of their lifeframe. I believe it is true that one experiences the world differently in and through different languages and that in learning a foreign language one is also learning elements of a foreign lifeframe. As Goddard and Wierzbicka explain it: “[W]ords embody habitual ways of thinking, shared by people in a speech community. We can indeed think about things for which we don’t have words, but words suggest to us certain ways of thinking about reality and create shared conceptual currency for the speakers of a language.”\(^2\) I could not agree more.

I also realized that many unique, complex, and culturally-freighted foreign words of other languages are glossed in English with horrible translation equivalents, which dilute or dismantle key cultural concepts. While other words are introduced to explain their culture, deifying English words like ‘religion’ or ‘God’ and further reifying the Western and/or American concepts these English words encapsulate. This ah-ha insight set me down a new path… a path into linguistics and cognitive psychology to build upon three theories a new overarching theory of lifeframe acquisition and composition. Not an easy task.

I began my research by making the worldview construct the object of study to elucidate a theory of lifeframing.\(^3\) Based on my research, I suggest a way to move forward is to take an interdisciplinary approach to what is inherently an interdisciplinary concept. In order to sift the wheat (a commonsense and universally acceptable lifeframe model) from the chaff (a specific culturally or religiously imbued worldview model), I rely on up-to-date findings of neuroscience,


\(^3\) Unlike many Christian apologists who have theorized regarding worldviews and use worldview analysis to compare religious worldviews and thus develop criteria for a worldview’s comprehensiveness, coherence, or applicability, I am not focused on the evaluation or truthfulness of any worldview in this discussion.
biological and cognitive psychology, and natural semantic metalanguage analysis. This research is corroborated by my own experiences of being human with held lifeframe orientations, to understand and explicate a very basic model of lifeframe acquisition, compositional structure, and discrete functioning, using basic semantic terms comparable across cultures when able to do so.

While the natural sciences’ philosophy of science branch is represented in the above discussion of previous literature on worldviews, the mainstream natural sciences are not. Yet, my own research and thinking on the subject has been greatly expanded and deepened by recent scientific findings related to bodily-based cognitive processes. In particular, recent research in cognitive science, neuroscience, and psychology are dismantling a ‘brainbound perspective’ of the human mind in favor of an ‘extended perspective’ theory of mental activity, called the Extended Mind Theory, which encompasses elements of our world, including our bodies, spaces, and social relationships as extensions of our mind. I also rely on psychology’s ‘Theory of Mind’ which refers to the human ability to inspect, understand, and empathetically attribute mental states, including perspective, intention, and thoughts, to ourselves and others based on our own ability for introspection. \(^4\) Theory of Mind can also be termed metacognition because it is the ability to think about your and others thinking. It is my contention that this newer understanding of where and how mental perceiving, distinguishing, and thinking happens offers a solid and fruitful foundation for lifeframe theorizing unrelated to any specific lifeframe orientations or contents.

In explicating what a lifeframe entails, I must also be able to discuss key terms and simple concepts free from a priori English-related baggage, worldview-related assumptions, or

obtuse abstractness. The question becomes: How can I perform robust analysis on a non-English, non-Western cultural lifeframe using English terms without fully succumbing to these known biases? In order to minimize this bias, I rely on the linguistic evidence of universal concepts (called semantic primes) found in all natural languages according to the Natural Semantic Metalanguage Theory (NSM)—with the assumption being that if all cultures’ languages share the prime term, then it must be because it is an innate, fundamental, and grounding concept to human thought. These semantic primes become my touchstones out of the ethnocentric quagmire to understand and speak about lifeframe acquisition, composition, and functioning. As Cliff Goddard concludes, “This is why the research finding that, despite all the cross-linguistic variability, some lexical meanings—the very simplest ones—are shared between all languages is of crucial importance. Using these words, we can fashion a non-ethnocentric lingua franca for conceptual analysis.”

Where able, I use these semantic primes (and second-level semantic molecules) in the below theoretical discussion and later data analysis.

Thus, **BODY**, **FEEL**, **SEE**, **HEAR**, **TOUCH**, and **PEOPLE** are English exponents of NSM’s semantic primes that relate to our notion of **SOMEONE**. For our I-ME aspect, there are multiple semantic primes related to the different functional areas: **THINK** and **KNOW** give evidence of a panhuman understanding of mentation and cognition; **GOOD**, **BAD**, and **TRUE** reflect a basic understanding of evaluation; and **WANT** and **DO** reflect a basic understanding of the will and volition. See section 3.3.4.2 for a table of the English exponents of all of the currently discovered semantic primes. These basic concepts have been built upon in every language, culture, and related lifeframes to develop more complex constructs. As I argue in the next section, these

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6 As noted in section 1.7, I markup the purposeful use and discussion of semantic primes with the small capitalization of each prime term the first time it is used. I do not markup the use of the terms outside of these purposeful discussions or off-chance use of primes.
semantic primes become the initial building blocks of all thinking and all lifeframes. While many previous theorists, starting with Redfield, have posited a small number of universal conceptual categories—like Self and Other, Man and Not-Man, Space and Time—it is this small lexicon of discovered basic concepts that become the foundation of categorizations. For a fuller discussion of these semantic primes, see chapter five.

Lastly, I rely on Hiebert and Kraft’s worldview theorizing the most (see section 2.1.3), having affinity with many of their assertions regarding how a worldview is formed and configured. Yet, I have greatly modified their understandings with the above cognitive-related theories regarding my own lifeframe theory.

3.2 A Unifying Theoretical Framework with Operative Assumptions

Any theory related to human phenomena is robust if it has explanatory value; if it can describe a wide scope of human experiences. It is also elegant if it is parsimonious; if it is concise, simple, and easily understood, without losing coherence or being arbitrary, reductive, or vague. It is also useful if it is generalizable; if it can be applied in many contexts. With these ideals in mind, I first provide my background assumptions that guide my overall theorizing. Then, I provide a working three-construct theory to explain the interplay of a mind, a lifeframe, and a culture, building upon the above theories. In doing so, I often use the term ‘lifeframe’\(^7\) rather than worldview as a more descriptive and appropriate term according to the proffered theory.

The below proposed assumptions are conjectured necessary conditions about the basic makeup of reality that are used as guidelines to construct a lifeframe-related theory. Thus, if

\(^7\) The term ‘lifeframe’ has been coined by me to denote what has been most often termed a ‘worldview.’ The term is meant to encompass the idea that one’s default orientations create a frame of reference for behavior for all of life, i.e., a lifeframe. See section 3.3.4 for a definition of a lifeframe.
there is any contouring or constraining mechanism in my working theory, it is these starter assumptions, including:

- All someones are mindful agents, capable of thinking, feeling, wanting, and doing
- All agential minded someones are qualitatively alike in regards to innate mental and bodily capacities, skills, and functioning
- All agential minded someones observe the same world/universe and state of things as they actually exist in reality
- All agential minded someones have basic control over thoughts, emotions, desires, and associated behaviors (i.e. free will)
- All agential minded someones can act proactively and predictively based on received and inherent inputs, rather than acting only reactively to internal and external stimuli
- All agential minded someones have an inherent, needful, and orientative capacity to operate according to some framed understanding regarding the reality of lived experience
- In our lived experience all agential minded someones face common opportunities and dilemmas which require some shared orientative response from choices to function communally in this world and life
- While there is variability in the number of opportunities and dilemmas and the subsequent choices available as a response, the number of opportunities and dilemmas and related choices are neither limitless nor random; the variability exists within a limited range or continuum of possibilities
- The most-often preferred orientative choices by the majority of a people group in any given society reflects that society’s generally-held culture-wide worldview or lifeframe
- All alternatives to all orientative choices are present in all societies at all times and places, but they are less popular, being less preferred

8 The last four assumptions listed are taken with modification from Kluckhohn and Strodtbeck's Values Orientation Theory as summarized in Hills, “Kluckhohn and Strodtbeck's Values Orientation Theory,” 4.
3.3 The 3-Construct Entanglement: A Mind, a Lifeframe, and a Culture

Based on the review of previous literature, we must bridge disciplines with a theoretical model that links rather than blurs our understanding of the concepts of minds, worldviews, and cultures, which also offers a multidimensional view. Unlike Dilthey and those that followed him, I do not view the human mind and a worldview as possessing parallel tripartite features. Unlike Hiebert and Kraft, I do not view a worldview as part of a culture.

Relying on the theories and findings of 4E cognitive science, communication’s network analysis, and psychology’s theory of the mind, I assert that minds, cultures, and lifeframes are different, yet co-constituted and coupled ideational constructs that must be discussed together. I argue that the *embrained, embodied, entangled, and embedded minds of a collective of someones use inherently engageable and extensible mental processes to realize, operationalize, and maintain a shared macro-lifeframe, which in turn manifests a shared macro-culture*. The constructed macro-lifeframe and manifested socioculture domains, in turn, influence, shape, and reinforce the mind domain, creating a complex, networked, larger system (see Figure 8).

*Figure 8: Entangled Interplay of Ideational Constructs*

In this view, the mind of someone consists of the mental processes of feeling, thinking, and wanting, as well as stored memories, knowledge, and beliefs that are known. These mental processes and capacities are the implicit mechanisms by which lifeframes are constructed, distributed, acquired, and operationalized. Lifeframes, in turn, consist of the appropriate default
orientations for living life together. The mental habits springing from lived lifeframes, in turn, rewire, repurpose, and reshape the brain and associated mind’s structure and functioning, forming a feedback loop. The operative lifeframe(s) of a people group are also the implicit scripter or producer of their shared culture(s) through the dictation of the appropriate behaviors which produce the explicit material (made), lingual (said), and behavioral (done) artifacts. These cultural practices, in turn, promote and reinforce shared lifeframes. Thus, the entangled mind, lifeframe, and culture constructs influence each other through mutually interactive processes.

Using a computer software analogy, someone’s mind consists of pre-installed software that includes executable program instructions (mental faculties and logics) and input data (semantic primes). Throughout life, additional input data is continually added and processed. A lifeframe consists of the gradually acquired associated how-to-use documentation, the readme files (default orientations), for the basic software. A culture consists of the produced output results like illustrations, documents, and spreadsheets (exhibited behavior, artifacts, and communications) of the executed software (a mind employing a lifeframe).

Some theorists blur the distinction between ideational constructs and realized entities, speaking of the brain, body, mind, and culture as similar things (and leaving out worldviews altogether). In my view, a mind, a culture, and a lifeframe are useful ideational constructs (as used in psychology) that each label and summarize a hypothesized, collectively constructed domain containing various defined and related processes and conceptual elements: a mindscape, lifescape, and culturescape. Thus, we can speak of a mind-frame-culture interactive complex. These ideational constructs are enmeshed in real-world systemic and networked entities, such as
the corporeal brain and body, institutional systems, and environments. Thus, we can also speak of a complementary neuro-bio-ecosocial⁹ interactive complex (see Figure 9).

*Figure 9: Interplay of Worldly, Hierarchically Nested Networks of Entities that Co-constitute Minds, Worldviews, and Cultures*

Often, scholars speak of a mind, a worldview, and/or a culture as doing the thinking and doing, as if they are pseudo-personal entities. I not only distinguish between these three ideational constructs and other realized entities, like brains, bodies, and places, I also distinguish between these constructs and the someones who are the agents. In all this, it is minded someones—not the constructs—that are the agents, as Kraft has noted, calling this ‘the person

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⁹ In the late 1970s psychiatrist George Engel developed the *biopsychosocial model* to account for multifactorial causation, which takes into account biological, psychological, and social factors for a disease’s symptoms and treatment in a specific patient. See Alan Jasanoff, *The Biological Mind: How Brain, Body, and Environment Collaborate to Make Us Who We Are* (New York: Basic Books, 2018), 192. 4E cognitive science also refers to brain-mind-body-environment interactions. See Laurence J. Kirmayer et al., eds., *Culture, Mind, and Brain: Emerging Concepts, Methods, and Applications* (Current Perspectives in Social and Behavioral Sciences: Cambridge, United Kingdom: Cambridge University Press, 2020). I have utilized and modified both terms to create two compositional terms which distinguish ideas from entities (i.e., a mind-frame-cultural complex and a neuro-bio-ecosocial complex).
factor. A mind, a worldview, and/or a culture do not act in the world—the mindful someones possessing a lifeframe and a culture are the ones who act.

First, we will discuss the mind construct upon which lifeframes and cultures are built.

3.3.1 Problematizing the Mind’s Functions

Based on my background assumptions, I assume, like many theorists, that all someones’ minds share similar innate capabilities and functioning (i.e., the same executable mental software). Many other theorists in the sciences studying the mind have also further assumed that our minds reside only in our brains. This turns out to be an untenable assumption.

In the past, the mind was known as an active thing that is located within the human brain. Then, in 1998 philosophers of the mind Andy Clark and David Chalmers asked the thought-provoking question: ‘Where does the mind stop and the rest of the world begin?’ Once again, the discussion becomes about boundaries…in this instance of the mind and the self.

Clark and Chalmers put forth what they call ‘The Extended Mind Thesis.’ They argue that according to recent cognitive science findings human cognitive processes are continuous with external processes in the environment, while consciousness remains internal to a human brain. In this view, language is the central means, the main coupling tool, by which our dynamic, extensible mental processes are extended into the world through speech, writing, and gesturing to utilize external resources like our embodiment (i.e., counting on fingers), other minds (i.e., group-based brainstorming), and our resources (i.e., a tool like a calculator or smartphone) as

part of our mind’s thinking—which also extends our mental self beyond our skull and skin. These extra-neural resources change the way we think, allowing us to offload, externalize, and interact with our thoughts and other people’s thoughts. It is truly thinking outside the box.

Opposed to Clark’s and Chalmers thesis of how and where thinking happens is much of the current cognitive and psychological research programs. The prevailing popular but misguided mind-centered or brain-centered views assume: (1) that the brain and mind are coextensive, (2) that this discrete mind-brain complex is the exclusive locus of thinking, (3) its properties are fixed, inherent, and measurable, and (4) that the mind-brain complex solely acts on the body and environment in a one-way direction.

These assumptions are longstanding. It was Plato who put forward the body-soul dualism underlying these assumptions in which our soul (Grk: psyche)\textsuperscript{13} is our true inner essence which makes us who we are; it is made for eternity and separate from the mortal body (Grk: sōma). This enduring inner essence or soul inhabits the material body and will be liberated from it at death. The Christian philosopher Augustine ‘Christianized Plato and Platonized Christianity’ by importing this body-soul paradigm into Christian theology and much of Western thinking in the fourth century CE.

In the contemporary Western, especially English-speaking, psychological field, the ‘mind’ construct has taken the place of Plato’s ‘soul’ construct as the most important non-bodily aspect of a person, making the psyche term truly refer to the mind rather than the soulish inner essence. Many cognitive psychologists and modern philosophers have idealized the concept of

\textsuperscript{13} The English term ‘soul’ is sometimes used interchangeably with the psychological term psyche, especially in older psychology textbooks. Likewise, the all-encompassing term ‘soul’ is used to translate such terms as German seele, Latin anima, Hebrew nefesh in religious and/or philosophical texts. See Anna Wierzbicka, \textit{Semantics, Culture, and Cognition: Universal Human Concepts In Culture-Specific Configurations} (Oxford University Press, 1992), 31-40.
mind, leading to a firm Cartesian distinction between the physical body and an immaterial mind. The soulish mind becomes the invisible operator of a remote-controlled body or the ‘ghost in the machine.’ In this mind-body paradigm the ethereal soul is supplanted with the disembodied mind. We are our minds, controlling a brain, trapped in a body. It leads to fantasies of immortality by swapping separable minds into other bodies or uploading the mental self to other non-bodily containers.

Many postmodernists and evolutionary psychologists today have gone further by idealizing the biological brain, making a further firm distinction between two material parts, the brain and body, creating a brain-body paradigm. The functionally self-contained and separable ‘brain in a vat’ becomes the source of all mind-related and/or soul-related functions, so that all is explained by biological processes in what is termed the ‘cerebral mystique.’ We are our brains, giving rise to a mind, trapped in a body. It also leads to fantasies of immortality by preserving the separable brain (inside the head) using cryogenics or initiating a head or brain transplant.

The Western obsession with the mind and brain has a valid underpinning though. Humanity has struggled for millennia to explain the existence, structure, and function of our mental processes. How do we get from the regulative workings of the physical brain to the complexity of conscious self-awareness and felt subjectivity? Is it an illusion, the product of a soul or mind, or just the brain doing its thing?

To counteract these current mind-bounded and/or brain-bounded views, another perspective has arisen that takes a more unified and monistic stance—agreeing with many postmodernists and evolutionary grounded scientists that the mind is created via brain functioning. But also agreeing with many psychologists and religionists that the mind (which some still equate with the idea of a ‘soul,’ ‘symbolic heart,’ or inner essence), not the brain, is
the locus of consciousness and subjective awareness. This view overthrows Plato’s dualistic and firm distinction between the separable immaterial soul/mind and the physical brain/body. Though it also goes farther, viewing the mind, not as a pseudo entity but as a set of mental processes which are also inseparable from the minds and world outside the self. There is no firm separation between the mind and matter, at any level.

Clark and others have built on Clark and Chalmers’ original thesis, beginning a Kuhnian paradigm shift as it were in many disciplines. They argue that we think best when we think—not about our bodies, relationships, and spaces—but with our bodies, our relationships, and our spaces as mental extensions in an “extended neural-bodily cognitive economy.”14 In particular, neuroscientists, cognitive scientists, and psychologists are studying three related areas as countervailing evidence to the mind-bounded or brain-bounded perspectives: (1) embodied cognition explores the role of the body in thinking, (2) distributed cognition explores the effects of thinking with others, and (3) situated cognition explores the influence of place on our thinking.

3.3.2 The Agential Mind: The Reworked Mind Construct

In particular I am adopting a modified 4E cognitive science perspective to explain the mind construct, which emphasizes the embodied, embedded, extended, and enacted nature of mental processes.15 I have added a fifth ‘E’ element, ‘embrainment’ to denote that the mind does originate in the brain—if there is no brain functioning then there is no mind. I have also added a sixth ‘E’ element, ‘entanglement’ to denote how our mental processes are inextricably coupled

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15 For a good overview of 4E cognitive science, see Kirmayer et al., *Culture, Mind, and the Brain: Emerging Concepts, Methods, and Applications*.
with the mind’s embedments. As already noted, I make a distinction between lifeframes and cultures—viewing them as different ideational constructs. I also make a firm distinction between ideational constructs in general and worldly, tangible entities, like brains and bodies. Thirdly, in my view, the mind construct overlaps with older notions of the soul, encompassing transcendental, intellectual, emotional, moral, and volitional dimensions—similar to previous theorists’ tripartite cognitive, affective, and evaluative dimensions. Relatedly, I use the term mentation to refer to all basic mental activity of the mind, especially NSM’s mental predicates of FEELING, THINKING, and WANTING. I use the term cognition to refer only to the process of KNOWING, the result of this mentation.

Lastly, relying on NSM, I use the broader and more inclusive semantic prime SOMEONE rather than the term person or human to refer to the agent doing the mentating, which encompasses any possible mindful being—human and nonhuman alike. I also utilize other primes, such as BODY, PEOPLE, PLACE, OTHER, and the semantic molecule WORLD\(^\text{16}\) in the discussion to ground it in universal, language-independent meanings as much as possible.

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Many who study the mind have defined it as what the brain does, encompassing its thinking, feeling, and judging capabilities. In my understanding, the mind is defined as arising from the embrained part of someone that is engaged in specific ways in order to feel, think, want, say, and know; through entangled embodiment these engaged mental processes are able to be

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\(^{16}\)While terms like ‘world’ and ‘hands’ are not semantic primes, they are semantic molecules—a second-level unit of meaning used to construct many other more complex concepts. NSM analytic notational style has typically used a \([m]\) to denote it. All molecules utilized in the discussion have been identified in previous literature. See Cliff Goddard, *Semantic Molecules* (Annual Meeting of the Australian Linguistic Society, Brisbane, Australia, 7-9 July, 2006; St Lucia, Australia: School of English, Media & Art History, University of Queensland, 2007).
extended and embedded in the outer world, which enables awareness and understanding of self, others, surroundings, and experiences.

**Embrainment.** First, we can say that the brain of someone is a bodily organ placed most often in the skull which is composed of hierarchical networks-within-networks of synapses, neurons, and circuits in overlapping functional brain areas. Thus, the mind of someone is grounded in this cerebral networks-within-networks of brain functioning. Through engagement, the brain gives rise to mentation and cognition. For instance, when our mind seeks to remember, it must access memories physically stored in the brain. Thankfully, there is a great amount of redundancy within the brain. Many cerebral areas are not required for generating the embrained mind’s core capabilities. Enormous parts of the brain can be missing, destroyed, or removed without compromising many essential mental functions of the mind. On the other hand, many diseases can affect the networked brain’s neuronal, wired functioning and connectivity, such as Alzheimer’s disease, which can in turn affect theembrained mind. In this view, the embrainment of someone’s mind is a condition, an instantiated state within the mindscape.

**Engageability.** Research has found that the structure, capabilities, and activity of brain networks are highly plastic and malleable through how the brain is used in specific contexts. The brain’s networks-within-networks are ready-made to be used and modified by the engaged mind of someone, solidifying and creating new neuronal pathways. It is through this engagement or the use of the mind to carry out particular doings (i.e., to feel, think, or want) that the embrained mind is operationalized. The brain does this by using chemicals to fire the action potential in neurons to transmit information, but it is the active, engaged mind that organizes, processes, and transforms the transmitted information into event-related potentials, such as attentional,
orienting, and decisional responses to input. In this view, the engageability or enactability of someone’s embrained mind is a process, a programmatic function of the mindtech.

**Embodiment.** The brain being an organ within the body means that the brain is embodied. It also means that the embrained mind of someone is embodied too, or grounded in a bodily experience that provides a sense of personal continuity and allows for body-related or embodied mentation and cogitation. Recognizing this mental embodiment, in American English we often speak of the human mind in terms of a moveable body—so much so that our mind can race, arrive at a conclusion, or go off on a tangent. In this view, the embodiment of someone’s embrained mind is a condition, an instantiated state within the mindscape.

**Extensibility.** The organ of the brain is also part of a network of organ systems within the body of someone. The organ of the brain is coupled or entangled with these other bodily systems, allowing the entangled brain and mind to connect or extend throughout the body, extending our felt embodiment to include not just the brain but the whole body. Our embrained mind is not only influenced by our body, but our mind can be extended beyond the brain so that we can feel, think, and want with our body. The embrained mind is so entangled with the body that we do not have a body, we are embodied beings. So much so, that bodily gestures can offload computations and needed short term memory, such as counting on one’s fingers. Likewise, I have found that walks in my local hills are conducive to thinking—to parallel walks in my mind. Moving the body can move the embrained mind by sharpening our focus, improving our memory, and enhancing our creativity, especially movements that provide new angles or new vistas. Likewise, our body’s generated external signals (sweaty palms, twisted gut, or clenched fists) are informative clues to our mental feelings which can direct choices and decisions.

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17 This example comes from Underhill who bases it on Sweetser and Lakoff and Johnson’s research. See Underhill, *Creating Worldviews*, 17-18.
Additionally, the body gives us a reference point for many judgements, including the relative size of other things.

Also, our embodied mind can be extended beyond the body. Our body’s external sensory organs (eye, ear, skin, tongue, and nose) are the best means by which our mind can be extended into the world. The transmitted external sensory input from our eyes, ears, skin, tongue, and nose allows the mind to extend itself into the world, giving rise to phenomenological experiences. Researchers have shown that visual input from the eye to the brain is “roughly equivalent to a computer’s internet connection, moving about a megabyte of visual input (four million spikes) each second over neural wires.”¹⁸ This is probably why so many terms and metaphors for someone’s world view rely on vision and sight in its explication. What you see is truly what you get. In this view, the extensibility through engageability of someone’s embrained, embodied mind is a process, a programmatic function of the mindtech.

**Embedment.** So far we have discussed the micro-level of social organization, focused on the brain and body of an individual someone engaged with and extended into the world, a mindscape. But the mind construct, as mindtech, is able to embed itself in larger contexts through these engagements and extensions. These mindful functions can be engaged and extended in a larger intra-networked familial, communal, and societal system, creating an external embedment in the world (see Figure 10). Not only is the mind embrained and embodied, it is embedded in external contexts via its enactable and extensible capabilities, allowing for socially distributed mentation and situated mentation. Thus, embrained, embodied, mindful beings are so engaged and extended within our ecosystem of interacting organisms in an environment that we do not have a context, we are embedded, contextualized beings. The body

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is not just the medium through which our minds phenomenologically experience the world—the body is the mechanism by which our mental processes are able to effortlessly engage, extend, and entangle with the larger world. Each embedded someone is always spatially and temporally situated in a particular place and time, surrounded by other mindful someones. In this view, the embedments of someone’s embrained, embodied mind are a condition, an instantiated state within the mindscape when it reaches out to the worldly culturescape.

**Entanglement.** In all this, the brain and mind are so entangled with the whole human, bodily organism that someone does not have a brain, a body, or a mind; we are embrained, embodied mindful beings. Our mindful extensions are not simple continuations, enlargements, or additions—they are networked entanglements forming bi-directional feedback loops. For instance, caffeine is a low-tech cognitive enhancer that works through the body to affect the brain to affect the mind, stimulating active mental attention which produces feelings of mental alertness and improved mood. Entanglement.19 Furthermore, the embrained, embodied mind of someone is entangled with and embedded in larger networks of other minds and places, adding more entanglements via its extensible capabilities, making us contextualized mindful beings. In this view, the entanglements of someone’s mind with the brain, body, others, and places of the world are a condition, an instantiated state within the mindscape.

Thus, in this newer understanding, we are an embrained, embodied, embedded, and entangled mindful being of deeply intra-networked engageable and extensible neural, mental, and bodily functions.

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19 This example comes from Jasanoff, *The Biological Mind*, 114-115.
While our bodily experience gives rise to embodied mentation, our embedments give rise to social and situated mentation. The mind is highly context sensitive to its entangled embedments. Within situated cognition, all physical places, natural and built, and the spatial thinking used to navigate them provide us a platform on which to scaffold abstract thought and traverse the space of ideas and construct mental maps of interconnected concepts. My field exams would never have been passed without the use of a memory palace, which linked the points of my essay’s arguments to familiar locations in my house for ease of remembrance. Tools
can also be used to extend thinking by offloading information onto a computer screen, structuring it on a whiteboard, or analyzing it via a tool. When we externalize our mental processes in these ways we can dynamically interact with information, not in our heads, but with our hands. This dissertation would never have been completed without a quiet, private place to think, a dedicated home office with a computer and whiteboard—akin to Virginia Woolf’s room of one’s own.

There are also many examples of socially distributed mentation—when we feel, think, and want with or through the minds of others, past and present. John Donne was correct, “No man is an island, / Entire of itself;… Any man’s death diminishes me, / Because I am involved in mankind.”

Most academic class-based discussions exhibit this type of extended mental activity. Likewise, most of us involuntarily mimic some of other people’s revealed mental and/or emotional states, such as contagious yawning or infectious smiling, which has been shown to affect our own mental and/or emotional states.

A human thinks differently in different embedded places with different embedded someones, because our mindtech continually monitors our immediate bodily and environmental surroundings which provide a steady stream of input to our bodily sensors that can be utilized, filtered, and interpreted by our mind. The social and situationally embedded mind is constantly anticipating its embedded environment, making active inferences or predictions, and noticing discrepancies between expectations and reality, and refining predictions for future accuracy or modifying the environment to conform to predictions. Thus, mindful someones do not accurately or fully perceive the surrounding world. Our predictive, interpretive processes filter all input to amplify and calibrate a useful, subjective perception, model, and/or simulation of phenomenal

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reality for our use. There is a real world of sights, sounds, touches, and tastes surrounding each of us—we just do not truly perceive it in full. As someone once told me, the world is very real, we just have never lived in it. We live in a mind-produced perception of the real world that is guided by the cultural complex we are embedded within, which has implications for our held lifeframe.

The embrained and embodied mind is aware through extensions of the entangled body and the entangled presence of other minds and surroundings via our embedments, all of which can evoke particular kinds of mental and cognitive processing, including embodied, social, and situated mentation.

Thus, the mind construct is not an illusion, an immaterial pseudo entity, nor located exclusively in the brain at all. The mind arises from the networked brain of someone and exists as a set of engageable mental and cognitive processes, involving, at its basis feeling, thinking, wanting, and knowing functions. Through these mental engagements the embrained mind is extended into and entangled with the body and ecosocial environments of times and places, creating an embodied and embedded experience. The mindtech processes of engagement and extension are the essential functions that bind our minds to our brains, bodies, external environment, and others in embedments.

In this view, the mind construct arises and is maintained in someone from the engaged interactions of the physical brain, body, and ecosocial environments comprising other minded someones in places, creating a larger organisms-environments complex, the so-called neural-bio-ecosocial complex. The mind is not a co-extensive thing with the brain. It is not a thing at all. The mind is a set of meaning-centered mental processes and states that originate in the brain but also reach beyond the brain. These interactive, engaged mental processes happening within the
brain’s networks-within-networks and extended into and entangled with the bodily and environmental networks-within-networks creates a complex, nested networked ecosystem that gives rise to individual experiences, a sense of personal continuity and interiority, relationships with other embrained, embodied, and embedded, mindfilled someones, our social world of families, communities, and societies, and built environments. This neural-bio-ecosocial complex, in turn, gives rise to lifeframes and cultures.

Again, we see expected boundaries blur, continuums form, and networks arise when we look more closely at the relationship between a someone, other someones, and the world they inhabit.

3.3.3 Problematizing Worldview Formation and Components

Many past theorists have asserted that a worldview is formed when a person seeks an interpretative framework that makes sense of their lived experience of reality. It is a reflective response. It has been asserted by many that a worldview is composed of whatever metanarrative compiled about the world’s nature that someone believes in (how things work), origin (how it all came to be), purpose (why we are all here), and conclusion (how it all will end). In this view, how someone answers ultimate and life-critical ‘big’ questions—such as ‘does God exist?’—determines the content of the above components of the worldview.

And the first component outlined (i.e., given an answer to) of a worldview is often what the person considers to be the primary, all-determinative, and formative aspect. From this component flows the other components’ questions and answers, forming a full worldview for a person. Thus, most classical and medieval (and theistic) thinkers begin with metaphysics and ontological questions about the fundamental nature of ultimate reality and existence. The
perceived existence of something (usually God as the Creator) is taken as the starting point, causing an initial cleavage between theistic, polytheistic, pantheistic, and atheistic worldviews—as seen in Sire’s work. Thus, ideas of being and not-being or caused and uncaused are fundamental and formative.

Most modern Enlightenment thinkers begin with epistemology and the mental categories of knowing and not-knowing as the critical formative and deciding factor of different worldviews. For instance, Rene Descartes placed his confidence in the consciousness of thinking, seen in his famous conclusion ‘I think; therefore I am.’ In this scenario, epistemology or the authority of the knower (in this case, the self) precedes ontology, one’s existence. Modernist Redfield begins with these mental constructs, the conceptual categories perceived in the phenomenal world, starting with the division between the known Self and All Else. Similarly, Kearney begins with how a person perceives and conceptualizes the material-only world into a system of knowledge, starting with Self and Other. Berger and Luckmann begin with how human knowledge about reality is sociologically generated.

Most postmodern thinkers begin with language (i.e., linguistics) and/or meaning (i.e., hermeneutics), both of which utilize signs, rather than mental categories of knowledge. To those like Sapir and Whorf, worldviews are most often linguistic structures used to construct and control our world.21

Theorists like Naugle and Sire have insightfully pointed out that the order of components hypothesized to sequentially and progressively form a worldview usually reflects the preconceptions (i.e., the worldview) of the worldview theorists analyzing and describing the worldview, not the position of the worldviewers themselves. This ‘first explicated component’

21 For a helpful discussion regarding epochal-related influences on theorists, see Naugle, Worldview, 255-256 and Sire, Naming the Elephant, 77-82, 140.
view does not offer a true explanation of formation. In other words, an operative worldview is not formed by most individuals through some philosophical process of sequential reflection. Like Naugle, I do not agree that worldview formation begins consciously, reflectively, or intentionally with one fundamental first component or question-and-answer from which the rest of the worldview builds upon.

Contrary to Berger and Luckmann, I am also not positing that worldviews are fully and consciously formed theoretical social constructs created only by elite, reflective intellectuals, which are then internalized by everyone. While I agree with Berger that humans have few innate instincts and many world-building capabilities, I disagree that it follows that all knowledge (including worldviews) arises out of and are consciously determined only by our collective social conditions. Rather, I agree with Sire that the bulk of a worldview is pre-theoretical and pre-suppositional in character—what we think with, not what we think about. It consists largely of intuited taken-for-granted orientations and taken-on-faith commitments that we use reflexively rather than reflectively in order to live life. As such, a worldview does not create reality, it interprets reality, becoming a how-to-guide, script, or framework—a lifeframe.

Lastly, I also assert that when one examines the lifeframe construct at multiple levels of analysis a lifeframe is not formed by most people as a uniquely personal lifeframe—it is socially acquired from our larger social networks we are entangled and embedded within. This societal macro-level must be the focus of any initial analysis, including herein. While psychology’s

—- 22 It has been noted that some academics and philosophers do produce well-formed and explicit worldviews containing explicated assumptions, propositions, and doctrines, such as Marxism and Scientific Naturalism. Though it is also true that most people, probably including the theorists, do not hold any of these more philosophical worldviews in a pure form. See Steve Wilkens and Mark L. Sanford, *Hidden Worldviews: Eight Cultural Stories That Shape Our Lives* (Downers Grove, Ill: IVP Academic, 2009), 11-12.

—- 23 Many disciplines’ theorists, especially sociologists, have categorized social analysis into three interconnected levels: individual selves in face-to-face interactions (micro-level), communal group networks (meso-level), and societal institutions, systems, and cultural-complexes (macro-level). Likewise, neuroscience and cognitive research focused on the mind necessarily includes many spatial scales of networks, from the micro-level of
worldview assessment questionnaires can examine and possibly categorize a worldview operational for any individual at the micro-level which reflects personality traits and personal values, most scholars focus on the meso-level or macro-level of worldview analysis, attempting to discover what generalized worldview(s) a large sect of a society shares in common.

3.3.4 The Orientative Lifeframe: The Reworked Worldview Construct

When a person steps out her door in the morning, she has a frame of reference, a background of default mental modes, assumptions, and beliefs, that in every situation helps her to decide what to think, what to feel, what to choose, and/or what to do—even if she is unaware of it. In other words, she has a frame for living, a lifeframe. We all do. But most of us never look at or reflect on our own lifeframe. Most of us could not even verbalize these often-subconscious orientations that direct our lives.

Lifeframes are central to human collective development and functioning. It is the lifeframe construct that bridges a commonly shared mindscape with the commonly shared culturescape, offering a multi-level perspective and unifying framework. Thus, a worldview is not simply a picture of the world, a map of reality, a complex of answers to big questions, or a set of conceptual categories.

In my understanding, a lifeframe is defined as the cooperatively constructed, socially acquired, and mindfully operationalized implicit set of governing mechanisms, default orientations, and/or mental parameters that powerfully and pervasively frame preconceptions, perceptions, priorities and prescriptions, and propositions for a group of someone's; these held neural, cerebral, and/or bodily networks to the meso-level of familial and communal networks to the macro-level of societal and global networks.
lifeways clothe a lifescape with such an aura of truthfulness and completeness that the overall lifeframe seems uniquely realistic and explanatory for all of life.\textsuperscript{24}

The instructions, rules, recipes, and scripts of a lifeframe work behind the scenes, guiding and governing thoughts, experiences, and actions, but they are rarely examined or reflected upon. All humans interact with the world through this interpreting filter of a constructed lifeframe, which, like any stencil, greatly determines what is seen, experienced, and understood.

For a society to function effectively there has to be a macro-lifeframe consensus or a broad agreement about a core set of understandings regarding reality, humanity, truth, and morality. And this lowest-common-denominator societally-held lifeframe shapes the society—just as a person is shaped by their thinking to act a certain way. A society’s group-thinking causes its aggregate behavior on the larger scale. Thus, we can offer some reworkings of the worldview construct in terms of a lifeframe, which provides a more solid theoretical grounding for our discussion.

There are four levels of each lifeframe. The levels include the (1) foundational preconceptions, (2) the deep perceptions, (3) the intermediate priorities and prescriptions, and (4) the apical propositions. See Figure 11 and see section 3.3.4.2 for a fuller description.

\textit{Figure 11: Component Levels of a Lifeframe}
There are macro-lifeframes, meso-lifeframes, and micro-lifeframes. Dilthey helpfully characterizes different historical epochs or large chunks of historical time according to its zeitgeist or ‘spirit of the times.’ Most cultural historians also characterize the Western world according to five large-scale epochs: antiquity (primordial time to ca. 500 BCE), classical (500 BCE to 500 CE), medieval (500 to 1500 CE), modern (1500 to 1950 CE), and postmodern (1950 to present). Expanding on these ideas, I argue that each epochal period within a large cultural complex is characterized by a generalized zeitgeist or macro-level lifeframe. Secondly, these generalized macro-lifeframes incorporate the default orientations related to foundational preconceptions and many deep perceptions—the first two levels—more than the higher-level priorities, prescriptions, and propositions (see section 3.3.4.2). Thus, we can speak of the macro-lifeframes of antiquitism, classicism, medievalism, modernism, and postmodernism.

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25 Hiebert, *Transforming Worldviews*, 14
Today, the American cultural complex possesses a modern and increasingly postmodern epochal macro-lifeframe centered in individualism.\textsuperscript{26} Both the modern and postmodern macro-lifeframes contain many of the same deep-level perceptual default orientations. Whereas there is a major cleavage in deep-level perceptions regarding the world between medievalism and modernism. Which is why a medieval Christian would not recognize a modern Christian’s religion-as-practiced (and vice versa), even though they share the same common core of creedal beliefs and sacramental practices of the religion. In this instance, the specific religious lifeframe orientations related to priorities, prescriptions, and propositions have not changed—what many call a ‘biblical worldview.’\textsuperscript{27} The often-deeper epochal lifeframe orientations have changed, including a perceived cleavage between sacred and profane space-and-time for a modern-minded someone.\textsuperscript{28}

While there is usually one macro-level epochal lifeframe held in a culture, there are multiple sublevel lifeframes existing and to some degree held and shared by people populating that culture’s subcultures—such as a religious one like vague Deism, a political one like progressivism, or a philosophical one like existentialism. These other subframes build upon the

\textsuperscript{26} For instance, the epochal macro-lifeframe of postmodernism defines itself as beyond or against the modern macro-lifeframe, hence the term postmodern. For instance, it embraces a plurality of perspectives, rather than modernism’s Enlightenment neutrality, unbiasedness, and monolithic views based on reason alone. No perspective or framework can have any more credibility than any other; they are all equally valid, being equally relative and unmoored from any objective truth or reality. See Sire’s The Universe Next Door, “The Vanished Horizon: Postmodernism,” 214-243 for a full discussion.

\textsuperscript{27} Many Christian apologists agree that there is no one ideal biblical or Christian theistic worldview. There are many ways it can be lived out in a specific cultural time and place. As Kraft notes in Worldview for Christian Witness, “[T]here is no such thing as a thoroughly Christian worldview, though there are thoroughly Christian people who live according to many different worldviews…There are, however, specifically Christian perspectives intended to be introduced into the worldview of every people.” Quote on page 27 with italics and bolding in the original.

\textsuperscript{28} For a good discussion of how no religion possesses a ‘transhistorical and transcultural essence,’ see Talal Asad, Genealogies of Religion: Discipline and Reasons of Power in Christianity and Islam (Baltimore: Johns Hopkins University Press, 1993), 27-54. For a good discussion of how Christianity in particular has changed over time in how it is lived out and how modern Protestant assumptions of individualism and voluntarism by scholars skew our understanding of most everyday practitioners, see Meredith B. McGuire, Lived Religion: Faith and Practice in Everyday Life (Oxford: Oxford University Press, 2008), 3-44.
deeper, stable preconceptual and perceptual default orientations associated with the epochal macro-lifeframe. Which is another reason why no lifeframe is consistent or purely held at the micro-level, because all minded someones are not only members of multiple groups, but participants of a certain epoch, each exhibiting certain basic lifeframe orientations related to space, time, and categorizations.

**No held lifeframe is fully complete or coherent.** As Dilthey points out, there is no humanly-created scientific, religious, and/or philosophical system that explains and proves the nature of our reality with absolute finality. There is no attainable god’s-eye or totalizing point of view. Each lifeframe at the individual and communal levels will be particular, finite, and situated points of view that attempt to make sense of reality as we find it, experience it, and study it; as we interact with ourselves, others, and the external world. Furthermore, all constructed, realized lifeframes—being most often implicit and hidden behind cultural trappings—are to some degree messy, intuited, often-unconscious, and reflexive givens used to live life. These worldviews, as human interpretations, are to one degree or another incomplete, error-prone, and contradictory. C.S. Lewis speaks of this incompleteness of a lifeframe (as well as the epochal quality) in discussing the discarding of the medieval worldview, saying “No Model is a catalogue of ultimate realities, and none is a mere fantasy. Each is a serious attempt to get in all the phenomena known at a given period, and each succeeds in getting in a great many. But also, no less surely, each reflects the prevalent psychology of an age almost as much as it reflects the state of that age’s knowledge.”

**No lifeframe is purely held.** Any studied and explained lifeframe (at any level of analysis) is to some extent an artificial construction. Scholars have distilled or gleaned what a

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specific cultural macro-lifeframe embraces and how group members are oriented within the possible dimensions. Probably no one exemplifies or holds any scholarly recognized and defined lifeframe in a pure form, as many academics seem to assume. Life is messy. In the U.S., many worldviews—especially naturalism and deism—come at us from all directions in fragments or bits and pieces. So that many someones believe a composite or mixture of these thoughts, rather than possessing one unified, non-contradictory lifeframe in all areas of life. Many someones throughout history have held incompatible and unexamined beliefs in a haphazard way for emotional as well as intellectual reasons. Many (or most) someones acquire various aspects of variously available, culturally shared macro-level and sub-level lifeframes, forming their own uniquely hybrid personal lifeframe (such as a mix of American individualism, Protestantism, and neoliberalism). It is only by first studying and understanding the larger, culturally shared collective macro-level lifeframes, that any hybrid personal lifeframe can be explained.

**No lifeframe remains static.** At the same time, a shared lifeframe must also be dynamic and open to change or modification by adherents to remain relevant. An already realized, formed lifeframe is socially transmitted and intuitively acquired by most successive generations who share that same culture or subculture. Just as culture changes over time, so do lifeframes—though often not at the deepest levels until a change of epochs. Most lifeframes are stable yet dynamic, able to be modified or reconfigured in response to new technologies, social processes, and/or environmental conditions. When viewed from a historical perspective, all lifeframes (at all levels of analysis) are historically, ecologically, and socially conditioned. Lifeframes usually change or evolve slowly due to new pressures, whether it is new thinking or new expressions, historical events, or interactions between different thought systems. And once in a while a new macro-lifeframe is introduced into a cultural complex that eventually supplants the old one as a
new cultural consensus in a Kuhnian paradigm shift of an upheaval rather than change resulting from developments by accumulations, because the revolution occurs at the two deepest levels—usually resulting in some blended or hybrid form of the old and new.

It is also true that no individual’s socially acquired and hybrid micro-lifeframe remains static. Maturity, experiences, learning, and exposure to new ideas can result in changes to a minded someone’s personal lifeframe. Though I agree with Kraft that held micro-lifeframes will rarely be exchanged or replaced in a full Kuhnian paradigm shift by most someones during their lifetime. Only certain nonworking, unlivable, and/or inaccurate aspects (usually not at the deepest levels) will be modified by any someone during their lifetime.30

3.3.4.1 Formation and Acquisition

A lifeframe is not personally, intentionally, and/or reflectively formed by most someones. Rather, lifeframes, as social phenomena, are cooperatively, socially constructed and agreed upon through the interactions of minds among a group of minded someones, situated in particular ecosocial contexts which evoke particular modes of mentation and cognition. When new lifeframes form, they do so as the result of cooperative mindshare at the collective level of social organization. Otherwise, every lifeframe would be individually unique and incomparable. Lifeframes are thus formed and acquired corporately (with individual modifications) within a social group, requiring a macro-level (or meso-level) of analysis and explanation.

The NSM theory assumes that in any given speech community the language’s word-meanings are shared, constituting the basis for communication. These shared meanings are also the vehicles by which lifeframes and culture are transmitted. Children begin to intake, absorb,

and make their own the household, community, and society’s commonly shared lifeframe(s)—not construct their own from scratch—at the same time as they begin to learn the language—which itself also greatly contours their overall framework through which they interpret and engage with reality. Being socially acquired, shared lifeframes are assumed to be true and taken on faith, without proof, beginning in childhood. They are not reasoned out. The default orientations are rarely questioned.

For peoples everywhere, an implicitly held (and possibly hybrid) lifeframe is culturally transmitted and acquired through the discourse of language involving demonstration, teaching, and/or imitation so as to be adopted gradually after birth from one’s parents, family, group affiliations, and society. These cultural discourses socialize societal members into associated default modes of mental perceiving, evaluating, and explaining all of reality, which transmit the core components of lifeframes to be acquired by peers and successive generations. This is similar to Polanyi’s assertion that intuited doings and embodied know-how are the inescapable starting points for the knowing process.31 These tacit lifeframe-related understandings are acquired through the examples of others and self-practice of lived experience.

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I also want to briefly discuss the factors that contribute to lifeframe formations, since new culture-wide macro-lifeframes do form occasionally in order to be widely distributed and acquired. I argue that the dynamic interactions through engagements and extensions of an embrained/embodied/entangled mind of someone and other minded someones embedded within a specific ecosocial environment gives rise occasionally to a new macro-lifeframe.

In particular, aspects of our ecological environment (including the particular climate, geography, varieties of natural resources, and types of subsistence) and social environment (including size of group, level of pluralism, features of the language, and level of technology) influence the adopted economic, political, social structures of the society. This ecosocial environment influences the default modes of thinking and perceiving, linkages formed, and the type of explanatory reasoning employed. Until eventually an overall lifeframe forms, which in turn feedbacks into reinforcing the built environment and social world constructed. Thus, specific configurations of the ecosocial environment enable and produce specific modes of mental functioning and associated lifeframing, which in turn sustain the ecosocial configurations.

Nisbett explains the ancient Chinese worldview using a similar sequence. Thus, the ancient Chinese ecology consisted of fertile plains, low mountains, navigable rivers, high rainfall, wild rice, and a homogenous ethnic group. These ecosocial factors favored collective rice farming for sustenance. Rice farming requires cooperation among people, intense manual cultivation, and ample irrigation systems. The easy to navigate ecology and need for mutual cooperation allowed for a highly centralized control of a collective society of rice farmers. This attentional focus on interdependent social relations and obligations led to a default mental mode of field dependence and perceiving the world as a continuous web of relations composed of interrelating substances. Causal explanations required attending to the whole context, recognizing complexity, change, and contradictions among the related parts.\textsuperscript{32}

I am not convinced this is a necessary sequence of factors and neither is Nisbett. But I agree, like Berger and Kearney, that ecosocial factors of our embedding are a main key to

explaining culture-wide lifeframe formation, persistence, and changes. This could be the topic of a dissertation in itself.

3.3.4.2 Lifeframe Configuration and Components

Rather than viewing a lifeframe like an agent which does something, I argue that the components of a lifeframe are not to be spoken of as an actor, but more like scripts for an actor, following Kraft’s theorizing.33 The engaged and extended mind works like mental technology or software that utilizes pre-installed linguistic data (i.e., universal basic meanings known as semantic primes) and in-built executable programs with low-level functions and outputs (i.e., mental faculties like thinking and knowing). All minded someones rely on these same innate data inputs and mental programs, the same functional resources for mentation and cognition. Some of these programmatic functions relate to language systems (see chapter five) and some relate to classification, attribution, and logical reasoning (see chapter six).

A lifeframe consists of the readme files (i.e., the how-to guides, scripts, and programmatic orientations) that our mindtech makes use of everyday to navigate our world. These default orientations are like the assigned initial values (i.e., individualism or collectivism) within software programs (i.e., mental reasoning, perceiving, and evaluating) that are needed before any mental executing of program functions can begin to produce results (i.e., cultural behavior).

A typical lifeframe consists of four hierarchical levels of components, each building on its predecessor: (1) a foundational level of encoded preconceptions; (2) a deep level of enactable perceptions; (3) an intermediate level of evaluative priorities and prescriptions; and (4) an apical

level of explicative propositions (see Figure 12). Like the mind construct which has six ‘E’ components, the lifeframe construct possesses six ‘P’ components: preconceptions, perceptions, priorities, prescriptions, propositions, and the associated programs applied at each level.

Furthermore, the foundational level of a lifeframe does not answer the ‘big questions’ as most theorists define them. Rather, the more explicit ‘big questions’ of any lifeframe that are usually the focus of worldview theorizing, especially those related to ontology and epistemology, are subsequently formed as more explicit known propositions in the final apical level from the underlying default orientations in these lower-level component frames.

*Figure 12: Model of A Lifeframe*
LEVEL ONE: Foundational Encoded Preconceptions

The encoded preconceptions—the intuited, taken-for-granted data inputs—are the foundation of lifeframing, produced through programmatic mental capabilities. Cultural linguistics’ discovery of sixty-ish universally shared and innate concepts, called semantic primes, are just such intuited conceptual givens—some of which do resemble Redfield and Kearney’s theorized universal conceptual categories including I~ME, TIME, and PLACE. When these primes are operationalized or expressed by lexemes in specific languages via a word, phraseme, or morpheme, these primes become preconceptions—primary concepts that are used by all higher-level mentation and cognition.

To fully understand a macro-lifeframe and the associated culture we must be able to understand a people’s expression of their language’s building blocks of semantic prime preconcepts and basic linguistic features of the language, including which concepts become the referential cornerstones. See chapter five for more details. Relatedly, many lifeframe differences between cultural groups are the result of and reflect how the people reasoned and evaluated ideational and social phenomena, creating preconceptual semantic categorical domains and taxonomic structures. See chapter six for more details.

It is on the basis of our universal mental programmatic capabilities working with these encoded preconceptual data at the root level that most subsequent level-two perceptions, level-three priorities and prescriptions, and level-four propositions are assembled.

LEVEL TWO: Deep Enacted Perceptual Presets

All minded someones are taught or socialized to use a default mental style, way, or program of thinking and knowing from among the possible choices—sometimes called mental habits. These
employed mental workways are mostly predetermined by the culturally held lifeframe(s). As Nisbett says, “People use the cognitive tools that seem to make sense—given the sense they make of the world.”

Moreover, the use of specific mental tools (i.e., attentional focus and/or perceptual awareness) by all minded someones result in filtered inferences or interpretations. No one has a direct readout of the worldly place. All perceptions are inferences, allowing for much variability of what is perceived. Often, the foundational level’s default mode of classifying and attributing influences the choice of the deep-level perceptual presets working in the background of a lifeframe that underlie and shape the more explicit thinking, feeling, seeing, and knowing. Furthermore, these enacted perceptions set the stage for the shape of the overall lifeframe that appears, the default priorities, prescriptions, and propositions.

The most basic orientative perceptions concern perceptions about the worldly place we live in. These perceptions involve the target of focus and perceived composition, dynamic quality, and workings of our environment. Another set of perceptions concern the perceived linkages within the world—what exists, what causes events, and how we are to relate to others. A last set of perceptions concern the perceived spatio-temporal characteristics and structure of our worldly place. I will not be covering this lifeframe component level in this work, but refer to section 7.1 for a more detailed discussion of this lifeframe level.

LEVEL THREE: Intermediate Evaluative Priorities and Prescriptions

A sociocultural group’s default perceptual presets influence the types of default priorities and prescriptions also held as part of their lifeframe. Prioritized values refer to what the sociocultural

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34 Nisbett, *The Geography of Thought*, xvii.
group evaluates to be a higher important, worthwhile, or useful good thing relative to other things. These priorities include preferences regarding actionable virtues, attitudes, and power differentials within the society. Prescriptive behaviors refer to what the sociocultural group evaluates to be the proper way of behaving in various contexts. These prescriptions include preferences regarding how to relate to the natural world, respond to uncertainties and norm violations, and make communal decisions. It is within this intermediate level of the framework that much of the social and moral order are defined regarding what to highly value and what is appropriate to do. I will also not be covering this lifeframe component level in this work, but refer to section 7.2 for a more detailed discussion of this lifeframe level.

The last level of a lifeframe includes the more explicit top-level propositions so familiar in most worldview theorizing.

LEVEL FOUR: Apical Explicative Propositions

It is on the basis of the pre-installed data, in-built mental programs, and encoded preconceptions that the deep enacted perceptions and intermediate priorities and prescriptions form that become implicit default orientative presets in a lifeframe. Upon these deeper levels, a final top fourth level forms which includes the explanatory and more explicit belief or knowledge systems which are full of propositions and systematized understandings. Most often these belief systems are typologized by scholars into a set of ideal types according to controlling beliefs regarding divinity, creating worldview types like monotheism, atheism, and polytheism, with sub-categories for specific religions. It is this level that many previous theorists and researchers have contended with when they have focused on the ‘big questions’ of life. I agree with them that there are additional questions-and-answers within each lifeframe not covered in the previous
levels. It is within the apical explanatory level that these subsequent questions are answered in the realms of epistemology, cosmology, ethics, and so on. These propositions become default orientations as well, utilizing the preset framework already provided as a guide. I will also not be covering this lifeframe component level in this work, but refer to section 7.3 for a more detailed discussion of this lifeframe level.

3.3.5 The Exhibited Culture: The Reworked Culture Construct

Edward Burnett Tylor was the first to use the term ‘culture’ in English in 1871 in the normal sense now accepted in the social sciences and humanities. Tylor defined culture as “that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society.”\(^{35}\) Since then, many theorists in many disciplines have utilized a similar version of this definition, blurring the conceptual boundary between the worldview construct and the culture construct.

In my understanding, a lifeframe consists of the orientative default presets regarding beliefs, morals, and most knowledge in the minds of someones. Culture, for its part, is defined as consisting of the explicit learned behaviors and exhibited results of those behaviors manifested by the mindful lifeframing of members of a sociocultural group. Culture is thus exemplified in the specific arts, laws, traditions, institutions, buildings, tools, and other artifacts produced—the linguistic sayings, artifact makings, behavioral doings, and institutional orderings that are central to human flourishing.

The culture construct is not so much constructed, as it is the cooperative outworkings of mindful agents using their communally held lifeframe(s) to live life. A lifeframe influences and

is influenced by the cultural air breathed. Likewise, most cultures are stable yet dynamic systems, able to be modified or reconfigured in response to new lifeframe-related ideas, new lifeways, and/or lifestyles.

In this view, the cultural outworkings of a lifeframe are the best vehicle of transmission and source of understanding regarding the lifeframe of most of that culture’s people. We reveal through our actions what we really think and what we really value and thus what our lifeframe really entails. Thus, the society’s communicative, behavioral, material, and structural manifestations represent the culture.

3.3.5.1 Surficial Enduring Products

In this view, all aspects of culture and all cultural products are considered material culture. Cultural products are manifested in some temporary or permanent tangible form; they can be created, used, experienced, consumed, displayed, and traded. There are no nonmaterial cultural products (i.e., beliefs, values, principles, rules, attitudes, preferences, etc.), because these are part of the lifeframe(s) associated with that sociocultural group.

**Sayings of Language.** Our social communications, especially written ones, give expression to our lifeframe orientations. This includes the literary arts—the stories, myths, and legends told, using metaphors, imagery, rhymes, and symbolism. It includes the law codes enacted, the writings of the wise, and the histories recorded. It includes the types of names given, the sentence order of words, and the grammar used. All externalized communications reflect the underlying lifeframe components of a people group.

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36 The explication of surface cultural products relies (with modifications) mainly on Hiebert’s *Transforming Worldviews* and Kraft’s *Worldview for Christian Witness*. Though neither Hiebert nor Kraft view culture as a separate sphere from a worldview. For both, a worldview is the deepest level of the cultural sphere.
**Makings of Artifacts.** Our created material goods also express our lifeframe orientations, including food/cuisine, pottery/crafts, dress/clothing, merchandise, tools, weapons, furniture, buildings, and monuments. They reflect what people value and prefer.

**Doings of Behavior.** Our social actions also demonstrate our lifeframe orientations, including the performance of customs, traditions, festivals, and rituals that reflect and reinforce beliefs, values, and attitudes. It includes the games and sports played and the uses of technology and skills for sustenance, health, transportation, and building. It includes gestures, facial expressions, and greetings and their associated meanings. It includes the manifested entertainment—the visual, oral, and performing arts (i.e., painting, music, drama, dance, films, etc.) that express important feelings, thoughts, and wants.

**Orderings of Social Institutions.** Social institutions are systemic conglomerates of people exhibiting role-specific social behavior. An institution consists of people-as-role-holders engaged in certain practices governed by associated rules that are focused on solving a common social problem according to shared lifeframes using proffered resources for common interests within a particular type of social (often hierarchical) infrastructure. Our generated social institutions (i.e., hospitals, schools, police forces) each revolve around a social dilemma and sphere of activity in need of ordering, forming a complex system which incorporates many aspects. Such as the U.S. educational system which encompasses many administrators overseeing funding, policies, and facilities with parent involvement and teachers teaching students from kindergarten to the university utilizing methods, standards, and resources in order to produce knowledgeable and productive members of the society. Other ordered social

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institutional systems include the familial, economic, religious, medical, legal, military, and governmental systems. These institutional agents’ actions and their so-called ‘institutional culture’ reflect, communicate, and reinforce shared lifeframe orientations.

3.4 My Interdisciplinary Methodology

There is no overarching approved or customary set of methods within worldview analysis to determine the proffered theory’s correctness and usefulness for explicating lifeframes. As a lifeframe works implicitly behind the scenes, we must infer macro-lifescapes of a sociocultural group from their sayings, makings, doings, and orderings of their lifeworld. Whatever methods utilized to achieve this, they must be able to uncover the similarities, connections, and patterns of orientations that thread themselves through the material culture under study. It also falls to one’s methodological research plan to overcome some of the inherent subjectivity and the subsequent method’s restricted results.

Thus, I have sought to undertake an interdisciplinary and convergent emic-etic approach which utilizes complementary methods from many disciplines with the goal to infer sought-after default preconceptual orientations in the areas of language and logic from explicit sayings, sayings of doings, and makings within the Kaldi Akkadûm linguaculture.

3.4.1 Previous Etic Approaches Utilized

The subject of the Ancient Near East as a research area is exceptional because of the ancientness of the civilizations and the exceedingly long-time span included, which on average includes over 3,000 years. This Ancient Near Eastern milieu and its many pivotal changes have been examined
using many different methodologies from many different disciplines with many differing (though not necessarily contradictory) results.

Regardless of the chosen methodology, for most of the past two hundred years of ANE research scholars have often used an etic or outsider-comparative approach, which views the cultural behavior being studied from a cross-cultural perspective, comparing it to other cultures (in space and time) according to generalized representations for noted similarities and differences. Though, often this etic approach can also become a self-reflective lens which uses the researcher’s own cultural perspective as a universal standard to determine what is important and what is normal.\(^3^{8}\) This affects the theories and assumptions employed, the types of questions asked, the data used to answer such questions, and the conclusions given—which typically presents a less than fully contextualized view of the Ancient Near Eastern world, its thinking, and its transformations.

Since the 1830s, many of these scholars have been Western moderns who have also been monotheists, state-based citizens, technologically advanced, scientifically minded, and literate men. They are what has come to be called WEIRD—Western, educated, industrialized, rich, and democratic.\(^3^{9}\) Each scholar who attacks this massive subject necessarily has a distinctive voice, particular interests, and held assumptions that aid these efforts. Yet, in much previous ANE research of the nineteenth and twentieth centuries this etic-based lens was often filtered through many WEIRD cultural constraints and ethnocentric assumptions to present a narrative of a civilization that philosophized about abstract concepts, had notions of an individual self, divided reality between sacred and secular spheres, and lacked intense religious devotion. They asserted

\(^3^{8}\) For a good overview of problems related to the traditional etic approach see Mark Golden and Peter Toohey, *Inventing Ancient Culture: Historicism, Periodization and the Ancient World* (London: Routledge, 1997).

that ANE civilizations began with writing, progressed through political stages to the ultimate State, and were propelled forward by ‘big men’ in history. They instinctively have read themselves into the artifacts and texts.

This etically-based research can be seen in the differing interpretations of one of the earliest discovered vessels of narrative relief sculpture, the famous Uruk (or Warka) Vase, a carved vessel found in the ancient Šumerûm city of Uruk in today’s southern Iraq which dates from circa 3200 to 3000 BCE (see Figure 13). This artifact presents a complex scene with five hierarchical registers, but it has no accompanying textual explanation, allowing for many ‘readings’ of it.

*Figure 13: Uruk Vase Diagram (Source unknown)*
Historian Marc Van de Mieroop states that the vase’s scene represents the temple’s role in collecting the resources of the region for redistribution to the community. The top register depicts a male temple official presenting the produce of the land to the goddess of the city, Inanna. Van de Mieroop reads it from the top down, focusing on temple politics. Anthropologist Susan Pollock states that the scene is an example of a naturalized social hierarchy—from water and plants to animals and naked men to a priest and goddess. Pollock reads it from the bottom up, focusing on the inequalities of relations. Frans Wiggermann, who specializes in art history and Assyriology, interprets the scene as one representing a harvest festival at the temple of Inanna. Behind the goddess in the temple preparations are being made for a meal to celebrate. Wiggermann reads it horizontally across the top register, focusing on the many details it contains. Thorkild Jacobsen, a historian specializing in Sumerûm literature, views it as a scene depicting the sacred marriage rite of the goddess Inanna to the god of the date palm, Dumuzi, who is at the head of a long retinue bearing his wedding gifts for her. Jacobsen reads it from the top down, focusing on the ritualistic aspects. Most of these interpretations rely on political, social, religious, and economic explanations that are reflective of the discipline-specific research of each scholar. These interpretations are like a Rorschach inkblot test in which everyone sees something different.

Moreover, many ANE scholars have focused on etically-based concepts like ‘politics’ and ‘religion’ which are institutionally distinct spheres in modern Western cultures. As one of

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the seminal WEIRD researchers, Oppenheim, famously concludes, “One obtains the impression—confirmed by other indications—that the influence of religion on the individual, as well as on the community as a whole, was unimportant in Mesopotamia…He lived in a quite tepid religious climate within a framework of socio-economic rather than cultic coordinates.”44 I contend, like many other more recent scholars, that the Birît Nārāti societies were highly focused on divine realities, entities, and functions. Just because theses cultures do not have an institutionalized or specialized religious sphere does not mean they do not have divinely focused behaviors that are diffused in other existing spheres of conduct.45

This mistaken conclusion highlights the deficiency of a purely etic outsider-comparative approach. Oppenheim is also misguided in his decision that “a systematic presentation of Mesopotamian religion cannot and should not be written,”46 (possibly alluding to the limits of an etic approach). This thinking helped set the standard methodology and subsequent narrative among researchers for many years.47 I agree that Mesopotamian ‘religion’ does not exist and

44 Oppenheim, Ancient Mesopotamia, 176.
45 Schneider astutely notes that the parameters of what constitutes religion have changed since Oppenheim indirectly wrote on the subject of religion. When Oppenheim wrote in 1964 Western scholarship, under the influence of Christianity, defined religion more often than not in substantive terms, according to content or beliefs that correlated with Christian beliefs and practices. Under such definitions, Mesopotamian religion seems thin. More recently, scholars like Gary Beckman in “How Religion Was Done,” in A Companion to the Ancient Near East (ed. Daniel C. Snell; Oxford: Blackwell Publishing, 2007), 366-376, have put forward functional definitions, according to how religion functions in the ANE. Since much of Mesopotamian religion is functionally oriented rather than focused on beliefs, these types of definitions are more inclusive of its aspects. See Schneider, An Introduction to Ancient Mesopotamian Religion, 1-3.

46 Oppenheim, Ancient Mesopotamia, 172.
47 Writing in 1987, Jean Bottéro offers “only a discrete silhouette of this civilization.” Mesopotamia: Writing, Reasoning, and the Gods (trans. Zainab Bahrani and Marc Van de Mieroop; Chicago: University of Chicago Press, 1992 [1987]), 2. Writing in 1988, Hans Jörg Nissen states in his preface that Oppenheim’s arguments are “fully justified.” He also admits that because of this, aspects of the religion are not treated by him as in-depth or with the same weight in his work as they were experienced in the life of the ancient inhabitants of Babylonia. The Early History of the Ancient Near East, 9000-2000 B.C. (trans. Elizabeth Lutzeier and Kenneth J Northcott; Chicago: University of Chicago Press, 1988 [1983]), xi. Writing in 2015, Ivan Hruša agrees, saying: “It is very difficult or practically impossible to tune oneself in to the mentality of a strange and culturally diverse society with which one has no direct experience… What we can capture from the Mesopotamian religious world, are only single aspects, seen on the screen of a theory and through the lens of our own experiences and ideas.” Ancient Mesopotamian Religion: A Descriptive Introduction (trans. Michael Tait; Munster: Ugarit-Verlag, 2015), 13.
cannot be systematized as such when one uses an etic perspective. An etic-based approach is an essential approach to any unfamiliar and unknown culture if used to compare cross-culturally valid or universal features between cultures. In this way it can be a most useful entry point. But Oppenheim is wrong in the reasoning used and subsequent conclusions given.

One of the misguided reasons Oppenheim gives is the difficulty of modern Westerners comprehending an ancient polytheistic religion of a ‘dead civilization’ far removed from our times. He further claims that his work is necessarily a ‘portraiture’ or a selective perspective that includes as much of the portraitist as of the subject. In other words, his assumes that his work must be an unabashedly self-reflective and etically comparative work of a modern man.  

Ultimately, this did not preclude him or others since from attempting to overcome these identified, etic-related problems, while at the same time stating that in light of these limitations any work on the ancient Near East cannot be definitive or total.

The hilarious novella entitled The Motel of the Mysteries by David Macaulay is a satire on archaeology as a science similar to my contentions regarding the Uruk Vase’s many interpretations. The story comically lampoons the real discovery of King Tutankhamun’s tomb in 1922 by Howard Carter. In the novella, the amateur archaeologist Howard Carson accidentally discovers a motel room of the Toot’n’C’mon Motel that has been buried since 1985 while running a marathon in the year 4022 in the ancient country of Usa. Wrongly assuming that the discovered motel room is like an Egyptian burial chamber (possibly because of a portrait of a Pharaoh on the room’s wall and previous noted scholarship in the same vein at the beginning of the story), Carson presents a laughable interpretation of the room full of religious and ceremonial

48 It is arguable that this was really a pseudo-etic approach as it utilized an etic outsider approach that only saw the ethnocentric qualities of his own culture in the to-be-studied culture (i.e. a self-reflective portraiture).
explanations. Thus, within the tomb’s outer chamber is the Great Altar (TV), Ceremonial Platform (bed), Sacred Communicator (TV remote), and a statue of the deity WATT (lamp). Within the inner chamber is a white sarcophagus (bathtub), Sacred Urn (toilet), and the Sacred Parchment (toilet paper) which was placed in the sacred urn during ceremonies.

A second well-known satirical example is Horace Miner’s article entitled “Body Ritual among the Nacirema,” which lampoons anthropologists’ etically-based tendency to interpret observed behavior of an unknown culture (Nacirema is ‘American’ spelled backwards) in ethnocentric, exaggerated, and often religious or magical terms, making it seem strange and exotic. Both satires’ pointed misrepresentations warn of the dangers associated with the human tendency to compare, explain, and judge another culture’s people, behavior, and objects using a myopic and outsider ethnocentric viewpoint replete with one’s own outsider terms, values, and/or assumptions. Very little attempt is undertaken to actually understand the insider point of view of the studied culture and people.

I agree with Oppenheim and others that any reconstructed ancient lifeframe will be generalized, incomplete, and lack definiteness because of the cross-cultural, cross-temporal, and cross-conceptual bridges necessary for such a reconstruction using the limited data at our disposal. But I disagree that an etic or ‘outside observer’ approach—which seeks to describe elements as understood from the scholar’s outsider perspective in terms applicable across cultures—is the only option available to researchers.

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51 A common joke among archaeologists (and one I heard often on the archaeological dig in Akko, Israel) is that if an artifact’s purpose is unclear, then it must be cultic or related to the people’s religious life. The joke is funny because it touches on a truth—that so much of Mesopotamian life was associated with religious functions. If religion infuses the lifeframe in many of its aspects, from how the economy is run to how time is structured, then it is imperative we address their religious views in full. When a more expansive and functional definition of religion is employed one begins to see how intertwined their religion was within their political, social, and economic lives.
I believe that we must shift the accepted, traditional research approach to include an emic or ‘insider’ approach—even of ancient ‘dead’ cultures—which views the culture being researched from the perspective of the participants/writers—which in this case is mainly the educated, elite male scribes. An emic approach attempts to reconstruct the deeper experiential world of beliefs, values, motives, interests, and attitudes of cultural contributors through their own words/terms, understandings, and behaviors. In this approach the manifested artifacts that they consider important are also allowed to speak for themselves before any comparisons are undertaken. When comparisons do occur, it is first with other evidence of the current culturescape or similar culturescapes. This more nuanced and emically-based approach has been successfully undertaken in recent decades regarding certain spheres of life of many ancient Near Eastern cultures. Is it possible that a combined emic-etic approach could afford us a more robust and convincing interpretation of the Uruk Vase?

3.4.2 The Use of an Emic-Etic Approach

I agree with Hiebert that it is best to triangulate findings of any one method with those produced by other methods. Recognizing the rich, thick description that can be obtained from utilizing both perspectives in conjunction, I use a combined emic-etic approach of two different standpoints to inform my methodology in which an emic perspective that utilizes concepts as

52 While many scholars like Oppenheim have focused on the differences and divisions between us modern (or postmodern) Western monotheists and ancient Near Eastern polytheistic cultures, I see the similarities I share with them. Like the ancient Babylonians, I believe in spiritual realities and beings, in a divinely created world, and in the human ability to affect the divine. Thus, I hope my ‘portraiture’ aligns in many significant ways with the Babylonian reality; that they would recognize and approve the broad brush strokes herein.


54 Hiebert, Transforming Worldviews, 89-104.
termed and employed in that culture is complemented by an etic rebuttal which attempts to align or approximate culturally-specific elements with common, universal terminology for cross-cultural comparisons.  

**The Narrower Emic Insider-Relative Approach.** Lifeframe-thinking is best revealed in the patterned cultural creations of each society and time period, because cultural products are a barometer or reflective measurement of a society’s thinking. These products reflect emically-based, insider understandings. Within this emic approach focused on the Kaldi Empire I utilize a wide range of modern techniques as multiple lines of evidence that work as optical lenses—from the microscope to the satellite—to bring our subject into view for analysis.

Regarding evidential resources, I conduct a study of Kaldi Akkadûm texts (myths, laws, and omens) and language (linguistic structure), believing that all people are socialized with words and into words. Wierzbicka noted this possibility, saying: “Words are a society’s most basic cultural artefacts, and—properly understood—they provide the best key to a culture’s values and assumptions.”

Regarding methods, I utilize NSM analysis and close readings focused on word usage and meaning, especially of semantic primes, to form our microscopic view. Rhetorical criticism and literary/folklore analysis focused on textual structure, wordplays, and genre form our usual view using a standard lens. Ethnosemantic analysis focused on how words are grouped into larger semantic sets, domains, and taxonomies use a telephoto lens that allows for distance viewing. Cultural keyword studies analyze the culturally laden words around which whole

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55 For a good overview of the etic and emic approaches, their benefits and dangers, and a possible synthesis, see Hede Helfrich, “Beyond the Dilemma of Cross-Cultural Psychology: Resolving the Tension between Etic and Emic Approaches,” *Culture & Psychology* 5, no. 2 (June 1999): 131–53.
discourses are organized and intertextual methods focused on the literary context together form a wide-angle lens.

**The Wider Etic Outsider Approach.** Using an etic perspective that compares the Kaldi Empire to other cultures, I rely on intercultural and socio-historical methods focused on customs and behaviors of the society’s neighbors in time and place, the larger sociocultural complex, to form a wider-angle lens. Ethnographic studies provide clarifying information from a distance in time and sometimes place, forming a satellite view. I consult anthropological and ethnographic studies of still existing pre-modern traditional societies—which share many common lifeframe orientations with the Kaldi that can shed light on issues—in order to understand the Kaldian mindset and provide parallels in their ways of thinking. Lastly, I compare aspects of their lifeframe with aspects of the modern Western and especially American lifeframe to understand similarities and differences.

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With these resources and methods at our disposal, we now turn to our second object of study, the Kaldian Empire and its deepest level lifeframe orientations.
PART TWO: THE KALDIAN LIFEFRAME

IV. CHAPTER FOUR: THE KALDIAN EMPIRE: The Subject

In order to give the reader a basic background for the discussions that follow, I provide an overview of the subject at hand. In what follows I offer a brief overview of the terminology, sociopolitical history, and legacies of the region. First, I discuss the different academic labels for the region, people, and language and possible ways to move forward. Next, I explore the history of the region from the sixth millennium to the first millennium, honing in especially on the central and southern geographical areas. Lastly, I explore the legacies of this linguaculture.

4.1 Labels

Many of the terms used within the study of the Southwest Asian milieu derive from British imperial terminology of the nineteenth century when Assyriology began to develop as a discipline. Since then many scholars have referred to the people, land, culture, and language using these etic labels, many of which derive from Greek terms by way of Latin into English.

Akkadian -> Akkadûm, Akkadi, and Şalmāt Qaqqadi. The language, people, political unit, and culture associated with the late second millennium BCE Southwest Asian river valley are often termed ‘Akkadian’ in modern scholarship. The name comes from the related capital

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city, Agade, founded by the ruler Šarrugi (Eng: Sargon) circa 2300 BCE. The term Agade is non-Akkadian; it is not of Semitic origin. The city’s name is spelled logographically in Šumerûm as URUₖi and phonetically in Akkadian as a-ga-deₖi in cuneiform texts, meaning Agade
place. The name Agade became Akkad when it was Semitized into Akkadian to refer to the region surrounding the capital city.² Scholars are now beginning to designate the capital city as Agade and the region as Akkad to reflect these facts.

Post-Šarrugi the Semitic term Akkadi (Eng: of-Akkad) acquired a new meaning. It began to refer to all people groups and lands regardless of ethnicity who began to adopt the language, customs, values, and culture—and the lifeframe—of the Šarrugic kingdom.³ The Akkadi kingdom was the first Semitic dominion of the region, which united all the native Semitic-speaking peoples and their conquered Šumeri neighbors into one bilingual linguaculture.

The people referred to their language as Akkadûₘ, so I refer to it as Akkadûm.⁴ Rather than use the term Akkadian to refer to the people, I use the term Šalmāt Qaggadi, meaning ‘dark of-head’ as this was a popular term they utilized to refer to themselves, including during the timeframe under discussion.⁵

Mesopotamia -> Birīt Nārāti. The often-used term ‘Mesopotamia’ as a place-name comes from ancient Greek (Grk: Μεσοποταμία), meaning ‘between’ (mēsos) ‘rivers’ (potamós).

³ Benjamin R. Foster, Age of Agade (Taylor and Francis, 2015), 30.
⁴ See the CAD Volume 1 ‘A,’ p.272 regarding akkadîₘ for further information. These people referred to the provenance of many objects associated with Akkad, not just their language, as akkadîm. I capitalize the term and all emic terms for ease of use in English even though no terms are capitalized in Akkadûm. While the final ‘m’ was later dropped during the early first millennium, I use the term and all emic terms in its standard form. Online: https://isac.uchicago.edu/sites/default/files/uploads/shared/docs/cad_a1.pdf
The Hellenic designation was first used in the fourth century BCE. It was eventually Latinized as Mesopotamia. The term has come to represent the whole area including the tributaries and surrounding areas watered by the twin river system, including modern-day Iraq and northern Syria.6

Rather than using a later etic term from a neighboring linguaculture, I posit the use of a similar emic Akkadûm term focused on the geography of the two famous rivers of the region. It has been found that the Greek place-name was seemingly translated from Aramaic (byn nhryn) which was translated from two related local Akkadûm terms already in use (māt birītimki meaning ‘land betweenplace’, and birīt nārim meaning ‘between-of-river’). Finkelstein argues that both terms probably originally designated only the great u-shaped bend of the Euphrates river which enclosed the land therein in a ‘riverine peninsula.’7 The geographical term nārāti kilallê has also been attested in cuneiform texts, meaning ‘rivers both’ or ‘rivers twin’ in Akkadûm.8

For our present purposes, it is not important how large the area designated by these terms was at any given time. What is important is the Šalmāt Qaqadi people’s understanding and use of the general ideas of between-land, between-riverbend, and rivers-twin to designate the homeland. While the names of the rivers have changed from linguaculture to linguaculture, their existence and general courses have not changed. I argue for the use of the term Birīt Nārāti for the whole region during the ancient era, meaning ‘between rivers’ in syllabic Akkadûm which is

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8 See CAD Volume 11 ‘N,’ p.368 which cites Cuneiform Texts from Babylonian Tablets 17 26:65f and Cuneiform Texts from Babylonian Tablets 16 47:197f. For Ṣumerûm, the twin rivers were referred to logographically together as ID.MEŠ, meaning ‘river.plural.’ Online: https://isac.uchicago.edu/sites/default/files/uploads/shared/docs/cad_n1.pdf.
attested in cuneiform texts. Like the term Mesopotamia, Birīt Nārāti is a geographically based term which allows scholars to refer to the region without referring to any specific socio-political unit of any specific historical time period.

**Babylon, Babylonia, and Neo-Babylonia -> Southern Birīt Nārāti or Māt Kaldîm.**

The name of the city of Babylon comes from the Hellenized form (Grk: Βαβυλων) of the Akkadûm name Bābil(m) (Eng: gate-of-gods), which was Latinized as Babulōn. Because Babylon was the capital of the region and empire in the first millennium the whole area was designated in ancient Greek as Βαβυλωνία and Latinized as Babulōnia. It has been used ever since as a general geographical and political term for the southern part of Mesopotamia, even though the Amurru (Eng: Amorites) who ruled during the late second millennium (1880-1595 BCE) and the Kaldum (Eng: Chaldeans) who ruled during the mid first millennium were only two groups of a succession of dynasties who took control of the region and ruled from Bābilim.10

I argue that when referring to the central and southern region in general it should be labeled geographically as Southern or Lower Birīt Nārāti. When referring to any particular dynastic empire the emic Akkadûm name of the socio-political unit should be used, as in Māt Akkadîm (Eng: land of-Akkadians) during the Akkadian rule (2288-2111 BCE), Bābilim for the city of Babylon, Māt Amurrîm (Eng: land of-Amorites) for Babylonia during the Amorite rule (1880-1595 BCE), Māt Karduniaš (Eng: land of-Kassites) for the region during the Kassite dynasty (1374-1155 BCE), and Māt Kaldîm (Eng: land of-Chaldeans) during the Chaldean rule (626-539 BCE) for the Neo-Babylonia Empire.11

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11 All of these emic terms in Akkadûm are attested in the CAD volumes. Dynasty dates come from Van de Mieroop, *A History of the Ancient Near East*, 348-359.
**Ancient Near East -> Ancient Tricontinental Zone.** The general term ‘ancient Near East’ is used by Assyriologists to designate the entire Southwest area of the Eurasian continent and the Nile area of the African continent, which usually includes latitudinally the land from the eastern Mediteraneanan coast to central Iran, and longitudinally from the Black Sea to the Red Sea. The term ‘Near East’ also comes from nineteenth century British imperial terminology. It identified the remains of the Ottoman Empire which covered much of the same region. From the British perspective (and most Europeans) the land was located in the east but nearer than most of the Asian continent, hence the term the Near East. Today we call much of this area the Middle East, but the two areas do not fully overlap.\(^{12}\)

Unfortunately, both geographic terms utilize directional cartographic aids that put Europe at the center of the world map. As this area uniquely encompasses the intersection of three continents (Asia, Africa, and Europe), I argue that a better term would be the ancient Tricontinental Zone. This is the term I use.

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I argue that it is never too late to change academic terminology which refers to specific terms from a linguaculture under study in order to use emic terms that reflect insider understandings according to their lifeframe, especially when your methods utilizes worldview analysis. Many other terms have already disappeared, including the Latin Eurocentric term ‘Oriental’ which means ‘east’ or ‘rising.’

With the use of this emic terminology we must discuss the sociopolitical developments of the Birīt Nārāti in order to futher orient ourselves to the subject.

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4.2 Lands

The Kaldi Empire (Eng: Chaldean Neo-Babylonia) of the first millennium BCE under discussion in the chapters that follow was the successor to many previous sociopolitical developments. While Egypt divided itself into thirty-one dynasties in the third century BCE which has been adopted ever since by scholars as a chronological scheme and starting point for applied methods, the neighboring regions have no such framework for divvying up their developments. Different scholars have used different slicing methods to separate the developments into discernible divisions, stages, or periods.

Following Van de Mieroop, I divide this sociopolitical history of the larger ancient Tricontinental Zone into four larger periods which are grouped into progressively larger and more centralized units, from villages and chiefdoms (7000 to 3000 BCE), to city-states (3000 to 1600), to territorial states (1600 to 800), to empires (800 to 300), for ease of discussion. Within this organizational scheme, I highlight any relevant and important developments, especially those which occurred in the central-southern Birīt Nārāti region, which are connected to the discussions of later chapters. Refer to Appendix A for a timeline of the chronology of the region.

As we will see, the region experienced repeated unifications and centralizations followed by repeated fragmentations and decentralizations, with each repetition leading to greater sociopolitical control of a land area. In all this, there is a direct correlation between the size of the sociopolitical unit, the size of the scribal unit, and the size of the textual records produced (and preserved). When the state flourishes, the textual records flourish as well.

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13 Schneider, *An Introduction to Ancient Mesopotamian Religion*, 17.
Villages and Chiefdoms (7000-3000 BCE).\(^{16}\) As with most Neolithic riverine civilizations, it is the twin river system of the region about which all subsequent developments center around. The semi-parallel rivers flow southeast down from the Taurus Mountains in the north, separately emptying into the Persian Gulf some 1,500 miles away, creating a funnel with the two rivers closest at the entry into the ocean. The central 250 mile portion through which the two rivers flow out of the uplands until present-day Baghdad is a flat, arid plateau. The larger lower portion from Baghdad till the Gulf is a rich, alluvial plain, creating a river delta interlaced by tributaries and irrigation canals. In the southern most area both rivers flow through marshes. The two rivers have changed watercourses multiple times causing settlement patterns to also change accordingly.

By 7000 agricultural village-level settlements existed throughout the ancient Tricontinental Zone in areas with sufficient rainfall or access to the rivers. Between 6500 and 5500 BCE permanent, more extensive, and complex agricultural villages, the Ubaid Villages, became common in the southern Birīt Nārāti, owing to the abundant resources in the marshes and delta areas. In the northern rainfed region, the successive Hassuna, Samarra, and Halaf village cultures arose in turn. It is within this timeframe that noticeable differences between the northern region and southern region began to appear, especially in terms of house layout, pottery styles, and social differentiation. After 5500 the Ubaid culture overtook the contemporary northern Halaf culture, bringing with it greater social distinctions and an elite class (see Figure 14).

Figure 14: Settlement Pattern for Ubaid Period, ca. 5500-4500 BCE

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By 3800 BCE there existed settled urban chiefdom-level societies, the Šumeri Chiefdoms (known in scholarship as the Uruk cultures), each one exhibiting a social hierarchy, specialized labor, temple ziggurats, and the central collection and redistribution of agricultural tribute goods. These long-lived chiefdoms on average lasted for over 1,000 years, preserving the same material culture throughout their existence, while at the same time becoming gradually more extensive and complex in terms of population and organization. Between 3500 and 3000 these chiefdoms expanded and grew further, especially the settlement at Uruk in the very south of the Birīt Nārāti region, near the Persian Gulf.
**City-States (3000-1600 BCE).** By 3250 Uruk had become the first true city in the region and possibly the world at over 250 hectares (620 acres), surrounded by a hierarchy of smaller towns and villages. The city of Uruk also exhibited monumental public works which produced two large mud-brick and reed complexes, one devoted to the female deity Inana (Šum: NIN.AN.NA.AK) and one devoted to the male deity Anu (Šum: AN). It is within the Eanna (Šum: É.AN.NA) complex devoted to Inana that the famous Uruk vase was found (see section 8.1 for a final discussion of this artifact). The city operated within a tribute economy in which the non-city farmers, fishermen, and herders were required to provide a tribute of goods to one of these two temples in exchange for city services, which redistributed the tribute to the temple, ruling, administrative, and craftsmen personnel of the city. Other smaller cities in the region included Uru (Eng: Ur) and Irîtu (Eng: Eridu). With the rise of the urban city comes the rise of a bureaucracy, standard measures, accounting, and eventually writing. By 3100 proto-cuneiform writing emerged, known as EME.GIR meaning ‘tongue-local’ in Šumerûm (Eng: Sumerian), from the older accounting system used for tracking goods.

Around 3100 there was a reorganization of society in the southern Birît Nārāti. Much of Uruk itself was razed and leveled and new buildings were built on top of the destruction. Surrounding it, more medium-sized cities appeared, creating a network of independent city-states, including Uruk, Uru, Umma, and Nibbur (Eng: Nippur) (see Figure 15).

*Figure 15: Settlement Pattern for Jemdet-Nasr Period, ca. 3000 BCE*

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By 2900 BCE the Šumeri City-States arose (known in scholarship as the Early Dynastic period), characterized by as many as thirty-five medium-sized urban city-states situated along the rivers, each encompassing an urban center surrounded by villages (see Figure 16). Each city-state was controlled by a local priestly ruler (Šum: EN meaning ‘lord’) who was in charge of the temple administration, serving a particular patron deity of the city, because it was believed the cities had developed for the gods’ benefits and dwelling places. Inana’s temple house was in
Uruk, while Enlil’s temple was in Nibbur. It was believed that the deities lived in a parallel reality, the above, with divinized spouses, children, and servants in households. The main deities chose to live in the earth world in a temple household dedicated to the deity’s needs in exchange for favoring the city. Other smaller temples in the city housed the main deity’s dependents.

*Figure 16: Settlement Pattern for Early Dynastic Period, Level III, ca. 2600-2450 BCE*

The growth in city populations led to intercity clashes, with the priestly ruler’s military skills becoming more important that the cultic role managing the deity’s household temple. In this situation, a new central institution arose, dynastic rule headed by a great-man (Šum: LU.GAL meaning ‘man-great’), centered in a royal great household, or palace (Šum: E.GAL meaning ‘house-great’), rather than the temple. Multiple alliances, coalitions, and defeats occurred between the many city-state dynasties for about four hundred years.

During the Šumeri City-State Dynastic period the temple-based tribute-gathering economy gave way to the great estate economy in which there was direct control of production and distribution of goods by the heads of large royal, religious, or kin-based household estates. This led to a greater differentiation of social classes.

It was also during this time that the main focus of the collective temple cultic system shifted from Uruk and Inana to centrally located Nibbur and the deity Enlil (Šum: EN.LÍL) within the Birīt Nārāti region. By this time Enlil had replaced Anu as the chief deity of the pantheon, making his dwelling city of Nibbur of symbolic importance. It was also during this time that EME.GIR was joined by a second language, proto-Akkadûm, making it a bilingual society. Towards the end of this period, the southern Birīt Nārāti region began to be referred to as KI.EN.GI (Eng: place-lords-noble) in Šumerûm, which was later translated syllabically into Akkadûm as Šumerum (Eng: Sumer). During this period, the intellectual center remained in the southern Birīt Nārāti region, with much of the scribal, administrative, and political practices being successively adopted in the north, west, and elsewhere.

The Šumeri City-State period ended with a large centralization of power through conquest and unification, creating a larger geographical unit, a small territorial state, a kingdom. Around 2330 the kingy ruler of Umma in the south, Lugalzagesi (Šum: LUGAL.ZAG.GE.SI),
conquered Uru, Uruk, and Lagaš, creating a short-lived small kingdom. In the north, Šarrugi (Eng: Sargon), probably ursuped rule of Kiš and then moved his rule to Agade ca. 2288 (which has an unknown northern location). Šarrugi (r. 2288-2235 BCE) campaigned in the south, conquering Lugalzagesi’s southern kingdom, allowing Šarrugi to rule the entire Birīt Nārāti region, creating the Māt Akkadîm (see Figure 17). For the first time all of the region was united into a large dynastic kingdom which lasted for almost two hundred years (ca. 2350-2150), the Akkadi-Agade Kingdom (known in scholarship as the Old Akkadian Dynasty). The former EN city-rulers became govenors under Šarrugi’s rule, who was known as šar Akkādi (meaning ruler of Akkad). Semitic Akkadûm became the official language in royal administration, while Šumeri EME.GIR continued to be spoken in local affairs.

Figure 17: The Akkadi-Agade (Akkadian) Kingdom, ca. 2334-2218 BCE

The next four familial successors to Šarrugi suppressed many revolts and expanded the city-dynasty’s influence in the north (Aššur, Eng: Ashur), east (Šušen, Eng: Susa), and northwest (Mari). So much so that Narām-Sîn (r. 2211-2175) gave himself a new royal title, šar kibrāt erbetti (ruler edges of-four) which is usually translated as ‘king of the four corners of the world.’ But then Akkadi rule collapsed ca. 2150, possibly as a result of rebellions, internal dynastic weaknesses, and/or outside conquerers, the Guti (Eng: Gutians).

With the end of Akkadi dynastic rule, the whole region reverted to independent city-states for about fifty years, with the Guti controlling several of the city-states in the south. Around 2100 the city-ruler of Uruk expelled the Guti. His brother, Ur-Namma (r. 2110-2093) succeeded him and re-unified much of the southern Birīt Nārāti region, making Uru the capital of a new kingdom, the Akkadi-Uru Kingdom (known in scholarship as the Third Dynasty of Ur). By the end of his reign he had claimed a new title, šar māt šumeri u akkadi (ruler land of-Šumer and of-Akkad), proclaiming his rule over the southern (Šumer) and northern (Akkad) regions. This dynasty experienced another four familial successors to Ur-Namma, until ca. 2000 BCE. Within this time period Šumeri EME.GIR was no longer a spoken language, overtaken by Akkadûm, though it continued to be used for the next 2,000 years as a language of literature and scholarship.

Once again the Akkadi-Uru Kingdom collapsed after about a hundred years through internal weaknesses and/or internal opposition. Around 2000, the rival city-ruler of Isin took over control of much of the southern Birīt Nārāti region, ruling from Isin, creating the Isin City-State dynasty. At the same time, much decentralization occurred, with many local city-rulers eventually re-exerting rule by 1880 over city-dynasties again in the region, including at Larsa, Uruk, and Bābilim.
By 1790 the city-state dynasties of Larsa and Bābilim competed for regional power, having subsumed the other city-states. In 1792 Ḫammurāpi (Eng: Hammurabi) of the Amurrum (Eng: Amorites) came to power in the city-state of Bābilim. Ḫammurāpi proceeded to defeat the other city-state dynasties of the whole region, including Larsa, Aššur, Ešnunna, and Mari, creating the Māt Amurrim. He united all of the southern region and part of the northern region, up to Mari into a short-lived territorial state, the Amurri-Bābilim Kingdom (known in scholarship as the Babylonian Empire). It created the conditions for other future territorial states to emerge. Ḫammurāpi took the titles šar bābilim (ruler of-Bābilim), šar māt šumeri u akkadi (ruler land of-Šumer and of-Akkad), and šar kibrāt erbetti (ruler edges of-four). He also made Bābilim his capital, which moved the religious center farther north, from Nibbur, which seems to have been abandoned for a time.

This unification began the ‘Old Babylonian’ period in which the city of Bābilim and the deity of Bābilim, Marduk (Šum: AMAR.UTU), dominated all of the southern region for the next 1,500 years (hence the contemporary term ‘Babylonia’). As Van de Mieroop summarizes it, “Thus in the centuries of the Old Babylonian dynasty, many of the cultural elements characteristic of the Near East in the second half of the second millennium were developed, and the political, religious, and cultural focus of Babylonia shifted permanently to its northern part.” Ḫammurāpi’s Amurri-Bābilim Kingdom, as the first large territorial state, projected a resounding echo down through the centuries, even though the dynasty was relatively short-lived.

Ḫammurāpi had five successors who ruled until 1595 BCE when the ruler of the Hattusa (Eng: Hittites) in the far north defeated and sacked the city of Bābilim, though they did not

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18 Van de Mieroop, A History of the Ancient Near East, 126.
remain to take control of the dynasty. By 1590 many cities had been destroyed or abandoned for unknown reasons, leaving a ‘darkness’ in the writings we have from this century.

**Territorial Countries** (1600-800 BCE).\textsuperscript{19} Into the dark void came two new groups who took the opportunity to take control, the Galšu (Akk: Kaššum; Eng: Kassites) in the south and the Ḫurri (Eng: Hurrians) in the north. By 1475 the Galšu had re-unified the southern Birīt Nārāti region with Bābilim as the capital, ushering in the ‘Middle Babylonian’ period (see Figure 18). The Galšu proceeded to adopt and assimilate into the Šumeri-Akkadi linguaculture, creating the Māt Karduniaš. The Galši-Bābilim Kingdom ruled for the next 400 hundred years, until 1155 BCE, interacting with a few other large, long-lived, regional territorial states, including Misr (Eng: Egypt) and Aššur (Eng: Assyria). Trade, diplomacy, treaties, and a shared ideology buoyed relations. The literature and scholarship created under the Šumeri, Akkadi, Amurri, and Galši dynasties influenced the rest of the Tricontinental Zone. Šumeri-Akkadi texts were preserved, copied, and imitated by the people of Misr, Aššur, and elsewhere.

*Figure 18: The Galši-Bābilim (Kassite) Kingdom, ca. 1500-1300 BCE*

In 1225 the ruler of northern Aššur invaded and deposed the current Galšu king and took control of the southern region, implementing local puppet rulers. In 1155 the eastern Haitami (Eng: Elamites) raided the southern region, sacking Bābilim again, finally ending the Galšu dynasty. The Haitami did not take control of the region which opened the way for the Isin Kingdom (known in scholarship as the Second Isin dynasty), whose most famous ruler was Nabû-kudurri-uṣur (Eng: Nebuchadnezzar I, r. 1125-1104).

From 1100 until 900, all of the Tricontinental Zone experienced invasions, migrations, ecological disasters, and eventually state collapses and the total disappearance of the international territorial state system. Once again, the region entered a ‘dark age’ of writings, so we know very little about this period.
Empires (800-300 BCE). In the 800s the Arami (Eng: Arameans) migrated into the northern region and the Kaldi (Eng: Chaldeans) migrated into the southern region. In the early 800s the northern Aššuri Empire (known in scholarship as the Neo-Assyrian Empire) began to exert political dominance over the southern region. Between 745 and 627 Aššur and the southern regional rulers vied for control in the south, with power oscillating between multiple groups with no one able to consolidate power. Famously, Sin-aḫḫ-erība (Eng: Sennacherib, r. 704-681), ruler of Aššur, sacked Bābilim again in 689, proclaiming himself šar Bābili and eventually šar kibrāt erbetti to encompass all the known world that he controlled.

Aššur-bāni-apli (Eng: Ashurbanipal, r. 668-631), Sin-aḫḫ-erība’s grandson, also used both royal titles. He took pride in the extent of his collected works within his library in Ninua (Eng: Ninevah), the capital of the Aššuri Empire. The library contained 1,000 to 1,200 different compositions in multiple copies (over 5,000 total) of the literature and scholarship of the Birīt Nārāti region for the last 1,500 years. The goal of this repeatedly copied and preserved collection was to be used as owned and authorized texts of wisdom, knowledge, and practices which would protect the king and the state by bringing order to the world. After Aššur-bāni-apli’s death ca. 631 and subsequent successor infighting, the unrivaled dynasty of Aššur disappeared.

In 626 a former official of Aššur living and working in Uruk, the Kaldi Nabû-apla-ušur (Eng: Nabopolassar), took the opportunity and rebelled against Aššur, proclaiming the beginning of a new Kaldi dynasty (known in scholarship as the Neo-Babylonian Empire) which would last from 626 to 539, less than a hundred years (see Figure 19). After repulsing an Aššuri attack, Nabû-apla-ušur (r. 626-605) was named šar Bābili. He continued the political, bureaucratic, and scribal practices of the past. Nabû-apla-ušur and many subsequent rulers sought to maintain and
revive former Šumeri-Akkadi traditions, including reviving the cults of the deities Anu and Inana (as Ištar), some of the oldest known cults.

By 616 Nabû-apla-ušur had re-united all of the southern Birît Nārāti once again with Bābilim as his capital, proclaiming himself šar māt šumeri u akkadi (ruler land of Šumer and of Akkad). The city was truly large at 900 hectares (2,224 acres) and known for its wealth, majestic architecture, and impressive city gates. By 610, Nabû-apla-ušur had taken control of the northern Aššuri region as well, re-uniting all of the Birît Nārāti. His son, Nabû-kudurri-ušur (Eng: Nebuchadnezzar II), conquered much of the Tricontinental Zone. During his long reign (r. 604-562) he conducted great building or re-building projects in Bābilim.

*Figure 19: The Kaldi (Chaldean) Empire, ca. 600 BCE*

After three very short-lived successors, Nabû-nâ’id (Eng: Nabonidus) came to power (r. 555-539). Nabû-nâ’id did not continue the traditional ways. He gave chief prominence to the deity of the moon, Sîn, over Marduk, he moved the capital to the Arabian Desert for ten years, and when he returned he turned several temples, including Marduk’s temple in Bābilim, into ones devoted to Sîn. These changes made him unpopular.

In 539, Kūroş (Eng: Cyrus) of Pārsa (Eng: Persia) conquered without difficulty Nabû-nâ’id and the Kaldi Empire. He became ruler of the southern region and elsewhere, portraying himself as the savior of Marduk who selected him to restore order, justice, and reinstate Marduk himself to preeminence. Similarly, Kūroş assumed several traditional, local royal titles, including šar kibrāt erbetti (originally from the Akkadi-Agade Kingdom), šar māt šumeri u akkadi (originally from the Akkadi-Uru Kingdom), and šar Bābili (originally from the Amurri-Bābilim Kingdom) to proclaim his legitimacy.

Because the Pārsans pragmatically maintained the local traditions, while inserting themselves where needed into the relevant ideologies, the Birīt Nārāti region enjoyed ‘a long sixth century’ from 626 to 484. This period provides us with the greatest overall amount of texts from this region with over 16,000 tablets published and many more awaiting translation (though many preserved text copies originally date to previous periods). The many tablet texts have been found in palaces, temples, homes, and libraries, giving scholars a wealth of information.

The far flung Pārsa Empire, the first world empire, united people groups with different languages, cultures, and sociopolitical organization for the first time. Aramaic became the language of administration and correspondence throughout the empire, replacing Akkadûm. Yet, there were several local rebellions among the Şalmāt Qaqqadi, culminating in 484 BCE. These
rebellions were crushed by Khshayarsa (Eng: Xerxes), who instituted firmer control of the Birît Närāti region until Hellenic (Eng: Greek) conquest in 333 BCE.

Despite being controlled by numerous outside rulers for the next five hundred years, the time-honored, traditional sociocultural elements of the macro-lifeframe of the Šalmāt Qaqqadi of the Birît Närāti region survived into the first century CE. It truly was characterized by ‘a long stream of tradition’ as Oppenheim once described it.²⁰

4.3 Legacies

Unlike Egypt’s long-lasting monoculture, the Birît Närāti region was a melting pot of lifeways, cultures, and languages which stimulated technological, mathematical, architectural, literary, and legal developments. Throughout the successive migrations and ruleships by many peoples, it was able to maintain an overarching Šumeri-Akkadi linguaculture and macro-lifeframe. Among the many inventions by the Šalmāt Qaqqadi were the wheel, pottery, beer-brewing, irrigation system, sexagesimal system, accounting, writing, currency, astrology, and mudbricks. It was the place of the first literary epics, the first apprenticeship schools, and the first walled cities.²¹

Many sociocultural aspects of the Birît Närāti region influenced Hellenic culture (which is often called the root of Western Civilization), including the ideal of kingship, diplomacy, astronomy, divination, measures, weights, economic interest, and literary motifs.²² Some of the most basic aspects of our American lives can be traced back to this region, including the sixty-second minute, sixty-minute hour, the 360-degree circle, and imagining heaven as the ‘above world’ and hell as the ‘below world’ after their cosmic geography.

How can we not strive to understand and reconstruct the Ṣalmāt Qaqqādī understanding of reality, their macro-lifeframe, especially of the Kaldi Empire, which existed as the epitome of 3,000 years of flourishing peoples?

Thus, we now turn to discussing the language (chapter five) and logic (chapter six) of the Kaldi Empire in order to reconstruct the foundational level of their macro-lifeframe.
V. CHAPTER FIVE: LANGUAGE

Where traditional linguistic theory claims that words have meanings, the cognitive linguist would say that meanings have words.

—Reinier de Blois

Give me a word ... and I'll show you that the root of that word is Greek… Kimono, kimono, kimono. Ha! Of course! Kimono is come from the Greek word himona, is mean winter. So, what do you wear in the wintertime to stay warm? A robe. You see: robe, kimono. There you go!"

—Gus Portokalos (My Big Fat Greek Wedding 2002 film)

Within the foundational level of taken-for-granted preconceptions of any lifeframe, language is the most fundamental area. There are over 7,000 languages spoken in the world today. Each language differs from the others in many ways. While all languages require different grammatical rules and focus of attention which are incorporated into the communication in various ways, all languages share and rely on the same human-driven foundational meanings.

5.1 Semantic Primes

All minded someones have encoded data that is taken for granted, which are often called ‘pre-theoretical ideas’ in philosophy¹ because they precede any thought—being what we think with rather than what we think about. All someones possess a preinstalled starter package of equivalent preconceptions, those notions and recognitions of relationships between notions without which we cannot think at all. This encoded data package is sometimes called our intuited givens, because they are universally recognized and received identical concepts, regardless of

¹ For a helpful distinction between pre-theoretical and pre-suppositional ideas, which are so often used interchangeably or haphazardly in worldview analysis, see Sire, Naming the Elephant, 141-143. In this view pre-suppositional ideas are further down the logical stream and thus more complex, defined, and well-known thoughts.
language. Within linguistics, this starter data package is called a ‘natural semantic metalanguage.’

Cultural linguistics’ discovery of these universally shared and innate concepts, called semantic primes, are just such intuited conceptual givens. Thus, a semantic prime preconception is any self-explanatory, intelligible, and undefinable simple concept manifested in a specific language’s wording. Refer to Table 2 for the current list of sixty-five English-language words and phrases, grouped into linguistically related categories.3

Table 2: English Table of Semantic Primes

<table>
<thead>
<tr>
<th>Substantives</th>
<th>Relational Substantives</th>
<th>Determiners</th>
<th>Quantifiers</th>
<th>Evaluators</th>
<th>Descriptors</th>
<th>Mental Predicates</th>
<th>Speech</th>
<th>Actions, Events, Movement</th>
<th>Location, Existence, Specification</th>
<th>Possession</th>
<th>Time</th>
<th>Place</th>
<th>Logical Concepts</th>
<th>Augmentor, Intensifier</th>
<th>Similarity</th>
</tr>
</thead>
<tbody>
<tr>
<td>I, YOU, SOMEONE, SOMETHING~THING, PEOPLE, BODY</td>
<td>KINDS, PARTS</td>
<td>THIS, THE SAME, OTHER~ELSE</td>
<td>ONE, TWO, SOME, ALL, MUCH<del>MANY, LITTLE</del>FEW</td>
<td>GOOD, BAD</td>
<td>BIG, SMALL</td>
<td>KNOW, THINK, WANT, DON'T WANT, FEEL, SEE, HEAR</td>
<td>SAY, WORDS, TRUE</td>
<td>DO, HAPPEN, MOVE</td>
<td>BE (SOMEWHERE), THERE IS, BE (SOMEONE/SOMETHING)</td>
<td>(IS) MINE</td>
<td>LIVE, DIE</td>
<td>WHEN~TIME, NOW, BEFORE, AFTER, A LONG TIME, A SHORT TIME, FOR SOME TIME, MOMENT</td>
<td>WHERE~PLACE, HERE, ABOVE, BELOW, FAR, NEAR, SIDE, INSIDE, TOUCH</td>
<td>NOT, MAYBE, CAN, BECAUSE, IF</td>
<td>VERY, MORE</td>
</tr>
</tbody>
</table>

This explication of the semantic prime building blocks is based on several of Anna Wierzbicka and Cliff Goddard’s works. See Wierzbicka, Semantics: Primes and Universals, especially 35-147; Cliff Goddard, Cross-Linguistic Semantics, Studies in Language Companion Series (Amsterdam: John Benjamins Publishing Co., 2008), especially 59-81; Goddard and Wierzbicka, Words and Meanings.

These semantic primes have some defined rules governing their behavior, regardless of language attestation. Found exponents of primes in any language may be words, bound morphemes, or phrasemes. They can be formally and morphologically complex. Exponents of primes can also be polysemous, meaning they can have other, additional meanings in the language. They can have combinatorial variants or allolexes (indicated with ~). Each prime has well-specified syntactic (combinatorial) properties in each language that help identify it.\textsuperscript{4} Refer to Appendix C for sample combinatorial possibilities of all semantic primes. In the next section we will discuss these semantic primes in detail (see section 5.2).

These primes are also innate and instinctive. Contrary to the tabula rasa view, humans as young children do not begin with a ‘blank slate’ of linguistic structure before acquiring language. While one can be born without such sensory abilities as sight or hearing, one cannot be born without linguistic abilities—though one can be born without the means to speak. According to most current child development theories, children are conceptually prepared, primed, and/or readied for language learning with an inborn, fixed, and encoded core of protolinguistic representations of the world (i.e. semantic primes). Children do not need to be taught what ‘no’ means—they relish using this word of negation as soon as they can verbalize a language.

These foundational semantic primes as a natural semantic metalanguage, when expressed in specific phonological ways, become the basic preconceptions or building blocks upon which group-specific languages, lifeframes, and cultures develop. Many lifeframe differences between cultural groups are the result of and reflect how these basic building block concepts are utilized, molecularized, and arranged in the semantic domains that arise, including which concepts become the referential cornerstones. Consequently, to fully understand a macro-lifeframe and/or

\textsuperscript{4} For a good overview of the current list, see Cliff Goddard, \textit{Semantic Analysis: A Practical Introduction} 2\textsuperscript{nd} ed. (Oxford: Oxford University Press, 2011), 66.
the associated culture we must be able to determine and understand their use and arrangement of their language’s building blocks of semantic primes and the linguistic features of the language.

5.2 Semantic Prime Building Blocks Explicated in English and Akkadûm

Natural Semantic Metalanguage (NSM) analysis realizes that language meaning representation can only be understood in relation to some previously understood word-meanings, a built-in entry point, for any understanding to take place. In other words, there must be a pre-installed starter package to avoid circularity. Since 1972 NSM-based analysis has empirically established sixty-five semantic (same unit of meaning lexicalized in every language) primes (irreducible and primary word or phrase) in over twenty-five languages, including Indo-European (English, German, Russian), Afroasiatic (Arabic, Amharic), Sino-Tibetan (Chinese), and Native American (East Cree, Quechua) languages.

NSM’s pre-installed inventory list of primes is a shared language-independent metalanguage of meaning representation that can be translated and readily understood across cultures. These semantic primes are similar to physical elements like hydrogen or oxygen which cannot be broken down into smaller elements (but can be combined to form more complicated meanings). This standardized subset of concepts identifiable in any natural human-created language becomes a mini-lexicon of indefinable, simple preconceptual expressions free from ethnocentric and/or anglocentric bias. There are four main principles regarding NSM analysis.

**Indefinability.** Semantic primes are meaning-bearing units (lexemes) that are comprehensible, yet indefinable and indecomposable through the use of other lexemes.
**Universality.** Semantic primes are universal lexemes which can be found in all human languages.

**Indispensability.** The inventory of semantic primes together must be adequate to explicate all linguistic utterances. All words must be decomposable into semantic primes.

**Combinability.** Semantic primes can be combined with each other in restricted ways. These combinatorial frames are universally found in all languages.\(^5\)

Using the above NSM principles, I outline four methodological rules for how to identify the exponents of these semantic primes in Akkadûm.\(^6\)

**Simple Combinability Found.** In a given language, if (1) there appears to be only one candidate exponent for a certain semantic prime, and (2) this candidate satisfies all the combinatorial sentential frames of the semantic prime, then this candidate is to be regarded as the language’s exponent of this semantic prime.

**Of Options, Only One Satisfies All Combinations.** If (1) there appear to be two or more candidate exponents for a certain semantic prime, but (2) only one of them satisfies all the combinatorial sentential frames of the semantic prime, then only this candidate is to be regarded as the exponent of this semantic prime.

**Of Options, Only One is Indefinable.** If (1) there appear to be two or more candidate exponents for a certain semantic prime, and (2) all of them satisfy all the combinatorial sentential frames of the semantic prime, but (3) only one of them seems to be semantically simpler and

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indefinable compared to all the others, then only this candidate is to be regarded as the exponent of the semantic prime.

**Of Options, All are Allolexies.** If (1) there appear to be two or more candidate exponents for a certain semantic prime, and (2) none of them satisfy all the combinatorial sentential frames of the semantic prime, and (3) there does not appear to be any semantic difference in meaning between them, and (4) they are each used in different sentential frames, then all of them are to be regarded as allolexes or combinatorial variants of the exponent of the semantic prime, either as a positional allolexy because of the change of position of the exponent in the frame (ME instead of I) or as a combinatorial allolexy because of the change of grammar of the frame (THESE instead of THIS).

Following NSM Theory, I will first identify the equivalent fifty-nine semantic primes in Kaldi Akkadûm used as the building blocks on which the Şalmât Qaqqadi’s language, conceptual world, and macro-life frame developed. Refer to Appendix B to view the complete table of Akkadûm exponents with English equivalents. NSM analysis aligns with the ‘extended mind’ view and my 6E mindscape construct in positing that atomic semantic primes are ‘molecularized’ into a full language representing a whole semantic space through neuro-bio-ecosocial interactions. Thus, language reflects what happens in the mind (not the brain) of

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7 The following explications of the semantic prime building blocks used in the construction of worldviews is based on Anna Wierzbicka and Cliff Goddard’s works. See Wierzbicka, *Semantics: Primes and Universals*, especially 35-147; Goddard, *Cross-Linguistic Semantics*, especially 59-81; and Goddard and Wierzbicka, *Words and Meanings*.

8 Similar to some critics, I doubt the primacy of six of the 65 primes which seem to be decomposable, including DON’T WANT (explained via NOT WANT), THE SAME (explained via LIKE and NOT ANOTHER), SOME (explained via NOT MUCH, NOT A LITTLE), A LONG TIME (explained via MUCH TIME), A SHORT TIME (explained via A LITTLE TIME), FOR SOME TIME (explained via NOT MUCH TIME, NOT A LITTLE TIME). Interestingly, I also could not find any of these six primes (except DON’T WANT) in Akkadûm, supporting my position. For a good critical discussion, see Ulla Vanhatalo, Heli Tissari & Anna Idström, “Revisiting the Universality of Natural Semantic Metalanguage: A View through Finnish” *SKY Journal of Linguistics* 27 (2014): 67–94.
someone, and our mind is in part shaped by our body, other minds, our cultural systems, and our environment. Explicating the building-block semantic primes becomes a first foray into a working model of a specific societal macro-lifeframe.

A few brief notes are in order regarding NSM analysis. NSM analysis identifies and focuses on lexical units of simple meaning as realized in specific languages, which become the language’s identified exponents, such as **TIME** and **PLACE** in English. In this approach, the focus is on the lexical meaning (i.e., what the word contributes in and of itself in a minimal semantic sentential frame), not the contextual meaning (i.e., what the context and other words contribute to modify or enhance the meaning of an exponent, especially figuratively). Some exponents of a single prime have two or more realized, attested, or encoded forms, termed allolexy (i.e., **LITTLE** and **FEW** in English). Some languages’ exponents of a given prime also have other polysemic extensions or other meanings in other contexts which are not included in the universal meaning (i.e., **MOVE** in English can also mean to change residence, besides a motion event). Patterns of allolexy and polysemy are language-specific and must be attended to in any explication.

The below explications of Akkadûm exponents use the English exponents as the baseline for understanding the shared lexical unit of primitive meaning found in all languages. The explications also include the allolexous and polysemous patterns found in English that can

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9 Following standard practice, I list prime Akkadûm nouns in the nominative singular form, prime adjectives in the masculine singular, and prime verbs in the nominative infinitive of the G stem. Mimation (the final –m of the ending) is not included as this –m was dropped by Neo-Babylonian times. I reference CAD from the University of Chicago Oriental Institute, [http://oi.uchicago.edu/research/pubs/catalog/cad/](http://oi.uchicago.edu/research/pubs/catalog/cad/), with confirmation from CDA, Jeremy A. Black and Tina Breckwoldt, *A Concise Dictionary of Akkadian* (2nd (corr.) print ed., Wiesbaden: Harrassowitz, 2012).

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become word-mines if not known. Thirdly, the explication outlines the biblical Hebrew\textsuperscript{10} and modern Arabic\textsuperscript{11} exponents for comparisons with the Akkadûm exponents.\textsuperscript{12}

In addition, all semantic primes in most languages manifest a shared conceptual syntax, how the word-meanings are combined with other words, such that a semantic sentential frame or basic form taken can be described (i.e., for happen the basic frame is: ‘Something happens’). I provide Akkadûm example texts to show how the exponents were used in sentence-based semantic frames, taken from the Birît Nārātī region and especially the Kaldi Empire whenever possible.\textsuperscript{13} However, not all languages manifest these semantic sentential frames in an analogous way. Some syntactic frames in some languages are realized through case-marking, postposition, verb serialization, or just by the order of words. These will be noted for Akkadûm where appropriate.


\textsuperscript{11} While all of Biblical Hebrew’s exponents have not been examined, Arabic exponents have been examined. As I am not familiar with this language, I cannot verify their accuracy. The Arabic exponents reflect Modern Standard Arabic used in formal writing. I have referred to Yousuf B. AlBader’s explication table, “Arabic Semantic Primes, with English equivalents,” Department of English, College of Basic Education, the Public Authority for Applied Education and Training, Kuwait, 2016. Online: https://www.academia.edu/28156768/Arabic_Semantic_Primes_with_English_equivalents.

\textsuperscript{12} There are a few works applying some form of lexical analysis to Akkadûm. Swadesh’s wordlist of 100 primary words was researched in Akkadûm. All but a few were found in Akkadûm, with no Šumerûm loan words. Not found were ‘to come,’ ‘feather,’ ‘leaf,’ ‘round,’ and ‘to swim.’ My five unfindables are not part of the Swadesh list except for SOME, which is listed as ‘ayyumma’ which rather means ‘any; anyone.’ For a discussion see Leonid Kogan and Manfred Krebernik, “A History of the Akkadian Lexicon,” in History of the Akkadian Language (2 vols) (ed. Juan-Pablo Vita; Leiden, The Netherlands: Brill). https://doi-org.ccl.idm.oclc.org/10.1163/9789004445215.

\textsuperscript{13} The text examples come from the dictionary listing or examples of the word from CAD, CDA, or AGA.
While most linguists have organized the primes by syntactic-grammatical properties and thematic-functional affiliations (i.e., quantifiers, determiners, mental predicates, time), I organize the prime concepts by Akkadûm semantic domains (i.e., a group of words that have certain shared and distinctive aspects of meaning) for use in worldview analysis.¹⁴ For an example semantic domain, consider in English the lexeme ‘apple’ which belongs to the semantic domain ‘fruit’ along with oranges and peaches. Thus, I have used and modified the lexical top-level domains often used for Biblical Hebrew and Aramaic created by Reiner de Blois (Objects, Events, Referents, and Markers), which are similar to the popular top domains for Greek by Nida and Louw (Objects, Events, Abstracts, and Relationals).¹⁵ But I organize by the animating factor of an agential someone versus an inert something, adhering more to the Šalmāt Qaqqadi people’s perspective. Beyond this initial cleavage I organize by similarity of concepts using a descriptive label, not a scientific or linguistic label.

A few brief notes are also in order about Akkadûm. There is a limited inventory of available texts from which to base this analysis. There are many textual challenges and uncertainties related to the cuneiform script which often exhibits both logographic and syllabic signs intermixed, textual gaps, loan words, and multiplicities of meanings for words. There are no native speakers to confirm understandings. That being said, I will identify the preconceptual

¹⁴ I am critical of the table organization and labels of primes in NSM research, since they always adhere to the English-based, linguistic-informed structure. The organization and labels reflect a linguistic and Western-based lifeframe, without allowing for variety of lifeframe differences across languages and cultures.

exponents of semantic primes in Akkadûm in each relevant section that follows. Because these are foundational ideas, they are indefinable. Thus, I will describe the situations in which the primes are used and, if necessary, the basic configurations established by its syntactic requirements.

5.1.1 Agential Someone Exponents

All meaning-bearing units that carry content that refer to doers, doer experiences, and doer attributes of someones are considered agential content exponents.

Indefinite Doer: SOMEONE~‘WHO

NSM analysis has found that all languages have a basic concept for the number-neutral indefinite substantives SOMEONE and SOMETHING. Indefinite substantives are those word-meanings that serve the function of a noun/pronoun that is not specific in a sentence.

In all languages, the distinction between the indefinites SOMEONE (a WHO) and SOMETHING (a WHAT) provides the most fundamental cleavage for human-made classification schemas. As Wierzbicka argues, “no language and no culture blurs the fundamental divide between SOMEONE and SOMETHING.”16 SOMEONE is an indefinite pronoun that is used to refer to an unspecified being, as in: ‘SOMEONE does/says something.’ Included in the idea of this foundational SOMEONE is the animating factor, this WHO is a creature that can FEEL and/or DO (including humans, divinities, and animals), as opposed to a THING, a WHAT that cannot FEEL and/or DO. This animating factor of SOMEONE does not include the idea of aliveness as part of the

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16 Wierzbicka, Semantics, 39. Contrary to Redfield and Kearney’s categorizational thinking, the concepts I and YOU, while being primes and fundamental to human thinking, do not fundamentally categorize the contents of the world. Rather, they are referential substantive primes.
universal concept. Likewise, the interrogative pronoun WHO is used to represent the SOMEONE in questions and as a substitute reference for an agent, as in: ‘WHO did it?’ or ‘I know WHO did it.’ While in English, a SOMEONE can often be describe as a ‘person’ in a biological and scientific view, it adds additional semantic content, implying it is a human. Rather, in this non-alive, social, folk view, a plant is considered a THING or an ‘it’ because it cannot FEEL and/or DO something. Conversely, the sun can be considered a SOMEONE that can DO things like move across the sky, shining brightly.

Eng: SOMEONE ~ WHO
Akk: MAMMA ~ MANNU
Hbw: Mī
Arb: ŠAXŠUN MĀ

Texts:
Trslit: mam-ma kī ubaʿ ū mim-ma ina qātēya yānu
Trslat: someone if searches, something in hand-my there-is-not
CADTrslat: if somebody searches, I have nothing
From: Texte und Materialien der Frau Professor Hilprecht Collection of Babylonian Antiquities im Eigentum der Universitat Jena 2-3 260:10

Trslit: mam-ma dibbīšu biʿ šūtu idabbubu
Trslat: someone matter-his bad is-speaking
CADTrslat: whoever speaks evil about him
From: Cuneiform Texts from Babylonian Tablets 22 155:10

Trslit: mannu išannananni ya-ti
Trslat: who is-equaling-this to-me
CADTrslat: who is equal to me?
From: G. A. Reisner, Sumerisch-babylonische Hymnen nach Thontafeln griechischer
Human Doer: PEOPLE

Whereas the indefinite SOMEONE is very inclusive of nonhumans, the notion of PEOPLE (which is an inherently collective or plural noun) refers only to humans as a collective, as in: ‘many PEOPLE’ or ‘PEOPLE say.’ They are SOMEONE like ME. PEOPLE is a social, folk category like SOMEONE, not a modern biological, scientific category. Contrary to much theorizing, the notion of an individual human being (i.e., self) or a human person in the singular are not a semantic primes and this idea is usually not related to the plural word for PEOPLE in most languages. It is a secondary level concept.

Eng: PEOPLE
Akk: NIŠŪ
Hbw: ‘AM
Arb: NĀS

Texts:
Trslit: ni-šu mārēšina ana kaspi ipaššara
Trslat: people children-they for silver they-will-sell
CAD Trslat: people will sell their children cheap (during a famine)
From: Cuneiform Texts from Babylonian Tablets 28 40 K.6286 r. 18 (Std-Bbn, Source: šumma ālu omen series)

Trslit: ša napšat kala ni-ši ištika
Trslat: of abundance all people with-you
CAD Trslat: you with whom is the sustenance of all mankind
From: Cuneiform Texts from Babylonian Tablets 15 4 ii 4 (Old-Bbn literary text)
Identical Doer: I~ME, YOU

The personal pronouns I~ME and YOU are lexicalized in all languages because all languages make a distinction between the agential SOMEONE experiencing who makes a self-referential gesture as the speaker (I) to an addressee (YOU). These two primes are deitic substantives, meaning that the referential identity is dependent on the context. If these pronouns are not used much or replaced with self-deprecating or deferential expressions in a language, it is usually due to cultural restrictions arising from the shared worldview (especially collectivistically oriented ones), not from semantic factors. YOU is a personal pronoun used to refer to an addressee or another singular someone, as in: ‘I know YOU’ or ‘I want YOU to do something.’ In English the self-referential prime takes two forms, depending on the context. The pronoun takes the nominative form I when it is the subject, as in: ‘I want something.’ It takes the accusative or oblique form ME when it is used after a verb or preposition, as in: ‘you know ME’ or ‘someone like ME.’ The notion of I~ME is also often used with mental predicates like FEEL, THINK, and KNOW in our own thoughts, as well as with speaking with others. The I~ME notion gives us a way to self-referentially talk to ourselves using our inner voice.

<table>
<thead>
<tr>
<th>Eng:</th>
<th>I ~ ME</th>
<th>Eng:</th>
<th>YOU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akk:</td>
<td>ANĀKU ~ YÂTI</td>
<td>Akk:</td>
<td>ATTA (m.) / ATTI (f.)</td>
</tr>
<tr>
<td>Hbw:</td>
<td>’ĀNĪ</td>
<td>Hbw:</td>
<td>’ÂTTÂH (m.) / ’ÂT (f.)</td>
</tr>
<tr>
<td>Arb:</td>
<td>’ANĀ</td>
<td>Arb:</td>
<td>’ANTA (m.) / ’ANTĪ (f.)</td>
</tr>
</tbody>
</table>

**Texts:**

Trslit: u šanītu a-mat ša itti libbikunu kuṣṣupākunu anāku idi

Trslat: also other matter of additionally heart-your thinking-your I know

*CAD* Trslat: I also know another matter which weighs on your heart

From: R. F. Harper, Assyrian and Babylonian Letters 301 r. 1
Trslit: mār šipri ana-ku šaprāk
Trslat: messenger sent I placed (here)
CADTrslat: I am a messenger, sent (here)
From: Yale Oriental Series, Babylonian Texts 3 200:18

Trslit: mannu išannananni ya-ti
Trslat: who is-equaling-this to-me
CADTrslat: who is equal to me?

Trslit: atta ta-tam-ra-an-ni tīdi kī bāštāku
Trslat: you cover-me know if being-living-me
CADTrslat: you have examined me repeatedly and know that I am in good health
From: R. F. Harper, Assyrian and Babylonian Letters 587 reverse 2 (Neo-Bbl)

Trslit: binīt qātiya at-ti
Trslat: creation hand-my you
CADTrslat: you are my own creation
From: Vorderasiatische Schriftdenkmaler 10 214 vi 47

Possession by Doer: (IS) MINE

The notion of agential possession is lexicalized as (IS) MINE in English. But often a suffix is appended to a noun to reflect such a possession in many other languages. It IS MINE is a possessor notion that implies durative ownership. While the concept of ‘have’ expresses possession, it cannot express ‘inalienable possession’ or true ownership. The possessor referenced in a MINE sentence must be a personal substantive (SOMEONE, PEOPLE, I, YOU), while
the possessed is a SOMETHING. The prime (IS) MINE takes the form: ‘This thing IS MINE,’ as in:

“This book IS MINE.”

<table>
<thead>
<tr>
<th>Eng</th>
<th>(IS) MINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akk</td>
<td>YĀʾU (m.) / YATTU (f.) ATTŪ- (with poss. pronoun suff.)</td>
</tr>
<tr>
<td>Hbw</td>
<td>ŠELI</td>
</tr>
<tr>
<td>Arb</td>
<td>-MULKĪ</td>
</tr>
</tbody>
</table>

**Texts:**

Trslit:  ši-ip-tum ú-ul ya-a-tum  
Trslat:  incantation also-not mine  
*CAD*Trslat:  the incantation is not mine  
From:  Journal of Cuneiform Studies 9 9 UIOM 1059:31

Trslit:  attūya in-bi iše rabē  
Trslat:  mine fruit tree big  
*CAD*Trslat:  mine (i.e., my branches) have the fruit of a big tree  
From:  W. G. Lambert, Babylonian Wisdom Literature 162:24 (Std-Bbn fable, Old-Bbn version)

Evaluations by Doer: GOOD, BAD, TRUE

The notions GOOD and BAD refer to evaluations or value-judgments which are made by agential doers regarding someone or something—an action, result, experience, thought, etc. GOOD refers to a quality of state of someone or something that is positive, pleasing, favored, of high value, best, and wanted. BAD refers to a quality of state of someone or something that is negative, unpleasant, disagreeable, of low value, evil, worst, and unwanted. They can both take a form which evaluates an event: ‘Something GOOD/BAD happened.’ They can also take a form
denoting an evaluative attribute of something: ‘This is GOOD/BAD.’ They can also be applied to someone as the moral agent or benefactor, taking the form: ‘Someone GOOD/BAD did something.’ Interestingly, the notions GOOD and BAD, like KNOW, when used as evaluations imply there is an objective, inherently valid perspective, regardless of what an individual THINKS is GOOD or BAD. People view different things as GOOD (in a positive way) or BAD (in a negative way), but all people agree that there are some things (no matter which ones) that can be regarded as GOOD or BAD. Experience can teach us to evaluate someone/something as good or bad in some way, but experience cannot teach us the very concepts GOOD and BAD on which the evaluation relies. On the other hand, rightness and wrongness are not primes because they can be defined in terms of GOOD, BAD, and TRUE. As Wierzbicka notes, the concepts ‘right’ and ‘wrong’ are very culture-specific and revealing of how values rooted in the concepts GOOD and BAD are linked to other concepts, like THINK, KNOW, and DO.

<table>
<thead>
<tr>
<th>Eng:</th>
<th>GOOD</th>
<th>Eng:</th>
<th>BAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akk:</td>
<td>ṬĀBU ~ DAMQU</td>
<td>Akk:</td>
<td>LEMNU ~ BĪŠU (only Neo-Bbl)</td>
</tr>
<tr>
<td>Hbw:</td>
<td>TŌWB</td>
<td>Hbw:</td>
<td>RA’</td>
</tr>
<tr>
<td>Arb:</td>
<td>ĠAYYID</td>
<td>Arb:</td>
<td>SAYYI’</td>
</tr>
</tbody>
</table>

**Texts:**

Trslit:   *išāta ṭa-ab-tum tašarrap*
Trslat:   fire good is-burning
*CADTrslat:* you keep a good fire burning
From:     A. L. Oppenheim, Glass and Glassmaking in Ancient Mesopotamia 44 s 14:113

Trslit:   *Divine Name ... epšētiya dam-qá-a-ti ḫadiš naplisma*
Trslat:   DN, works-my good happily looking
*CADTrslat:* DN, look with pleasure upon my pious works
From: Vorderasiatische Bibliothek (VAB) 4 64 iii 33 (Source: Nabopolassar)

Trslit:  
\textit{minma lemnu} ša tazirru uḫallaq ina māti

Trslat: all bad of scattering lose from country

\textit{CAD} Trslat: (until) he removes from the country every evil that you (šamaš) hate

From: Epic of Gilgamesh III ii 18.

Trslit:  
dibbīya \textit{bi-}šú-\textit{tu} idabbub u anāku ana muḫḫi ṣarri ...taklāk

Trslat: matter-my bad speaking about me, but concerning ruler trust

\textit{CAD} Trslat: he is saying evil things about me, but I put my trust in the king

From: R. F. Harper, Assyrian and Babylonian Letters 498 reverse 9

The concept of \textit{TRUE} refers to evaluations made regarding something being said or thought about reality, taking the form: ‘This is \textit{TRUE}.’ The lexeme \textit{TRUE}, unlike good and bad, cannot be modified by \textit{VERY} as it involves absoluteness, permanence, and reliability. Something is either true or not; there is no gradation. \textit{TRUE} has highly constrained combinatorial possibilities. \textit{TRUE} can only occur as a predicate applied to something someone says or thinks, as in: ‘Someone said/thought something; this is (not) \textit{TRUE}.’ Whereas, good and bad are each primes because badness does not always mean ‘not good’ (just as black does not mean ‘not white’), falsity is not a prime along with \textit{TRUE} because we can say: ‘This is not \textit{TRUE}’ to mean it is false. \textit{GOOD}, \textit{BAD}, and \textit{TRUE} become the initial building blocks used to construct an ethical system of oughts based on evaluations which produces lifeframe-related values, attitudes, and motives as studied in axiology.

\begin{align*}
\text{Eng:} & \quad \text{TRUE} \\
\text{Akk:} & \quad \text{KĪNU} \\
\text{Hbw:} & \quad \text{ʾΩMITI} \\
\text{Arb:} & \quad \text{ṢAHĪḤ}
\end{align*}
Texts:

Trslit: a-mat-ú ki-en-tum šalimti [šî]
Trslat: word true completely this

CADTrslat: Is this news really true?

From: R. F. Harper, Assyrian and Babylonian Letters (ABL) 1195:4 (Neo-Babylonian)

Trslit: e tātami ṭemu la ki-i-ni
Trslat: not oath-swearing report not true

CADTrslat: do not make an untrue report

From: W. G. Lambert, Babylonian Wisdom Literature 100:29

Sensory Experiences of Doer: SEE, HEAR, TOUCH

In discussing NSM findings within the mind-lifeframe-culture complex we have already discussed many aspects of how human embodiment relates to cognition. PEOPLE’S BODIES also have external sensory functions. Of which, SEE, HEAR, and TOUCH are semantic primes with a time-dependent quality that describe experiential happenings in time. They are classified as sensory predicates, referring to experiences which rely on the BODY of an agential SOMEONE. Meaning that all cultures’ languages do not distinguish five senses (sight, hearing, touch, taste, and smell)—some cultures recognize more senses and other cultures fewer.

Both SEE and HEAR require a SOMEONE doing the act as the subject. SEE refers to SEEING with the eyes, as in: ‘I SEE something,’ which relies on the body for the visual evidential knowledge gained. When attested, SEE takes the form: ‘Someone SEES someone/something (optionally: somewhere),’ as in: “I SEE something in this place.” Only SEE implies voluntary control (one can close the eyes to sight, but cannot close the ears to sound or remove touches from skin). HEAR takes the form: ‘Someone HEARS someone/something (optionally: somewhere),’ as in: “I HEAR something over there.” Interestingly, SEE and HEAR can also be
alloxes or a combinatorial variant for a mental predicate (KNOW). Many languages’ lexicons reflect this incarnated reality—with their use of replacement words of body parts to discuss mental phenomena—such that one can gut-feel, ear-think, and eye-know. We will discuss these other meanings in the next section on mental predicates.

TOUCH is an experiential notion which does not require a SOMEONE as the subject. SEE and HEAR cannot take a nonpersonal substantive as the seer or hearer, whereas TOUCH can. TOUCH takes the form: ‘Someone/something TOUCHES someone/something (optionally: somewhere),’ as in: “Something TOUCHES my body” or “I TOUCH someone with part of my body.” If the bodily sensation is felt outwardly it involves the primary notion of TOUCH. Our skin is our largest sensory organ in the body, giving us an expansive tactile sense of TOUCH.

The physical, spatial extension (not existence) of SOMEONE or SOMETHING, especially a BODY, can be spoken of in terms of SEE (implying a visible surface), TOUCH (implying a contact surface), and INSIDE (implying mass).

<table>
<thead>
<tr>
<th>Eng:</th>
<th>SEE</th>
<th>Eng:</th>
<th>HEAR</th>
<th>Eng:</th>
<th>TOUCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akk:</td>
<td>AMĀRU</td>
<td>Akk:</td>
<td>ŠEMÛ</td>
<td>Akk:</td>
<td>LAPĀTU</td>
</tr>
<tr>
<td>Hbw:</td>
<td>RAʾAH</td>
<td>Hbw:</td>
<td>ŠĀMAʾ</td>
<td>Hbw:</td>
<td>NAGAʾ</td>
</tr>
<tr>
<td>Arb:</td>
<td>YARĀ</td>
<td>Arb:</td>
<td>YASMA</td>
<td>Arb:</td>
<td>YALMIS</td>
</tr>
</tbody>
</table>

**Texts:**

<table>
<thead>
<tr>
<th>Trslit:</th>
<th>Trslat:</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>adi la mār šipri ša bēliya am-ma-ru maršāk</em></td>
<td>until not messenger sent of lord-my seeing sick</td>
</tr>
<tr>
<td><em>petâma ul i-šem-ma-a uznāya</em></td>
<td>open not hearing ear-my</td>
</tr>
</tbody>
</table>

From: Babylonian Inscriptions in the Collection of J. B. Nies 1 15:8
CADTrslat: My ears are open but cannot hear
From: W. G. Lambert, Babylonian Wisdom Literature 42:74
(Source: Ludlul II, also Gilgamesh I iv 32)

Trslit: *il-pu-ut pūtnima*
Trslat: had-touched forehead-ours
CADTrslat: (Enlil) touched our foreheads
From: The Epic of Gilgamesh XI 192

Trslit: *lu-pu-us-su-ma liggettā amēlu*
Trslat: touch-and let-awake man
CADTrslat: touch the man so that he wakes up
From: The Epic of Gilgamesh XI 206

Mental Experiences of Doer: FEEL, THINK, WANT

All mental predicates (verbs) require a personal substantive (SOMEONE) as the subjective agent and a substantive complement (SOMETHING), as in: ‘Someone FEELS/THINKS/WANTS/KNOWS something.’ The concepts FEEL, THINK, and WANT are experiencer constructions that mentally encode experiential situations—whether these feelings, choices, and thoughts are verbalized or not.

The concept of FEEL is an experiential predicate that refers to the mental processing of internal bodily sensations, taking the form: ‘Someone FEELS something somewhere in the body,’ as in: “I FEEL pressure in my heart.” The notion of FEEL also refers to expressing felt inner emotional states as in: “I FEEL something happy about something” or “I FEEL something bad toward you.” The concept FEEL can be used with other primes (CAN, WANT, BECAUSE, THINK) in many ways to encode different perspectives on how someone came to have the feeling in the specific context, including whether the feeling is controllable (CAN FEEL), wanted (WANT TO
FEEL), externally caused (BECAUSE), or self-generated (THINK, KNOW). Many linguists and psychologists recognize a difference between TO FEEL and to emote. Usually, attributed emotion terms like angry or sad involve FEEL-plus-THINK, such that one’s thinking is involved to construct, label, and/or change these FELT feelings.

In some languages, FEEL is expressed via LIKE THIS rather than the SOMETHING felt, taking the form: ‘Someone FEELS like this,’ as in: “Something bad happened; I FEEL this way about it.” In this view, the typical expression ‘what do you feel’ is replaced by ‘how do you feel.’ In many languages, including Italian, FEEL and HEAR are polysemous, as in: “I hear (=FEEL) in the body something” or “I feel (=HEAR) something bad (when I hear this word),” usually referring to ‘swear words’—which also implies the power of saying WORDS. Additionally, in some languages, the lexeme for FEEL is identical with a body part (liver, heart, stomach, or insides), providing a set phrase for describing felt inner states, as in: ‘I gut (=FEEL) something bad’ or ‘I heart (=FEEL) good.’ It is not figurative language when the language has no other word for FEEL. This is the case with Akkadûm, which has no generic lexeme for FEEL which reflects the felt emotional states. Rather Akkadûm often uses the vital organs of the ‘liver/entrails’ (kabattu) or ‘heart’ (libbu) to express feelings.\(^\text{17}\) Biblical Hebrew likewise uses mē’ay (internal organ, possibly entrails) or lōbāḇ (heart or inner self) to mean the source of feelings.

\[
\begin{array}{ll}
\text{Eng:} & \text{FEEL} \\
\text{Akk:} & \text{KABATTU} \sim \text{LIBBU} \\
\text{Hbw:} & \text{MĒ’AY} \sim \text{LŌBAB} \\
\text{Arb:} & \text{YAŠ’UR} \\
\end{array}
\]

**Texts:**

Trslit:  
ayumma ša annītam iqbūma li-ib-ba-am īr-ša-am-ri-ṣūr

Trslat: whoever of that had-said heartfeelings causes-distress

CADTrslat: whoever said such a thing and caused hard feelings

From: Baghdader Mitteilungen 2 58 iii 13 (early Old-Bbn)

Trslit:  
ina awatim anummeam ma-ši-ik-tam ina libbika lu la ta-ṣa-ṣa-ab-bat

Trslat: in matter herewith being-bad in heartfeel-your let-be not you-has-held

CADTrslat: you should not feel bad in your heart on account of this

From: Keilschrifttexte aus Boghazkoi 1 5 iv 39

Trslit:  
libbaka liṭib ka-bat-ka liḥdu

Trslat: heartfeelings-your let-be-pleasing liverfeelings-your let-be-happy

CADTrslat: may your heart be pleased, your mind be happy

From: H. Zimmern, Beiträge zur Kenntnis der babylonischen Religion No. 31-36:30

Trslit:  
am-lat ka-bat-ṣa-ṣūr

Trslat: somber liverfeelings-his

CADTrslat: his mood is somber

From: Archiv für Orientforschung 19 52:155

The notion of THINK implies voluntary control with an agential factor. THINK refers to directed mental processing of input data and/or stored memories by someone. It can refer to something thought as a resultant output of mental data processing, taking the form: ‘Someone THINKS that,’ as in: “I THINK that you are stupid.” Or THINK can refer to something thought about a topic, taking the form: ‘Someone THINKS (something) about someone/something,’ as in: “I THINK this about this topic.” In some languages, THINK is expressed via LIKE THIS or THIS WAY rather than SOMETHING, taking the form: ‘Someone THINKS like this: “__,”’ as in: “People are bad; I THINK so of them.” In this view, the typical expression ‘what do you think’ is replaced by ‘how do you think.’ THINK can also refer to internal monologues, taking the form: [Someone
THINKS:] “___”, as in: [I THINK:] “it is hot today,” for spontaneous thoughts passing through our mind. In many non-Western speech communities THINK is polysemous with HEAR, possibly because they are more aurally oriented cultures and think with/through their ears—just as some FEEL with/through their ears. Many times, our FEELING and THINKING coalesce as bi-directional phenomena that inform each other in a thought-plus-feeling scenario. How I FEEL about someone/something is informed by what I THINK about that someone/something, and vice versa.

One of the main differences between FEEL and THINK is their relation to evidential KNOWING. FEEL indicates experiential KNOWING of which there is personal confirmation or personal comparison. Such that one can say: “I know this happened because I FELT it” or “I know you are FEELING tired.” Whereas THINK implies uncertain KNOWING, as in: “I THINK that is true” or “I THINK I know what that means.” THINK can refer to assumptions, hypothesis, and deductions which have not or cannot be evidentially confirmed. Whereas KNOW can refer to inferences, facts, and personal experiences that can be validated.

Eng: THINK
Akk: ḪASĀSU
Hbw: ḪĀŠAB
Arb: YUFAKKIR

Texts:
Trslit: շուլմ (or շուշում) ռամանկա Ծու-Սու
Trslat: be-well! yourself thinking

CAD Trslat: take (good) care of yourself! (end of letter to an important official)
From: R. F. Harper, Assyrian and Babylonian Letters 219 reverse 6, Neo-Bbl

Trslit: Շառու ինա էկալիշ Շումշու անա դամիցիմ Հա-Սա-Սա
Trslat: ruler in palace-his whatever for be-good thinking
Our notion of WANT uses the imperative, the giving of an authoritative command, to indicate what SOMEONE consciously wills, taking the basic forms: ‘Someone WANT something (optionally: to happen); Someone WANT to know/do/say something; Someone WANT someone else to know/do/say something.’ The concept WANT, like THINK and FEEL, implies a subjective, individual perspective.

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**Eng:** WANT
**Akk:** ḪAŠĀḪU
**Hbw:** ṬAH
**Arb:** YURĪD

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**Texts:**

**Trslit:** *ina bīti šuāti še’am i-ḫa-šaḫ*
**Trslet:** in house this barley he-will-want

**CADTrslet:** he will be in need of barley in this house
**From:** Cuneiform Texts from Babylonian Tablets 38 13:101, Std-Bbn šumma alu

**Trslit:** *epēš bīti šāti libbī itammima ka-ba-at-tim ḫa-āš-ḫa-ku*
**Trslet:** build house this heartfeeling-my oath-swear liverfeelings want-it

**CADTrslet:** I planned and wanted dearly to build this temple
**From:** Revue d’assyriologie et d’archéologie orientale 22 59 ii 9, Nabonidus

**Trslit:** *ina mātiya gabbumma ibašši u anāku mimmama ul ḫa-aš-ḫa-[ku]*
**Trslet:** in country-my everything is-available and I everything-and not want-it

**CADTrslet:** in my country there is everything and I do not need anything
**From:** J. A. Knudtzon, Die El-AmarnaTafeln 7:36, Mid-Bbn
The experiential notions of FEEL, THINK, and WANT are the foundations for describing our experience of the world. These ideas are at the center of phenomenological studies of how people react to, process, and choose among stimuli/input. There are multiple semantic primes related to the different functional areas of human psychology. The concepts FEEL, THINK, and WANT give evidence of a panhuman experience and understanding of the mind and cognition in the area of phenomenology.

Mental Evidence of Doer: KNOW~SEE~HEAR

We have already briefly considered KNOW. The concept KNOW and its allolexes in English SEE and HEAR are evidential terms. The notion of KNOW encompasses experiential knowledge of which there is external evidence, not knowledge of specific propositional content or unconfirmed knowledge. While in English we can ‘know’ about something, ‘know’ someone, or ‘know’ how to do something, the semantic prime KNOW refers to objective knowing through experience, as in: “I KNOW where she lives” or “I KNOW you talked to her” or “I KNOW because I did it.” The prime cannot be used with knowing someone because this implies relational knowledge rather than direct experiential knowledge. KNOW points to the speaker or subject’s personal experience of SEEING, HEARING, SAYING, WANTING, or DOING as a self-explanatory source of information of what is KNOWN. Something can also not be KNOWN, such as if it is a saying of someone else (hearsay), as in: “I don’t KNOW what she said.”

In English, there is a special relationship between KNOW and SEE/HEAR, possibly because of our speech community’s focus on and value of knowledge, especially of the scientific kind that is gained by sight and sound. As discussed, the notions SEE and HEAR can relate to bodily senses. Both being polysemous in many languages, they can also relate to the communication of
experiential KNOWING. SEE is sensory predicate, as in “I SEE something,” which relies on optical evidential knowledge. SEE can also refer to KNOWING (EYE-KNOWING) or ‘seeing’ with/through your mind, as in: “I SEE what you mean,” making it a mental predicate too.

The same holds true for HEAR. It is a sensory predicate, as in “I HEAR something,” which relies on auditory evidential knowledge. It is also a mental predicate that can refer to KNOWING (EAR-KNOWING) or ‘hearing’ with/through your mind, as in “I HEAR what you are saying.”

Akkadûm also has a lexeme for ‘ear’ (uznu) which can also mean to know or understand. This is understandable given the primacy of orality in their culture.

Eng: KNOW ~ SEE ~ HEAR
Akk: IDû ~ UZNU
Hbw: YÂḌA’
Arb: YA’LAM

Texts:
Trslit: ul i-di zikiršu ummānu (written UD-ma-dA-num) Adapa
Trslat: not know name-his saying adapa
CADTrslat: the wise Adapa (himself) does not know it’s (the temple’s) name
From: S. Smith, Babylonian Historical Texts plate 6 ii 3 (Neo-Bbl)

Trslit: ki ša amat Marduk la ti-du-u tamallikanni yâši
Trslat: if of command marduk not know has-given-advice-this me-to
CADTrslat: you give me advice as if you did not know of the command of Marduk
From: F. Gössmann, Das Era-Epos III 43

Trslit: uz-na-am nēmeqim ḫasīsam eršet
Trslat: (Ištar) ear-knows civilizing-knowledge understanding wisdom
CADTrslat: she (Ištar) is wise in wisdom, understanding, and perception
From: Revue d'assyriologie et d'archeologie orientale 22 17: 35 (Old-Bbn hymn to Ištar)
Such a basic evidential concept as KNOW becomes the building block that people use to construct complex systems of knowledge about the world that they communicate which becomes part of their worldview’s epistemological foundation.

Presence of Doers: LIVE

The verbal predicate to LIVE is focused on presence. It is very inclusive of nonhuman SOMEONES. Yet, this animating factor of SOMEONE does not include the idea of aliveness as part of the universal concept. It is often used in connection with time, locational stable living conditions, or shared presence (in a place, for a time, with someone else)—not the existential notion of being alive/breathing, or residing/abiding. LIVE often takes a domain argument referring to duration, location, or accompaniment, as in: “someone LIVES for much time,” “someone LIVES in this house” or “someone LIVES with her.” The prime to LIVE can only be spoken of about SOMEONEs, not SOMETHINGS—it can only refer to someones who DO, THINK and FEEL. In this view, one cannot say that a plant LIVES in a garden with other plants.

Unfortunately, Akkadûm’s lexeme for this concept is not straightforward. The lexeme *(w)*ašabu seems to refer to living in a place and living with people, utilizing the locational and accompaniment valencies (similar to Hebrew’s yāšaḇ). But *(w)*ašabu does not seem to be used to specify a duration without a location, since its other valencies refer to sitting or dwelling. While balāṭu can refer to durative living or living for a time, as well as aliveness (similar to Hebrew’s ḥāyāh). For now, I am including both words.

Eng: LIVE
Akk: BALĀṬU ~ *(W)*AŠABU
Hbw: ḤĀYĀH ~ YĀŠAḇ
Arb: YAHYĀ

163
Texts:

Trslit: ulti ūmi annî adi ūmu mala bal-ta-a-ni
Trslat: from day this until as-much-as live-we


Trslit: atta ta-tam-ra-an-ni tîdi kî balṭāku
Trslat: you cover-me know how being-living-me

From: R. F. Harper, Assyrian and Babylonian Letters 587 reverse 2 (Neo-Bbl)

Trslit: kimtašu sapihtâ upahḫarma šû ittišunu TUŠ nēḫtam uššab
Trslat: gathering scattered assembling-and with-them placed peaceful living

From: R. Labat, Textes littéraires de Suse 8 reverse 35

Trslit: ul ina mātišu kî ašbāku
Trslat: not in land-his like living-me

From: R. F. Harper, Assyrian and Babylonian Letters 228 reverse 9 (Neo-Bbl)

Trslit: arduḫi ša šarri ša illakunimma 3 ūmû 4 ium ina Nippur āš-bu-ma
Trslat: servants of ruler who they-have-come-and 3 day 4 day in nippur living

From: R. F. Harper, Assyrian and Babylonian Letters 238 reverse 12

Evidential Events to or by Doers: HAPPEN, DO, MOVE, SAY, DIE

Someones can also be linked with events. There are five event-based notions that indicate
evidentiality by involving a temporal (time-dependent) and optionally a manner (i.e., like this or
in this way) quality. The verbal notions HAPPEN and DO can be differentiated by the agential factor. The syntax for HAPPEN takes the form: ‘Something HAPPENS’ (optionally: to someone/something), which implies there was no agency involved in the event, only possibly someone, something, or a place as the undergoer it happened to, met, or befell. While the syntax for DO takes the form: ‘Someone DOES something’ (optionally: to someone/something), which implies agency, an act, because there is an experiencer or doer as part of the syntactic construction. Thus, while HAPPEN is used more generally of chance occurrences outside any agential control that can involve undergoers, DO includes an agential quality of doers that do something and undergoers to which something is done.

| Eng: HAPPEN | Eng: DO |
| Maqātu | Epēšu |
| Karāh | ‘Āšāh |
| Hadut | Yaf’al |

**Texts:**

**Trslit:** šumma ana bēl immerim im-ta-aq-ta-am imāt

**Trslat:** if to lord of-sheep make-happen he-will-die

**CADTrslat:** if it happens(?) to the owner of the sheep, he will die

**From:** Yale Oriental Series, Babylonian Texts 10 11 iii 17 (Old-Bbn extispicy)

**Trslit:** šumma ša taqabbīm im-ta-aq-ta-ni-ma kaspam ... ašaqqal

**Trslat:** if of told make-happen-and silver I-will-pay

**CADTrslat:** if what you (fem.) told me should happen, I will pay the silver

**From:** Yale Oriental Series, Babylonian Texts 2 61:26 (Old-Bbn)

**Trslit:** šarru ... ana ardišu lišpura ina pūte ni-pu-uš

**Trslat:** ruler to proceed may-send to servant we-will-do

**CADTrslat:** may the king send word to his servant, we shall proceed immediately
MOVE is also a basic concept that involves a motion event. It takes the form:

‘Something/someone MOVES’ (optionally: somewhere) (optionally: in this way), as in: “You MOVE too much,” or “some part of the body MOVES like this.” The motion can involve someone or something, in whole or in part. The movement does not have to involve a change of place, nor does the manner, means, or path of movement need to be defined.

Eng: MOVE
Akk: ALĀKU
Hbw: HĀLAK
Arb: YATAHARRAK

Texts:
Trslit: kī lu māda la marṣāku mala a-la-ku maṣāku
Trslat: how let-be very not being-sick-I be-able to-move comply

From: Yale Oriental Series, Babylonian Texts 46:33 (Neo-Bbl)

Trslit: a-la-ku ša šarri ibašši
Trslat: moving by ruler there-will-be

From: Textes cunéiformes du Louvre 9 89:26 (Neo-Bbl)

Much like the notions THINK and DO, the concept of SAY takes an agent and implies voluntary control. The notion of SAY is another evidential notion which categorizes discourse and organizes utterances.¹⁸ SAY takes many compositional forms, including: ‘Someone SAY

¹⁸ English has over a hundred speech-act verbs besides SAY for various kinds of verbal interactions with many subtle variations (such as request, plead, invite, suggest), while most languages have only a dozen or so. Wierzbicka argues that the large quantity of speech-act verbs in English relates to Anglo culture’s value of personal
something’ (optionally: about something or to someone), as in: “I SAID something to you” or “People SAY bad things about that.” SAY can optionally involve an addressee (a personal substantive like SOMEONE) and a topic. Like THINK, SAY can also take the form: ‘Someone SAYS “___” and involve direct or reported speech. SAY always involves a speaker (a personal substantive like SOMEONE except if the subject is the notion WORDS), as in: “These words SAY something.” In many languages SAY and DO or SAY and WANT are polysemous, as in: “I SAID to give it” or “I SAID to move that.”

Eng: SAY
Akk: QABû
Hbw: ‘ÂMAR
Arb: YAQûL

Texts:
Trslit: ūš tuwa’iranni šunnâm dabâbam qâ-ба-am u turram ula ele’i
Trslat: the orders you gave me, I cannot even repeat the words or say again what you said
From: Iraq 25 184:32 (Old-Bbn literary text)

Trslit: assana’al memēni la i-qabbi-a šummu mēti šummu bašta
Trslat: I-asking somebody not they-speaking-to-me if dead if alive
CAD Trslat: I keep asking but no one can say whether he is dead or alive
From: R. F. Harper, Assyrian and Babylonian Letters 144 reverse 2

freedom which requires great subtlety in discourses of interaction and especially persuasion to not seem to be overriding or disregarding another’s autonomy. See Anna Wierzbicka, “Different cultures, different languages, different speech acts: Polish vs. English,” Journal of Pragmatics 9(2) (1985): 145-178.
The notion DIE (unlike LIVE) involves an event which is time dependent. To DIE, as a perfective verb, refers to when death occurred, taking the simple form: ‘Someone DIES at this time,’ as in: “A person died this morning.” While LIVE involves a duration of time, DIE is a one-time event. LIVE and DIE, in their universal meanings, can only be spoken of about SOMEONES, not SOMETHINGS. Both LIVE and DIE can especially refer to the manner involved, as in: “I LIVE like this,” or “The person DIED in this way.”

Eng: DIE  
Akk: MÂTU  
Hbw: ’ĀMŪT  
Arb: YAMŪT

Texts:

Trslit: maršāku ... šarru la umaššaranni la a-ma-ti  
Trslat: being-sick-I… ruler not he-will-abandon-me without die-I  
CADTrslat: I am sick, the king must not abandon me or else I die  
From: R. C. Thompson, The Reports of the Magicians and Astrologers 158 reverse 7 (Neo-Bbl)

Trslit: kī anāku a-mut-tu-ú-ma  
Trslat: when I dead!  
CADTrslat: when I am dead  
From: Textes cunéiformes du Louvre 9 141:5 (Neo-Bbl)

These events-based notions become the building blocks used to establish practices, rituals, customs, narratives, and describe occurrences or movements.
Attributes Specified by Doers: BE (SOMEONE/SOMETHING)

BE (SOMEONE/SOMETHING) is an identificational concept. It involves the idea of permanency of characteristics or specificational attributes equated to someone or something. It denotes identity, membership, and/or inherent properties of someone/something. In English BE can morph into IS, AM, ARE, WERE, and WAS depending on the context. Identificational BE takes multiple forms, as in: “I want to BE someone special” or “the thing IS big.” Identificational BE is not time-bound, as it does not take a SOMEWHERE argument. In most cases, it is the opposite, because identity, membership, and inherent properties do not often change, as in: “She IS kind.”

The lexeme TO BE used as an equater is nonexistent in some ancient languages, including Akkadûm, because verbless clauses rather juxtapose the subject and predicate in equational sentences, as in: “thing big.” Akkadûm also juxtaposes the predicate and subject with an optional final copula in existential sentences without using a verb, as in: “Hammurabi king he.”19 Though Akkadûm does have lexemes for ‘to become’ (ewûm) and ‘to be in existence or be present, available’ (bašûm) which are arguably in the same area of meaning. Either the Akkadûm concept TO BE has a narrower range of meaning or syntactically it did not need to use the lexeme in this semantic frame. The Biblical Hebrew verbal lexeme, hāyāh, can mean ‘to be, become, or come to pass.” The Modern Arabic verbal lexeme means “to be, exist, or institute.”

<table>
<thead>
<tr>
<th>Eng:</th>
<th>BE (SOMEONE/SOMETHING)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akk:</td>
<td>*concept expressed through juxtaposition</td>
</tr>
<tr>
<td>Hbw:</td>
<td>HĀYĀH</td>
</tr>
<tr>
<td>Arb:</td>
<td>YAKŪN</td>
</tr>
</tbody>
</table>

Texts:

Trslit: ummi šarrim ina ekallim

5.1.2 Inert Thing Exponents

Unlike the above agential exponents, exponents which are contextual in nature often express information about number, tense, gender, aspect, evidential status, durativeness, definiteness, or affectedness. These meaning-bearing units do not contain content and often do no refer to any physical things. They refer rather to connecters, references, and markers (i.e., pronouns, prepositions, auxiliary verbs, conjunctions, determiners) within the context of the communication.

Indefinite Item: SOMETHING~THING~WHAT

SOMETHING is a number-neutral indefinite substantive. It is a SOMETHING that cannot FEEL and/or DO, taking the form: ‘something big.’ In this nonbiological social view, a plant is considered a SOMETHING or an ‘it’ because it cannot FEEL and/or DO something. In English SOMETHING has two other allolexies or combinatorial variants, THING and WHAT, depending on the context, as in: “this THING is big” or “WHAT is it.”

<table>
<thead>
<tr>
<th>Eng:</th>
<th>SOMETHING ~ THING ~ WHAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akk:</td>
<td>MIMMA ~ MÎNU</td>
</tr>
<tr>
<td>Hbw:</td>
<td>MAH- ~ MÔʾUMÂH</td>
</tr>
<tr>
<td>Arb:</td>
<td>ŠAY ’UN MÂ ~ ŠAY’</td>
</tr>
</tbody>
</table>

Texts:

Trslit:  šumma mi-ma erriška
Trslat:  if something demand-you
if he demands something of you

From: Babylonian Inscriptions in the Collection of J. B. Nies 6 66:30

something of (business)-venture-their that without

From: Textes cunéiformes du Louvre 13 160:13 (Neo-Bbl)

what give to children

From: Babylonian Inscriptions in the Collection of J. B. Nies 6 183:9

A BODY is a specific thing that relates to a someone or a something. The BODY represents a SOMEONE as the discrete, corporeal, touchable, visible presence. Because of this, BODY is the only concrete, specific substantive noun included as a semantic prime (while PEOPLE and WORD are general, number-neutral nouns). BODY has a relational quality; it cannot function by itself as an argument. One cannot say: “BODY is big” or “BODY is dead.” BODY must always be combined with an anchoring expression giving specifics about the BODY in the phrase, as in: “His BODY is dead.” Relatedly, while most SOMEONES have a BODY, the concept is also connected to the notion of SOMETHING, because a BODY can be thought of as a SOMETHING as well, as in: “A BODY of water.” BODY, as a relational notion, becomes an intermediate semantic prime between the notions SOMEONE and SOMETHING.

Eng: BODY
Akk: ZUMRU
Hbw: GƏVİYĀH
Texts:

Trslit:  *

Trslat:  ? illness of body-my trampled

CAD Trslat: let the illness of my body be extirpated

From: L. W. King, Babylonian Magic and Sorcery 30:12

Speaking Item: WORDS

WORDS is a general, number-neutral or indeterminate noun (like PEOPLE). The notion of WORDS is intimately connected to the concept of SAY, because people articulate thinking and speaking with WORDS. Spoken WORDS refers to direct references of the things said, an utterance, taking the form: ‘These WORDS say something’ or ‘Say these WORDS,’ as in: “These WORDS say something good” or “Do not say these bad WORDS.” While the prime WORDS can be singular as ‘word’ in many languages, most of the prime exponent’s sentential frames are in the plural form as WORDS.

Eng: WORDS (pl.)
Akk: AMĀTŪ ~ AWĀTŪ (Old-Bbn) (pl.)
Hbw: DƏBÂRĪM ~ MILLĪM (pl.)
Arb: KALĪMĀT (pl.)

Texts:

Trslit:  *amātu iqbâ *

Trslat:  word-me she-said

AGA Trslat:  she said a word to me

From: John Huehnergard, A Grammar of Akkadian, p. 597
Relational Items: KIND, PART

The notions KIND and PART are relational substantives which attribute certain properties—either permanent or temporary—to categorical substantives (SOMEONE, SOMETHING, PLACE, TIME) to form phrases which express categorization and partonomy.

Each language reflects a wide-ranging categorization schema in terms of KINDS. The notion refers to kind-based or taxonomic (from Greek, meaning ‘arrangement method’) classification, often in a hierarchy of KINDS (such as our biological classification schema based on shared characteristics into family > genus > species). The categorizing notion KIND often takes the form: ‘Someone/something is a KIND of someone/something,’ as in: “A rose is a KIND of flower” or “women are people of one KIND.”

Yet, it has been found previously that at least one language, East Cree (a language of the Algonquian family), can only express a taxonomic relationship of somethings by adding a classifier expression at the end of nouns and verbs that describes concrete properties of these somethings, as in: paddle-wood or roast-stick.20 Similarly, Akkadûm and Šumerûm use determinatives which precede or follow a noun to denote that the noun belongs to a particular semantic classified group. In Akkadûm, some cuneiform signs are determinatives which act as indicators of the class of objects to which the item belongs (i.e., kind of material, kind of animal, or kind of object). The use of determinative markers was optional. No lexeme for KIND is needed or attested with this system. These determinatives were not pronounced. In transliterations the determinatives are written in a superscript either before the word or after it, as in: “Agade\textsuperscript{kîn}” (Agade\textsuperscript{place}). There are about two dozen determinatives in Akkadûm.21 This implies some level of

\begin{footnotesize}
\begin{itemize}
  \item[21] Huehnergard, AGA, 111-112. Biblical Hebrew also uses the accusative of specification to denote the sphere in which a word applies as a substitute system for the lexeme KIND.
\end{itemize}
\end{footnotesize}
classification and understanding of this notion, but the abstract concept of a KIND of relationship cannot be directly expressed with a specific lexeme.

Eng: KINDS (pl.)
Akk: concept expressed through determinatives
Hbw: KIL’AYIM (pl.)
Arb: ANWĀ’ (pl.)

Texts:
Trslit: ḫa-am-mu-ra-pī šar Bābilimki giš-e-le-ep-pa-am ir-ka-ab
Trslat: Hammurapi ruler Babylon place wood ship boarded
AGATrslat: Hammurapi king of Babylon boarded the ship
From: John Huehnergard, A Grammar of Akkadian, p. 112

Many things of different KINDS also have certain nameable PARTS. The concept PART refers to analogous relations between two concepts—an identifiable part of a larger whole or the part-hood of some person, thing, place, or time. While in English part can also mean a piece of something before it is detached (“I want a piece of the cake”) and a subset of discrete things (“Part of the group of people left”), the universal notion of PART only refers to the first type of part-hood (part or portion of a complete whole). The concept PART combined with SOMETHING is a particularly popular partonomic phrase in many languages, with the human BODY most often providing the canonical model or prototype, as in: “The head is a PART of someone’s body.” Body-part terminology is a key lexical domain for exploring this concept in most languages. The notion can also often take the form: ‘This something has many PARTS,’ as in: “The chariot has many PARTS.” In some languages, this part-whole relationship is approximated via the possessor ‘have’ rather than PART, taking the form: ‘Someone/something has something,’ as in: “I have a nose.”
Yet again, it has been found that at least one language, East Cree, does not have a word, lexeme, or phrase related to the notion PART.  Similarly, Akkadûm and Šumerûm do not have a lexeme referring to a part-to-whole relationship. They use determinatives, though fewer, for this concept as well, indicating the word is part of something else. There are fewer determinatives expressing parthood, including (i.e., ē for parts of buildings and uzu for parts of the body).

<table>
<thead>
<tr>
<th>Eng:</th>
<th>PARTS (pl.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akk:</td>
<td>*concept expressed through determinatives</td>
</tr>
<tr>
<td>Hbw:</td>
<td>ḤĀLĀQĪM (pl.)</td>
</tr>
<tr>
<td>Arb:</td>
<td>ḠḠZĀ’ (pl.)</td>
</tr>
</tbody>
</table>

**Texts:**

**Trslit:**  
**Trslat:**  
**CADTrslat:**  
**From:**  

The concepts KIND and PART become the constructors to classify the world, creating referential categories and lexical domains based on whatever is in focus, the preoccupations of a people. In utilizing these prime concepts, KIND and PART, the lexical domains of all of the other semantic primes (i.e., physical, sensory, social, and abstract) are further divided and built upon, producing classification systems and taxonomies.

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Similarity of Items: LIKE~AS~WAY

While categorization is based on KINDS, the qualification of things as possessing certain descriptive qualities is based on the notion of LIKE. This provides a conceptual link between referents and a way to classify KINDS. The LIKE qualities of someone/something are integral to distinguishing KINDS. The concept of LIKE refers to comparisons or inferences of qualities, characteristics, or actions between someones or somethings, usually based on a prototype, taking the form: ‘Someone/something LIKE this.’ In English the concept has two allolexies or combinatorial varients (AS and WAY) in certain semantic sentential frames. It can also take the form: ‘Do AS someone wants/says,’ as in: “He did AS she said.” In English the concept can also take the form: ‘Do/say it in this WAY.’ The prime LIKE creates complex ‘likeness’ connections between a thing and an external reference point, possibly creating a semantic category or domain, based on embodied human experience and inferred comparisons with prototypical situations or sensations.

Eng: LIKE ~ AS ~ WAY
Akk: KĪMA ~ KI
Hbw: KƏMOW- ~ KƏ-
Arb: MIĻ ~ KA’ANNA

Texts:

Trslit: 3 GIŠ.BANŠUR.MEŠ tušallak kīma ša Anu Enlil u Ea tuṭabẖad
Trslat: 3 wood-offering-tables plural you-brought like that-of anu enlil and ea you-copyously— are-supplying

CADTrs: you have three offering tables passed along and you sumptuously set them like the ones of Anu, Enlil and Ea

From: H. Zimmern, Beitrage zur Kenntnis der babylonischen Religion No. 1–20:101
Trslit: [tušaznan ... tuqmataša ki na-ab-[i]
Trslat: you-make-provision ... you-pounce-on-her like flames
CADTrslat: she makes her attack come down like flames
From: VAS 10 213:5

Trslit: ki-i ilim tabbašši
Trslat: like god you-are-existing
CADTrslat: you are like a god
From: Gilgamesh I iv 34

Quantifiers of Items: ONE, TWO, ALL, MUCH~MANY, LITTLE~FEW

ONE and TWO are numeral quantifiers, as in: “she has ONE child” or “TWO people sat.” Like English, Akkadûm often writes the numbers logographically, as in: “she has 1 child.” However, Akkadûm, like most languages, does have lexemes for use in the noun form. The numbers ONE and TWO usually occur in this noun form.23

<table>
<thead>
<tr>
<th>Eng:</th>
<th>ONE</th>
<th>Eng:</th>
<th>TWO</th>
</tr>
</thead>
<tbody>
<tr>
<td>AKK:</td>
<td>İSTÊN (m.) / İSTEAT, İSTÊT (f.)</td>
<td>Akk:</td>
<td>ŞINÂ (m.) / ŞITTÂ (f.)</td>
</tr>
<tr>
<td>Hbw:</td>
<td>'EHÄD (m.) / 'AHAT (f.)</td>
<td>Hbw:</td>
<td>ŞØNÊ (m.) / ŞØTÊ (f.)</td>
</tr>
<tr>
<td>Arb:</td>
<td>WÄHID (m.) / WÄHIDA (f.)</td>
<td>Arb:</td>
<td>’IṬNÂN (m.) / ’IṬNÂTAN (f.)</td>
</tr>
</tbody>
</table>

Texts:

Trslit: šumma ina kilallîn ištên ana šîmtim ittalak
Trslat: if from both one about operative-functioning-of it-has-gone
AGATrslat: if one of the two (brothers) dies
From: Huehnergard, A Grammar of Akkadian, p. 236

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23 Huehnergard, AGA, 234-235.
Since the concept **ALL** is a strong quantifier it is incompatible with existential contexts, meaning **ALL** cannot combine with existential statements, as in: “There are **ALL** things in this place.” While one can say: “There are **TWO/SOME/MANY** things in this place.” In English, there are two words for a big quantity—**MUCH** and **MANY**—whose meaning is the same, but they are used in different combinatorial contexts. **MUCH** is used with reference to substances, as in: ‘**MUCH water** or **MUCH dirt**.’ **MANY** is used with reference to people or things, as in: ‘**MANY people** or **MANY things**.’ Most languages, including Akkadûm, only have one term for the concept, whether it is a lot of a continuous substance or a discrete object.

The same is true of **LITTLE** and **FEW** for a small quantity. **LITTLE** is used with reference to substances, as in: ‘**LITTLE water** or **LITTLE dirt**.’ **FEW** is used with reference to people and things, as in: ‘**FEW people** or **FEW things**.’ Akkadûm has only one term, like most languages.

<table>
<thead>
<tr>
<th>Eng: ALL</th>
<th>Eng: MUCH ~ MANY</th>
<th>Eng: LITTLE ~ FEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akk: KALÛ</td>
<td>Akk: MÂDU / MÂ’DU (m.), MÂTTU (f.)</td>
<td>Akk: MAṬÛ</td>
</tr>
<tr>
<td>Hbw: ƘÖL-</td>
<td>Hbw: RÂB</td>
<td>Hbw: ZO‘ÊR ~ MÔ’ÂṬ</td>
</tr>
<tr>
<td>Arb: KULL</td>
<td>Arb: KAŢİR</td>
<td>Arb: QALİL</td>
</tr>
</tbody>
</table>

**Texts:**

Trslit:   šittā amātim nīmur
Trslat:   two female-slaves saw!
AGATrslat: we saw two female slaves
From: Huehnergard, A Grammar of Akkadian, p. 238

From: Textes cunéiformes du Louvre 17 6:14 (Old-Bbn letter)
Trslit: 𝒖𝒕𝒕𝒂𝒕𝒖 𝒎𝒂-˛𝒂𝒕-𝒕𝒂 ... ﺍnaire  ﺖﻟِّ ﺖﻟِّ
Trslat: barley much for harvest pronounced
*CAD*Trslat: much barley has gone up as tax
From: Yale Oriental Series, Babylonian Texts 3 81:7

Trslit: șābē  anale dullu(!)  ﻝو  ﻡﺍ-ﻅ ﻭ-ﻯ
Trslat: people for work not many few
*CAD*Trslat: there are far too few workmen to do the work
From: Yale Oriental Series, Babylonian Texts 3 51:5

Trslit:  karānu  anale  ﻁ ﻁ
Trslat: wine for regular little
*CAD*Trslat: there is insufficient wine for the regular offerings
From: Yale Oriental Series, Babylonian Texts 3 92:19

Determiners of Items: THIS, OTHER~ELSE~ANOTHER

THIS (plural THESE) can act as a substantive, referencing someone or something, as in: ‘THIS is good’ or ‘something happened to THIS plant.’ THIS can also act as a determiner with other substantives, as in: “all THESE people.” OTHER refers to a different entity or identity within the context, as in: ‘this OTHER thing.’ In English the determiner ANOTHER and the adverb ELSE are another way to express otherness by modifying an indefinite or interrogative pronoun, as in: ‘someone ELSE did it’ or ‘I want ANOTHER thing.’ Most languages only have one term expressing the concept of OTHER.

<table>
<thead>
<tr>
<th>Eng: THIS</th>
<th>Eng: OTHER ~ ELSE ~ ANOTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akk:  ﺎﻨﻨ ﺲ ﺎG (only Neo-Bbl)</td>
<td>Akk:  ﺶ ﻁ</td>
</tr>
<tr>
<td>Hbw: ﺖﻌ</td>
<td></td>
</tr>
</tbody>
</table>
| Arb: ﻆﺩ | Hbw: ﻝٍ ﺓ ﺖ \)

<table>
<thead>
<tr>
<th>Eng: THIS</th>
<th>Eng: OTHER ~ ELSE ~ ANOTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akk:  ﺎﻨﻨ ﺲ ﺎG (only Neo-Bbl)</td>
<td>Akk:  ﺶ ﻁ</td>
</tr>
<tr>
<td>Hbw: ﺖﻌ</td>
<td></td>
</tr>
<tr>
<td>Arb: ﻆﺩ</td>
<td>Hbw: ﻝٍ ﺓ ﺖ )</td>
</tr>
</tbody>
</table>
Texts:
Trslit: dumqu têrti an-ni-ti ūmi mahrâ āmurma
Trslat: good instruction this on-this-day they-being-received being-examined
CADTrslat: the good omens of this extispicy I observed already on the first day
(after list of omens)
From: Vorderasiatische Bibliothek 4 268 ii 20 (Nabonidus)

Trslit: ša a-wa-at ṭuppim annîm unakkaru
Trslat: who word-of tablet this they-are-altering
CADTrslat: whosoever changes the wording of this document
From: Vorderasiatische Schriftdenkmaler 8 12:27

Trslit: mînamma ūma aga-a tašapparu
Trslat: why day this you-are-sending (a message)
CADTrslat: why do you send a message this day?
From: Yale Oriental Series, Babylonian Texts 3 92:28

Trslit: iltēn ša bît ili u šá-nu-u ša āl Puqūdu
Trslat: one he-of house-of god and other he-of city-of puqūdu
CADTrslat: (of the two shepherds) one is from the temple and the other from a city of the Puqūdu
From: R. F. Harper, Assyrian and Babylonian Letters 268:12 (Neo-Bbl)

Descriptors of Items: BIG, SMALL, VERY, MORE~ANYMORE

BIG and SMALL refer to physical size only, as in: ‘something BIG’ or ‘someone SMALL.’ VERY is an intensifier notion, as in: ‘something VERY small.’ MORE is an augmentor notion and refers to an additional quantity, as in: ‘someone wants MORE.’ In English, MORE can also be expressed via ANYMORE in some semantic frames, as in: ‘not living ANYMORE.’
Texts:
Trslit:  
\[ \text{KUR ra-bi-ti uttitra u birti dannati ina qāti mātāti aktašar} \]
Trslat: land large enlarged-I and within fortress by hand-my lands constructed-I  
\[ \text{CAD Trslat: I have won back a large country and I constructed a strong fort thanks to the help(?) of all lands} \]
From: R. F. Harper, Assyrian and Babylonian Letters 542 r. 18 (Neo-Bbl)  

Trslit:  
\[ 3 \text{ SIG₄.ḪI.A ša-ḫi-rī-tim ... appalisma} \]
Trslat: 3 mudbricks\(^\text{plural}\) small I-have-seen  
\[ \text{CAD Trslat: I discovered three small bricks} \]
From: Vorderasiatische Bibliothek 4 76 iii 13 (Nebuchadnezzar II)  

Trslit:  
\[ \text{mušaḫḫinu qal-la ina Ekur yānu ... mušaḫḫinu qal-la bēlē lušēbilunu} \]
Trslat: hot-maker little in ekur is-not … hot-maker small lords let-dispatch  
\[ \text{CAD Trslat: there is no small kettle in the Ekur, let my lords send us a small kettle} \]
From: Yale Oriental Series, Babylonian Texts 3 191:30 and 32 (Neo-Bbl letter)  

Texts:
Trslit:  
\[ \text{maṣṣarti ... GN ma-‘diš dannat} \]
Trslat: guard … geographical name very strong
CADTrslat: the guard of Nippur is extremely strong
From: R. F. Harper, Assyrian and Babylonian Letters 1074:7

Trslit: 9 GÍN.TA še e-li
Trslat: 9 shekels or more
CADTrslat: for nine shekels (on) each (mina of tin) or more
From: Babylonian Inscriptions in the Collection of J. B. Nies 6 55:6

Logicals: NOT, MAYBE, CAN, BECAUSE, IF

The notions NOT, MAYBE, and CAN are termed logical operators. The concept of NOT refers to negation, usually of ability (‘I can NOT do it’), knowledge (‘I do NOT know’), values (‘This is NOT good’), or manner (‘NOT like this’). Likewise, MAYBE relates to extrinsic possibilities or potentialities, as in: ‘MAYBE someone else can.’ MAYBE is inherently restricted from being used with KNOW as know includes the idea of evidential knowledge. CAN is similar to MAYBE and signifies intrinsic possibility, ability, opportunity, and permission—which is why social rules are based on CAN or NOT CAN, while moral rules are based on GOOD and BAD. The notion of CAN requires a pre-condition of being able to do what one wants to do, as in: ‘I CAN do something.’

<table>
<thead>
<tr>
<th>Eng:</th>
<th>NOT</th>
<th>Eng:</th>
<th>MAYBE</th>
<th>Eng:</th>
<th>CAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akk:</td>
<td>LĀ ~ UL</td>
<td>Akk:</td>
<td>MINDE</td>
<td>Akk:</td>
<td>LE’Û</td>
</tr>
<tr>
<td>Hbw:</td>
<td>LĀ’</td>
<td>Hbw:</td>
<td>’ŪLAY</td>
<td>Hbw:</td>
<td>YĀKÔL</td>
</tr>
<tr>
<td>Arb:</td>
<td>LAMM / LANN</td>
<td>Arb:</td>
<td>RUBBAMĀ</td>
<td>Arb:</td>
<td>YASTAṬI’</td>
</tr>
</tbody>
</table>

Texts:
Trslit: šaḫû la simat ekurri
Trslat: pig not proper temple
CADTrslat: the pig is not fit for a temple
From: W. G. Lambert, Babylonian Wisdom Literature 215 reverse iii 15
Trslit: ina la riqūtim ul illikamma
Trslat: by not emptiness not he-come

CADTrslat: because of lack of free time, he did not come here
From: Textes cunéiformes du Louvre 7 51:11

Trslit: min-de-e-ma DN ippušma
Trslat: maybe divine name they-will-act

CADTrslat: perhaps Bel will act
From: R. F. Harper, Assyrian and Babylonian Letters 844 reverse 5

Trslit: marduk ina qabri bulluṭa i-le-’i
Trslat: marduk from grave you-keep-alive he-can

CADTrslat: Marduk can bring back to life from the grave
From: W. G. Lambert, Babylonian Wisdom Literature 58:35 (Source: Ludlul IV)

BECAUSE refers to causation and it forms adjunct phrases, acting as a linker, as in:

‘BECAUSE of this.’ IF as a conditional introduces a dependent clause and pulls from the
imagination to explicate possibilities and/or potentialities, as in: ‘IF you do this.’

<table>
<thead>
<tr>
<th>Eng:</th>
<th>BECAUSE</th>
<th>Eng:</th>
<th>IF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akk:</td>
<td>AŠŠU</td>
<td>Akk:</td>
<td>ŠUMMA</td>
</tr>
<tr>
<td>Hbw:</td>
<td>KĪ-</td>
<td>Hbw:</td>
<td>’IM-</td>
</tr>
<tr>
<td>Arb:</td>
<td>LI’ANNA</td>
<td>Arb:</td>
<td>IḌĀ / INN</td>
</tr>
</tbody>
</table>

Texts:
Trslit: aššu ša ITI maṣṣartu ša šamaš šū
Trslat: because of month watching he-of sun he

CADTrslat: because (this is) the month for keeping watch for (an eclipse of) the sun
From: R. F. Harper, Assyrian and Babylonian Letters 477 reverse 5 (Neo-Bbl)
Trslit: Šumma amēlu ḫašūšu IM edpu
Trslat: if man lungs-his air being-inflated
*CAD*Trslat: if a man's lungs are inflated with air
From: F. Kocher, Die babylonisch-assyrische Medizin in Texten und Untersuchungen 558 iv 1

Substantive Temporality: TIME~ WHEN, NOW

The basic categorical substantive TIME provides general categorization for the notion of time, as in: ‘it is TIME’ or ‘at that TIME.’ The English allolexy WHEN is used to refer to non-specific TIMES, as in: ‘WHEN I say’ or ‘at the time WHEN.’ NOW is a deictic prime, providing a time reference in a present context, as in: ‘something is happening here NOW.’

<table>
<thead>
<tr>
<th>Eng: TIME ~ WHEN</th>
<th>Eng: NOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akk: ADANNU ~ MATI</td>
<td>Akk: ANUMMA ~ INANNA</td>
</tr>
<tr>
<td>Hbw: ‘ĒṬ ~ MĀṬAY</td>
<td>Hbw: ‘ATTĀH</td>
</tr>
<tr>
<td>Arb: MATĀ</td>
<td>Arb: AL’ĀN</td>
</tr>
</tbody>
</table>

**Texts:**

Trslit: *im-ma-ti šarru ina muḫḫi illakamma*
Trslat: by-when ruler as-result-of depart he-will-come
*CAD*Trslat: when will the king come?
From: R. F. Harper, Assyrian and Babylonian Letters 1431:13 (Neo-Bbl)

Trslit: *adi ūm a-dan-ni iballuṭ arki a-dan-ni-šū imāt*
Trslat: until day fixed-time he-will-live after fixed-time-it he-will-die
*CAD*Trslat: he (the sick man for whom the extispicy is performed) will live until the predetermined day, after his time is up, he will die
From: Cuneiform Texts from Babylonian Tablets 31 36 r. 9 (SB extispicy)
Trslit:  \textit{anumma} PN uš-ta-ri-a-ku-um  
Trslat: now PN I-causing-sending  
\textit{CAD}Trslat: herewith I am sending you PN  
From: Babylonian Inscriptions in the Collection of J. B. Nies 7 21:6

Trslit:  \textit{i-na-an-ni} ziqqurrat šuātu labāriš illikma  
Trslat: now temple-tower it being-old had-become  
\textit{CAD}Trslat: now this temple tower had become old  
From: Vorderasiatische Bibliothek 4 250 i 19

Durative Temporality: \textit{MOMENT}  

\textit{MOMENT} refers to a brief or short extension in time without a specified duration. It captures the idea of instantaneousness, as in: ‘something happened in one \textit{MOMENT}’ or ‘at this \textit{MOMENT}.’

-----------------------------------------------
Eng: \textit{MOMENT}  
Akk: \textit{SURRI}  
Hbw: \textit{REGA'}  
Arb: \textit{LAHĐA}  
-----------------------------------------------

\textbf{Texts:}  
Trslit:  \textit{sur-riš} udamma[q] zamar ugal[lal]  
Trslat: to-moment he-kind immediately he-is-sinning  
\textit{CAD}Trslat: one moment he does good, the next evil  
From: W. G. Lambert, Babylonian Wisdom Literature 256:3

Sequential Temporality: \textit{BEFORE, \textit{AFTER}}  

\textit{BEFORE} and \textit{AFTER} are sequential temporal notions providing a relative ordering. \textit{BEFORE} marks anteriority in time, as in: ‘\textit{BEFORE} this time.’ While \textit{AFTER} marks posteriority in time, as in: ‘\textit{AFTER} this time.’ \textit{BEFORE} and \textit{AFTER} are often polysemous in many languages, expressing
locational (such as ‘in front of’ or ‘behind’) or motional (such as ‘forward’ or ‘backward’)
meanings, as well as temporal sequencing. But the sequential temporality of the concept is all
that the prime expresses.

<table>
<thead>
<tr>
<th>Eng: BEFORE</th>
<th>Eng: AFTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akk: LĀMA</td>
<td>Akk: ULTU ~ WARKI</td>
</tr>
<tr>
<td>Hbw: LIPNÉ ~ QOḌĀM</td>
<td>Hbw: ’AHAR</td>
</tr>
<tr>
<td>Arb: QABL</td>
<td>Arb: BA’D</td>
</tr>
</tbody>
</table>

**Texts:**

Trslit: **DIŠ UDU la-a-ma teptūšu ītarur**
Trslat: one sheep before you-have-done he-is-shivering
**CAD** Trslat: if the sheep shivers(?) before you have opened it
From: Yale Oriental Series, Babylonian Texts 10 47:34
(Old-Bbn behavior of sacrificial lamb)

Trslit: **ul-tu kasap rīḥī šīm zērišu i-ṭi-ir-šu**
Trslat: after break remaining purchase divided-into-sections-it he-had-paid-it
**CAD** Trslat: after he paid the balance of the purchase price for his field
From: Vorderasiatische Schriftdenkmaler 6 50:4 (Neo-Bbl)

Trslit: **wa-ar-ki warḫim**
Trslat: after first-month-moon
**CAD** Trslat: after the first of the month
From: Textes cunéiformes du Louvre 17 23:25

Substantive Presence: BE (SOMEWHERE), THERE IS
Locational BE (SOMEWHERE) refers to presence. It implies place and time-boundedness when
used with SOMEWHERE. The locational notion BE (SOMEWHERE) takes the form:
‘Someone/something IS’ (optionally: somewhere), as in: ‘Someone IS in this place.’ Or it takes the form: ‘Someone IS with someone.’ In English BE can morph into IS, AM, ARE, WERE, and WAS depending on context. In many languages, including English, locational BE (SOMEWHERE) and LIVE are polysemous, as in: “I AM in Seattle,” to mean I live in Seattle, which is not included in the prime meaning.

The present tense notion THERE IS refers to transient, impermanent presence or extension of someone or something, possibly in a specified location. It takes the form: ‘THERE IS someone/something’ (optionally: somewhere), as in: “THERE IS something on your head” or “THERE ARE cats here.” It can also refer to the presence of attributes, as in: “THERE ARE many kinds of cats.” The universal conceptualization of THERE IS can be polysemous with the more complex notion of existence in some languages (like English) which is not included in the prime meaning. While ‘to exist’ refers to an absolute state of BE-ing which cannot take a place reference—such that one cannot say: “Unicorns do not exist in Claremont,” because unicorns would not exist anywhere. The THERE IS lexeme can be the same lexeme as the locational TO BE (SOMEWHERE) lexeme in some languages with difference of meaning in different tenses leading to different exponents, including Akkadûm. But THERE IS expresses current presence, whereas BE (SOMEWHERE) can refer to past or future presence as well, as in: ‘I want to BE with my mother.’ In some languages, THERE IS is expressed not by a verbal predicate but by a particle, a determiner-like element, or a definite article in a verbless sentence.

<table>
<thead>
<tr>
<th>Eng:</th>
<th>BE (SOMEWHERE)</th>
<th>Eng:</th>
<th>THERE IS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akk:</td>
<td>BAŠU</td>
<td>Akk:</td>
<td>IBÂŠI (present tense)</td>
</tr>
<tr>
<td>Hbw:</td>
<td>HÂYÂH</td>
<td>Hbw:</td>
<td>YÊŠ</td>
</tr>
<tr>
<td>Arb:</td>
<td>YAKUN</td>
<td>Arb:</td>
<td></td>
</tr>
</tbody>
</table>
Texts:
Trslit: šarrum ša ina mātim ib-ba-aš-šu-úr
Trslat: ruler who in land he-will-be-there
CAD Trslat: a king who (then) will be in the country

Trslit: alāku ša šarri i-ba-āš-ši
Trslat: going of ruler he-there-is
CAD Trslat: there will be a marching out of the king
From: Textes cunéiformes du Louvre 9 89:27

Trslit: dibbī i-ba-āš-ši bišūti ina kutil šarri epšu'
Trslat: things there-are bad to back ruler they-done
CAD Trslat: there are really evil things being done behind the back of the king
From: R. F. Harper, Assyrian and Babylonian Letters 1131 r. 9

Substantive Positionality: PLACE~WHERE~SOMEWHERE, HERE

The notions of TIME and PLACE parallel each other in compositional forms. The basic categorical substantive PLACE provides general categorization for space, as in: ‘another PLACE’ or ‘in this PLACE.’ The allolexies WHERE or SOMEWHERE in English are used to refer to non-specific PLACES, as in: ‘something happened SOMEWHERE’ or ‘the place WHERE.’ HERE is a deictic prime, providing a space reference in a present context, as in: ‘something happened HERE.’ It is like the notion NOW which provides a time reference in a present context.

<table>
<thead>
<tr>
<th>Eng:</th>
<th>PLACE ~ WHERE ~ SOMEWHERE</th>
<th>Eng:</th>
<th>HERE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akk:</td>
<td>AŠRU ~ ĖKĀNU (only Neo-Bbl)</td>
<td>Akk:</td>
<td>AKANNA (only Neo-Bbl)</td>
</tr>
<tr>
<td>Hbw:</td>
<td>MĀQŌWM ~ ĖPŌH</td>
<td>Hbw:</td>
<td>HÊNNĀH</td>
</tr>
<tr>
<td>Arb:</td>
<td>AYNA</td>
<td>Arb:</td>
<td>HUNĀ</td>
</tr>
</tbody>
</table>
**Texts:**

Trslit:  
*šaš ušu šamaš la innammar*

Trslat:  
place sun not he-has-been-seen

*CAD* Trslat:  
a region where the sun is not seen

From:  
Cuneiform Texts from Babylonian Tablets 22 pi. 48 obverse (mappa mundi)

Trslit:  
*enna agâ ultu ša GN a-na e-ka-a-ni kî allaka*

Trslat:  
now this after from GN about where like to-go

*CAD* Trslat:  
where am I to go from GN now?

From:  
Yale Oriental Series, Babylonian Texts 3 106:33

Trslit:  
*qallassu akanna i-ba-āš-ši*

Trslat:  
slave-girl here she-is-there

*CAD* Trslat:  
his slave girl is here

From:  
Yale Oriental Series, Babylonian Texts 3 117:20

Relational Positionality: ABOVE, BELOW, INSIDE, SIDE, FAR, NEAR

The notions ABOVE, BELOW, and SIDE are relational notions for position with respect to a given reference point, providing an orientation in space. As in: ‘ABOVE this place’ or ‘BELOW this place’ or ‘on this SIDE.’ For these notions, the human BODY acts as the ultimate prototype or experiential reference point for interpreted orientations of verticality (ABOVE, BELOW) and laterality (SIDE)—with the right hand and face acting as the focal point. The concept of INSIDE refers to containment, as in: ‘INSIDE this something.’ It also optionally has a spatial component of extension in SOMEWHERE. One can say: ‘Something/someone is INSIDE something/someone (optionally: somewhere).’ FAR and NEAR are dimensional notions, providing distance, as in: ‘something FAR’ or ‘something NEAR.’
**Eng:** ABOVE  |  **Eng:** BELOW  
**Akk:** ELÛ  |  **Akk:** ŠAPLU  
**Hbw:** ‘AL-  |  **Hbw:** TAHAṬ  
**Arb:** FAWQ  |  **Arb:** TAHT

---

**Texts:**

**Trslit:** *ištu elâniš ana šap-la-niš tumašša’ma*
**Trslat:** first to-above towards to-below you-rub

*CAD Trslat:* (with the materia medica) you rub (the pregnant woman) with downward strokes (lit. from above to below) (but *ana šaplānu* iii 53)

**From:** F. Kocher, Die babylonic-assyrische Medizin in Texten und Untersuchungen 248 iii 9

---

**Eng:** INSIDE  |  **Eng:** (ON THIS) SIDE  
**Akk:** QERBĒNU  |  **Akk:** INA IDI  
**Hbw:** BƏ ~ BƏTŌWК ~ PƏNİMÃH  |  **Hbw:** BƏṢAD  
**Arb:** DĂXIL  |  **Arb:** ĞÂNIB

---

**Texts:**

**Trslit:** *šumma šēr ḥašim qē-er-bé-nu-um imittam u šumēlam kuppput*
**Trslat:** if back of-lung inside on-right or on-left compacted

*CAD Trslat:* if the back of the lung is compacted on the inside to the right and to the left

**From:** Yale Oriental Series, Babylonian Texts 10 36 i 34 (Old-Bbn extispicy)

---

**Trslit:** *šumma sinništu ... qer-bé-nu šarka išu*
**Trslat:** if female … inside discharge pus

*CAD Trslat:* a woman has pus inside

**From:** F. Kocher, Die babylonic-assyrische Medizin in Texten und Untersuchungen 240:65
Trslit:  
Trslat:  he-made-to-kneel female at side-me

*CAD*Trslat:  he made my wife kneel down at my side

From:  Gilgamesh XI 191

<table>
<thead>
<tr>
<th>Eng:</th>
<th>FAR</th>
<th>Eng:</th>
<th>NEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akk:</td>
<td>RĒQU</td>
<td>Akk:</td>
<td>QERBU</td>
</tr>
<tr>
<td>Hbw:</td>
<td>RĀḤOWQ</td>
<td>Hbw:</td>
<td>QĀRŌWḇ</td>
</tr>
<tr>
<td>Arb:</td>
<td>BAʾID</td>
<td>Arb:</td>
<td>QARĪḇ</td>
</tr>
</tbody>
</table>

**Texts:**

Trslit:  
Trslat:  master know how not far which with-respect-to going

*CAD*Trslat:  my lord knows that it is too far for me to go to them (the sheep and goats)

From:  Yale Oriental Series, Babylonian Texts 3 167:20 (Neo-Bbl letter)

Trslit:  
Trslat:  people-our near PN he-led-away

*CAD*Trslat:  PN led away our people who were close by

From:  Yale Oriental Series, Babylonian Texts 3 168:26 (Neo-Bbl)

5.3 Secondary Level Concepts: Semantic Molecules

Semantic molecules are words with more complex lexical meanings than the atomic semantic primes. These semantic molecules serve as helpful explicator functions as secondary level concepts in a language’s basic lexicon. NSM theory posits that there are between 100 to 200 such molecules in each language—some of which are universally found, though not simple and indecomposable like primes. Certain kinds of molecules tend to be common, such as: taxonomic categories of lifeforms (animal, plant), cosmological features (sky, sun), elemental terms (fire, water), social categories (men, women), body parts (arms, legs), bodily actions (eat, drink),
shape descriptors (round, flat), physical qualities (sharp, hard), and ethnogeometrical terms (edges, ends).24

While Biblical Hebrew and Aramaic have word frequency calculated against the Hebrew Bible, there are no word counts for the usage of Akkadûm vocabulary by the Šalmāt Qaqqadi because of the large amount and siloed nature of the evidence. I base my choices of Akkadûm molecules on a comparison with Biblical Hebrew frequencies, overlaps with the Šumerûm lexicon, and concise Akkadûm lexicon lists. Once again, I categorize the molecules according to Kaldian thinking as much as possible.

**Nonhuman Someones:** nūnu (fish), iṣṣūru (bird), ūnu (sheep/goats), alpu (bull), umāmu (beast), ilu (god)

**Identical Someones:** nīnu (we), šunu (they), šū (he), šī (she), ramānu (self), šalmāt qaqqadi (black-headed, humans), awīlu (free person), šumu (name)

**Role Relationships of Someones:** sinništu (female/woman), zikaru (male/man), šēhru (child), aššatu (wife), mutu (husband), ummu (mother), abu (father), rēšu (slave), šarru (ruler), ibru (friend), bēlu (master), talmīdu (student)

**Evidential Doings by Someones:** šatū (to drink), akālu (to eat), šittu (to sleep), nēru (to kill), nadānu (to give), manū (to count), palāḫu (to fear), banū (to build), zenū (to anger), šapāru (to write), šabātu (to take hold), madādu (to measure), magātu (to fall), apālu (to answer), dagālu (to attend to), šakānu (to put), našāru (to guard), nâḫu D stem (to appease)

**Parts of Someones:** damu (blood), ešemtu (bone), qaqqadu (head), malû (hair), īnu (eye), uznu (ear), appu (nose), pù (mouth), šēpītu (foot), qātu (hand), pānu (face), qarnu (horn), zibbatu (tail), šinnu (tooth)

---

Worldly Somethings: erṣetu (land/ground), šamšu (sun), kakkabu (star), mü (water), zunnu (rain), abnu (stone), iṣu (tree/wood), išātu (fire), šadû (mountain), nāru (river), šamû (sky), qanû (reed), akalu (food), bītu (temple/house), ālu (city), ekallu (palace), kaspû (silver), bābu (gate), merītu (pasture field), garrītu (storehouse), ammatu (cubit), šubâtu (garment), itû (border), šikaru (beer), karpatu (vessel), igisû (offering), libittu (mud-brick), ṭuppû (tablet)

Descriptors of Somethings: gamru (full), rīqu (empty), eššu (new), labiru (old), arku (long), kabtu (heavy), qatnu (narrow/thin), eššu (fresh)

Temporality: urra (tomorrow), ūma (today), ūnu (day), mušitu (night), warlu (month), šattu (year), dāru (forever)

Positionality: šītiš (in the east), šī šamši (the east), imittu (right side), šumēlu (left side), mehretu (opposite side), sadru (in ordered rows), ina birīt (among/between)

5.4 Features of the Akkadûm Language and Writing System

Children begin life with pre-installed concepts that represent basic understandings in the world, such as negation (NOT) or self (I~ME). They are then further influenced in the acquisition and organization of their semantic space of their lifeframe by the semantic structure of the specific input language. In a nod to the Sapir-Whorf theory, the language first acquired or learned as a child greatly contours one’s thought world, one’s lifeframe.

In this view, semantic meaning does not entail or require a direct correspondence between a linguistic expression and the real world—just as all lifeframes are not direct views of the world. All languages do not reflect reality and the world directly—they reflect human conceptualizations and interpretations about the world around us.25 Rather, semantic meaning is

a conceptual phenomenon, which begins with shared primes as intuited givens, not realized from experience, and continually built upon through our embodied and entangled experience in culturally subjective and language-specific ways.

Thus, speakers of different languages must attend to and encode different information in communications with others about the worldly place, because different languages require different rules. For example, some languages’ grammars must include time for tenses, gender, modes of being, and/or evidentiality for verbal actions. The overall structure of the language produces and reinforces sociocultural perceptions. In this way, some of the most important aspects of the language are not the words, but what goes without being said—the structure, rules, and diction of the language.

Most Western Indo-European languages, being focused on componential, discrete elements, need only thirty (30) letter signs or less of an alphabet which separates syllables into separate letters to construct a communication system. The Chinese script, on the other hand, needs over three thousand (3000) different characters, one for each syllable, demonstrating their focus on wholes.  

Akkadûm cuneiform sign lists, likewise, contain about a thousand (1000) individual logographic and syllabographic signs, depending on the time period. This cuneiform writing binds its users into a ‘cuneiform culture’ with “a shared set of ways of understanding and managing their world.”

The term ‘Akkadian’ is the modern linguistic term for the third millennium BCE language inscribed on moist clay tablets from the southern Birît Nărâti region. As has been discussed, the language, people, and culture are named after the related capital city, Akkad(e) or

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Agade, founded by the ruler Šarrugi (Sargon) circa 2300 BCE. The Akkadi kingdom was the first Semitic dominion of the region, which united all the native Semitic-speaking Šalmāt Qaqqadi peoples and their conquered Šumeri neighbors. Akkadûm is classified as an East Semitic language, a branch of the Afroasiatic language family (see Figure 20). There are two main Akkadûm dialects, southern Babylonian (natively termed akkadû) and northern Assyrian (natively termed aššurû), connected to distinct geographic areas.

*Figure 20: Semitic Language Family Tree*

Note: Source image can be found at www.bartleby.com/61/JPG/tree.jpg

One cannot discuss Akkadûm without first discussing non-Semitic Šumerûm, its predecessor and exemplar. Šumerûm was spoken in ancient Šumer and is a language isolate—it has no familial siblings in its linguistic tree. The Šalmāt Qaqqadi speakers of Akkadûm borrowed Šumerûm’s cuneiform script. In order to use it the Šalmāt Qaqqadi wrote their

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28 Huehnergard, AGA, xxiii-xxvii.
29 Lenzi, An Introduction to Akkadian Literature, 2.
30 Likewise, Sumerian was written šumerûm in Akkadûm and as EME.GIR₁₅ in native Šumerûm. See CAD Shin Part 3, p.272-273. I will refer to it as Šumerûm. Online: https://isac.uchicago.edu/sites/default/files/uploads/shared/docs/cad_s_shin_3.pdf.
language phonetically, using the corresponding Šumerûm phonetic signs. The speakers of Akkadûm also borrowed many associated written texts for their own use. These borrowings restrained, influenced, and added to the developing Akkadûm phonology, vocabulary, and word order. Thus, Akkadûm makes extensive use of Šumerûm logograms, determinatives, and verb-final word ordering. As Benjamin Foster notes, “one can speak of a hybrid Sumero-Akkadian literary culture, even in the Late period.”

In addition, while most Western cultures’ someone are highly literate and utilize alphabetic languages, most ancient cultures’ someone were not fully literate in their non-alphabetic writing systems. There were different levels of cuneiform literacy, including functional, technical, and scholarly literacy. Many scholars now believe that there was widespread functional literacy by many merchants, administrators, military officers, and priests, beginning within the Amurri-Bâbilim Kingdom (Old-Bbl), which required knowing about 57 logograms and 112 syllabograms in order to write basic documents. Technical literacy was achieved by specialists who compiled, copied, and referred to compendias for medical and divinatory practices—something akin to contemporary technical jargon. Scholarly literacy was achieved by a smaller number of professional scribes who knew all the possible cuneiform signs and their meanings. Most of the texts examined as part of this work were probably written by these scribes writing at a scholarly level.

Thus, the extinct language of Akkadûm presents us with a number of lifeframe oddities to our way of thinking, which need to be discussed.

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31 As quoted in Lenzi, *An Introduction to Akkadian Literature*, 2.
5.4.1 Ethnolinguistics

One way to explore the Akkadûm language is through ethnolinguistics (also sometimes called cognitive anthropology), the branch of linguistics which studies the relations between linguistic behavior and cultural behavior within a specific ethnic community. Any language contains cues that enables the discovery of related cultural values. Within applied ethnolinguistics and the NSM approach there are currently five pathways which are used to discover the cultural values and lifeframe thinking of a linguaculture: a culturally salient word (ethnolexicology), phrase (ethnophraseology), syntactic pattern (ethnosyntax), figure of speech or metaphor (ethnorhetorics), or communicative behavior (ethnopragmatics).33 I have added a sixth: the study of the linguaculture’s word structure (ethnomorphology).

We will first explore ethnopragmatics to discover linkages between Akkadûm as the language-in-use and the lifeframe orientations of its people.

Ethnopragmatics: Textual Materiality, Continuous Scripting, Collective Writing, Powerful Language, and Refined Language

Within ethnopragmatics, one fruitful area of study is how specific properties of a language qualitatively influences and modulates the way the language is mentally processed by someones within communications. An area of ethnopragmatics which relates to our discussion involves the act of writing itself on material tablets. Regarding Akkadûm, the physical characteristics of the clay tablets shaped the writing process. Many tablets were rectangular, used in portrait mode, and had only a single column of text which was inscribed with a stylus reed left to right and top

to bottom, using three possible sign markings (elongated vertical wedge, elongated horizontal wedge, or a fat wedgish arrow). A typical sign contains five to ten wedge stroked markings. The region’s clay tablets, stone inscriptions, and papyri do not only reflect ancient writing technologies, they are also material artifacts themselves which offer additional insights into the Kaldi way of thinking. Similar to how digital mediums allow us to think interconnectedly and dynamically, the clay medium influenced certain ways of thinking. Mud clay was central to Šumeri-Akkadi culture, being used to build their houses, temples, streets, walls, and writing surfaces. It is not surprising that humans are made from clay in a number of stories, including the *Epic of Gilgamesh*.\(^{34}\) This hard, heavy, and durable substance shaped the way the Šalmāt Qaqqadi peoples of the Birīt Nārāti lived and communicated. The materiality of the indestructable clay led to the long-term preservation of writings, but it also made it difficult to edit or update any writings, transport texts, and it discouraged lengthy writing.\(^{35}\) The size of these clay tablets was determined by the amount of text needed to be inscribed. Most clay tablets were small and rectangular, being able to fit in the palm of the hand—though some are ingeniously cylindrical or pyramidal.\(^{36}\) The clay medium encouraged conformity, stability, and conciseness and contributed to the long-standing stream of tradition in which some texts were still being copied and promulgated 2,000 years later.

A second area of ethnopragmatics relates to how the text was written on these durable clay tablets. Most tablet-based texts were inscribed with signs without any spaces between words, without any capitalization or punctuation—as if it was one long continuous stream of


syllables which often continued onto the backside of the tablet as well.\textsuperscript{37} See Figure 21 for an example. It would be like reading this sentence. It is doable for those well versed in the language (but it is hard for today’s scholars to decipher).\textsuperscript{38}

\textit{Figure 21: Inscription B with Word for King Thrice Identified}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{Figure21.png}
\caption{Inscription B with Word for King Thrice Identified}
\end{figure}

Note: From \textit{Reisebeschreibung nach Arabien und andern umliegender Ländern} by Carsten Niebuhr, 1778. Public Domain. Niebuhr’s translation: “Darius the Great King, King of Kings, King of Countries, son of Hystaspes, an Achaemenian, who built this palace.”

In my mind, it seems natural to tangibly and visibly separate words, capitalize certain key words, and provide an indication of the termination of the sentence’s complete thought, especially for fast, silent reading of something I have never read before.\textsuperscript{39} As Šumerûm also utilized a stream-of-syllables style, called \textit{scriptio continua} or ‘continuous script,’ it is likely those speaking Akkadûm mimicked this Šumerûm format. Akkadûm syllabification follows three rules: (1) every syllable has only one vowel, (2) with two exceptions, no syllable may begin

\begin{itemize}
\item \textsuperscript{37} Lenzi, \textit{An Introduction to Akkadian Literature}, 14-17.
\item \textsuperscript{38} Though, continuous scripting is making a comeback as a result of technological platforms that require no spacing, such as websites (i.e., http://www.momthisishowtwitterworks.com/), email addresses (i.e., profheatherburrow@gmail.com), and twitter hashtags (i.e., #caseofthemondays). Digital natives are also more naturally using pseudo continuous scripting with logogram-like elements in text messages (i.e., jsyk ill b L8 so sorry cu in 5 😊).
\item \textsuperscript{39} This is why I have chosen to capitalize nouns and separate words in Akkadûm, for ease of reading.
\end{itemize}
with a vowel, and (3) no syllable may begin or end with two consonants. These rules aid in the parsing of words.

The lack of written phonological boundary markers does save space logistically, which is important when using a clay writing surface—too big and the tablet becomes bulky, heavy, and hard to manage. It also more closely mimics continuous speech. Other ancient writing systems also used this format as the default norm, including Ancient Chinese, Ancient Arabic, Classical Greek, and Classical Latin. Today, Thai, Burmese, Javanese, and other Southeast Asian languages still use *scriptio continua*, as these languages also have very limited, simple combinatory rules, sounds found only at certain word edges, vowel harmony, and certain tones that serve as word boundary markers that help with parsing to ensure easy comprehension.

Šumerûm and Akkadûm also share some of these same traits which compensate for a lack of written phonological word boundary markers.

Most readers of Akkadûm texts would have been familiar and in many cases have memorized well-known texts. But this lack of word and sentence parsing forced many readers and performance-based speakers to determine word partitions, pauses, tone, and inflections. Thus, they had to be more aware of the context and meaning of the text as a whole. This continuous script parsing also encourages contextual, complex mental attention and processing of the sentence, similar to the Akkadûm way of word meaning processing. In the case of the Kaldi peoples (Neo-Bbl), they were linguistically programmed to be attuned to the full context and the continuity of components.

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40 Huehnergard, AGA, 3.
A third area of ethn pragmatics which relates to our discussion involves the idea of authorship and subsequent plagiarism. In general, professional scribes who copied tablet texts and authors of most other literary tablet texts remain anonymous, as “claims of authorship in the modern sense did not exist in ancient Mesopotamia.”[^42] Scholarly texts related to epics, legends, histories, and medical and divinatory practices remained nameless and thus a part of the stream of tradition. In American culture today, authorship is important, often required, and desirable, as it is connected with our valuing individualism and creativity. This absence of someone taking credit for the composition in Akkadûm texts would seem to reflect a more collective identity. As van der Toorn explains, these editors and composers “did not write as individuals but functioned as constituent parts of a social organism.”[^43] Though it is also true that many economic, administrative, or royal writings were often impressed with a seal which acted like a signature, marking the identity or authority of the writer in those specific contexts.

Similarly, some Assyriologists speak of plagiarism as characteristic of the Akkadûm written textual tradition.[^44] If texts were purposefully copied and composed anonymously how can there be plagiarism or the claiming of another’s work as one’s own original work. These ideas will be explored further in chapter seven on the deep-level perceptual presets of a lifeframe.

A fourth area of ethn pragmatics relates to the perception of linguistic power. It was believed that spoken, sung, or written words have power—not just to express ideas or move listeners—but to cause associated actions, even existence of associated realities. As Georges

[^42]: Lenzi, *An Introduction to Akkadian Literature*, 27.
[^43]: As quoted in Lenzi, *An Introduction to Akkadian Literature*, 27. Original source comes from van der Toorn 2007, 47.
Contenau explains it: “Since to know and pronounce the name of an object instantly endowed it with reality, and created power over it, and since the degree of knowledge and consequently of power was strengthened by the tone of voice in which the name was uttered, writing, which was a permanent record of the name, naturally contributed to this power.”

Inscribed names and messages on statues, seals, and wall reliefs were seen as agentially enlivening and empowering the referent, granting the person or message posterity and eternity. These texts were not just preserved and revered for their inherent power, they were sometimes disempowered through destruction, effacement, or addition. Unlike modern iconoclasm which destroys cultural icons (Berlin Wall, World Trade Center) as a symbolic act, ancient peoples’ iconoclastic acts sought different goals. Many adversaries intentionally smashed, sunk, burned, or mutilated tablets, stelae, and inscriptions as symbolical, magical, and performative acts to destroy the power of the named person and messages these objects contained. Curses were erased to obliterate their potency, names were notched out to expunge the person and memory of the person, and treaty tablets were literally broken to ‘break’ the agreement. Sometimes a victorious adversarial ruler would incise his own superimposed inscription of his name and a dedication to his god on the plundered textual object, making its power now his power.

Aššur-bāni-apli’s scribes all added a colophon postscript to copied texts which read: ‘belonging to the palace of Assurbanipal, king of the universe, king of Assyria.’ This was not a library stamp of copyright. It was his way of owning the power of the words of all these texts.

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Likewise, it has been noted that many texts display alliteration, assonance, paranomasia, repetition, and particular layout structures. While these polysemic literary features contributed to the texts’ creativeness and memorability, these features were also seen to heighten and intensify the textual power, as if these repetitions of similar phrases and sounds in specific structural relationships on the material tablet amplified, unleashed, or harnessed the power of words. Moreover, the ability of Akkadûm to be polyvalent regarding meaning because cuneiform signs and words can simultaneously represent determinative, logographic, syllabic, or numeric values added to the peformative power of the language (i.e., the sign can mean determinatively DINGIR = deity, logographically AN = šamû or above world, syllabically ‘an,’ or numerically 60). The resultant potential for multiple meanings added strength to the powerful words, “for they multiply the agency, effect, and perceived power of the living word or sign.”

For example, polysemy empowers a first millennium Akkadûm incantation against the demoness Lamaštu. It reads: ušēšiaši a-pa-ni ušahlipašši šé-er-re-nim (Yale Oriental Society 11:19.13–14). The incantation allows for multiple readings of most of the words, as in: they-caused-repulsion-her window/cane-brake they-made-slip-through-her/they-caused-indicted-her door-pivot/snake/steppe. Lamaštu is not only repulsed from the place through the window or cane-brake by means of slipping or indicting, but she is also sent back to the possible places from which she came, whether it be through the door, a snake, or the steppe.

A final area of ethnopragnomics relates to the use of a special linguistic style, Šumerûm EME.SAL (‘tongue-refined, ‘tongue-highpitch, or ‘tongue-narrowed’). It is the refined, narrowed, and ingratiating speech associated with women, which has a distinct phonology

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48 Lenzi, An Introduction to Akkadian Literature, 44-67.
51 Example comes from Noegel, 148.
(different words but similar grammatical structure) from the main Šumerûm dialect, EME.ĠIR (‘tongue-native’). This genteel style for feminine requests seems to have been first used for direct speech by divine and human women in the third millennium BCE in literary texts. But by the twenty-first century it became the cultic language sung by the intercessionary experts to appease, praise, and please the divinities in order to guarantee the divinities’ continued benevolence towards humans and the well-being of the community. These mostly male prayer performers were the only professional experts or cultic functionaries to use Šumerûm EME.SAL—akin to Catholic priests continuing to use Latin in mass services as part of the liturgy. By the first millennium Kaldi Empire (Neo-Bbl) period, only prayer professionals were trained in it for daily, deferential service to the deities mainly in the temple’s inner shrine.52

This special, ingratiating style of speech or song toward divinities further set the divine world apart from the human world. It highlights the importance of the affective power of special words and the prominence of orality and songs in their ritual practices. The special language sung along with music aided in remembrance of the necessary prayers. But it also reinforced the need for humans to appease the divinities with special linguistic means for the divinities to continue to operate within their jurisdictions in order for cosmic maintenance to occur.

Ethnomorphology: Tri-consonantal Roots and Gender-Inflection

Ethnomorphology is the study of culturally salient productive structures of words. All languages have differing morphological structural properties which concern the internal structure of words. Semitic languages have a systematic morphology which utilizes tri-consonantal root morphemes

to derive related words. Their inventory of lexical vocabulary is organized by this morphology so that words fall into ‘root families.’ In this case, all roots are modified in specific patterns and do not involve concatenation of morphemes. Thus, the Akkadûm root š-ṭ-r generally means ‘to write’ and produces šaṭāru (to write), išṭur (he wrote), šāṭir (writer), šaṭárum (writing), or šuṣṭuru (to have a tablet written). This causes the mental processing system to search for and focus on the three consonantal root letters for word recognition. The whole context of the word is given focus.

However, the morphology of a language like English consists of a linear and sequential concatenation of prefixes and suffixes to a base stem morpheme, which is often a word as well. Thus, the base ‘scrib’ produces describe, inscribe, postscript, manuscript. This causes the mental processing system to focus on the word’s linear structure for word recognition. Each part of the word is given focus in sequence.53

Akkadûm, as a Semitic language, encourages contextual, complex mental attention and processing. This has ramifications for the overall lifeframe thinking, especially what is outwardly given focal attention by someones in our worldly place (field-dependence versus field-independence) and how the components of this worldly place are perceived to be related (a continuum of substances or a collection of discrete objects). I briefly consider these areas of a lifeframe in section 7.1.

A second area of ethnomorphology concerns inflection, the change in the form of the word to mark tense, gender, number, mood, etc. There are three types of gendered languages: gender-inflected, genderless, and natural gender languages. English adheres not to grammatical gender but to natural gender in which pronouns (he, she) and some adjectives (pretty/handsome,

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bitch/jerk, ladylike/gentlemanly) reflect real-world genders of living entities. But most nouns do not encode gender, giving the language fewer gender-based distinctions—though there are still problematic areas. Akkadûm, on the other hand, is a gender-inflected language in which a word (usually a noun) requires gender agreement through grammatical marking (inflection) of other words (verbs, adjectives, and pronouns) related to the word in a sentence.\(^{54}\) Akkadûm has two genders, masculine and feminine, which are woven into the language itself. The highly gendered structure of the language makes its speakers more aware of gender, especially male gender, because it requires morphing many of the words in the sentence into a gender. Moreover, masculine singular nouns in Akkadûm have no special formal marker, no inflection (i.e., mārum or ‘son’). Feminine singular nouns have ‘t’ or ‘at’ added after the base morpheme (i.e., mārtum or ‘daughter’). Feminine nouns are derived from the masculine versions. In cases where gender is unknown or both genders are being referred to, the masculine forms are used.\(^{55}\) This generic masculine usage is meant to be inclusive, but it is often read as including only males. Thus, Akkadûm is a male-biased language, meaning that words are male unless otherwise indicated—the default, normative form is the third person male form.

The male gender is the default gender in the language, which has ramifications for the construction of the Kaldi collective identity and social structures.\(^{56}\) Male bias is built into the language and thus into the speech community’s psyche, which is the starting point of thinking, expressing, and communicating—of building a lifeframe and a culture.

\(^{55}\) Huehnergard, AGA, 6-8.
\(^{56}\) Akkadûm being a gender-inflected language also has ramifications for academia. In dictionaries, lexicons, and grammars, the third person masculine singular is the default form used for instruction and definition.
Ethnosyntax: Word Order, Definiteness, and Topic-Prominence

Ethnosyntax is the study of culturally salient productive syntactic patterns, especially word order. Proto-Semitic probably had a default verb-subject-object (VSO) order, as in: “drinks wine man.” Many ancient West Semitic languages derived from Proto-Semitic retained the VSO word order, including classical Arabic, Biblical Hebrew, ancient Egyptian, ancient Phoenician, ancient Aramaic, and ancient Ugaritic. But East-Semitic Akkadûm became a verb-final (SOV) language through the influence of isolated Šumerûm, also a SOV language, as in: “man wine drinks.” See Figure 22 for a visual representation of word order usage in ancient languages.

Figure 22: Word Order in Ancient Languages


Within SOV (and SVO) ordered languages, the subject is the first referent in the causal chain of the sentence. The someone providing the agential animating factor becomes the focal point of the sentence. This makes sense to our way of thinking, obsessed as we are with individuality and agency. It must have made sense to the Šumeri as well. And to the Šalmāt Qaqqadi peoples who adopted the ordering.
The Akkadûm language exhibited a typical SOV word order in most scribal formulaic legal and administrative documents until the Hellenistic period of the third century BCE, when Akkadûm begins to use both SOV and VSO—possibly as a result of the influence of VSO Aramaic. But variation in word order occurs in poetry, personal names, and late second millenium (Std-Bbn) prose, especially in letters and royal inscriptions, which are arguably closer to the everyday spoken language.\(^{57}\) I argue that the lean towards VSO in everyday affairs, even in earlier times, reflects its use outside Šumeri-influenced professional writings. It is also true that Akkadûm’s SOV format was still used in more formulaic literature and administrative writings until the first century CE, even though VSO Aramaic had replaced it as the spoken language during the mid-first millennium BCE, showing the continued difference between SOV formal writings and VSO everyday speech.\(^{58}\) This is similar to how Latin remained the language of learning and scholarship in medieval Europe after it ceased to be spoken.\(^{59}\)

Within VSO ordered languages, the verb is the first referent in the causal chain of the sentence. The action and function of the agential subject becomes the focal point. This also has ramifications for the subsequent lifeframe orientations, causing someones to be focused on functions and to perceive the worldly place as dynamic and full of animations of all kinds.

Interestingly, of the 1,063 modern languages inventoried about 45% are classified as SOV like traditional, scholarly Akkadûm and are found all over the world, including Japanese, Apache, Hindi, and Zuni. Only about 9% are classified as VSO today, including modern standard Arabic, Gaelic, Hawaiian, and Zapotec—though it was very popular in ancient times. Whereas,

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\(^{58}\) Huehnergard, \textit{AGA}, xxiv.

\(^{59}\) Huehnergard, \textit{AGA}, xxvii.
the SVO order found in English represents about 42% of languages today, including French, Russian, Mandarin, and Cantonese.60

A second area of syntactic pattern differences can be found in the use of definite and indefinite articles with noun phrases. Akkadûm, like most Semitic languages, has no definite article for the word ‘the’ and no indefinite article for the word ‘a.’ Likewise, Akkadûm is a topic-prominent language which organizes its syntax around the topic, establishing the context, while English is a subject-prominent language. Thus, in Akkadûm the distinction between subject/agent and object/patient is not reliably marked. CAD questionly translates the BIG example as: ‘mine (i.e., my branches) have the fruit of a big tree.’ I translated it as: ‘mine fruit tree big.’ It is unclear if I have a big fruit tree or the fruit of my tree is big. Thus, the context of the sentence and topic must provide additional clues as to meanings, making Akkadûm a highly contextual language in this way as well.

Ethnolexicology: A Cultural Keyword

Ethnolexicology is the study of culturally salient lexical items or central keywords in the culture. Building on the NSM paradigm, a cultural keyword study analyzes the culturally freighted words around which whole discourses are organized. It becomes possible to explore different macro-lifeframe’s semantic spaces through the peoples’ use of these shared, culture-rich keywords. These keywords are thus not universal semantic primes. Rather, examining a cultural keyword reveals the configuration of simple primes encoded in it. The breakdown of complex meanings

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into semantic primes allows for comparisons of lifeframe components (the logic, assumptions, and values) across cultures.

Thus, a culturally salient keyword reflects emically-based, insider understandings that many times have no perfect equivalent in other languages. They resist easy translation. Their frequency use is quantitatively high. Their meaning is central to the discussion. They are constitutive of a deep emic logic of the socioculture. They reflect and govern the shared outlook of speakers by encoding culture-specific logics that impose on their speakers a certain interpretive grid through which they make sense of the world. Importantly for my purposes, these keywords embody cultural values, orientations, and ideas—they are a clue or key to the overall macro-lifeframe. By analyzing culture-specific keywords we are able to discover and understand the ways in which native speakers construe their world(s) with words.61

Wierzbicka and others have argued that highly probably areas to discover cultural keywords of any language’s lexicon include: (1) words for cultural values, such as English ‘fairness,’ Danish hygge (‘cozy sociality’), or Hebrew hesed (‘steadfast loving-kindness’), (2) ethnosophical words, such as Russian sud’ba (‘uncontrollable life course’) or Japanese wa (‘social harmony, unity’), and (3) words for the psychological makeup of someones, such as English ‘mind’ or Russian duša (‘soul’).62

Akkadûm, being an ancient language, has a smaller lexicon or vocabulary package than modern languages. But, like any linguaculture, there exist some words which are culturally salient keywords. If a culture has multiple specialized words related to the same thing or experience, it is likely of importance. Think of all the specialized words English has to describe

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cars of different types, including sedan, hatchback, convertible, wagon, coupe, limousine, or jeep. We are a ‘car culture.’ Some other Anglo-English cultural keywords include: business, communication, competition, deadline, efficiency, empirical, evidence, fair, freedom, fun, happy, information, mind, personal, privacy, rational, rights, rule, science, self, sex, tolerance, and work.63 These are important and often-used keywords in American culture which relate to our individualistic, capitalistic, scientific, and digital aged macro-lifeframe. But not all of these keywords are found in other languages, because they do not give attention to the same things as we do.

Most WEIRD cultures, and especially monolingual Americans, assume that everyone interprets reality like we do. Thus, it is assumed that our language adequately describes reality because our language has a word for all important, known concepts. It is likewise assumed that there is a one-to-one equivalent relationship between words in different languages; they mean what we mean by the use of a certain word or phrase. Many linguists and anyone who is multilingual or a translator have rejected these assumptions. They know that often other languages have several related words for a concept when our mother tongue has only one word. For example, Greek has four words that describe different kinds of love (agápe, éros, philía, and storgē), whereas English has only the word ‘love.’ Often other languages have no word for a central concept in our language.64 This is why culturally important keywords can be illuminating.

Most collectively oriented cultures, including the Șalmāt Qaqqadi, do not have a word for ‘privacy’ or ‘personal.’65 Akkadūm also does not have a word for ‘sorry,’ ‘please,’ or ‘thanks,’

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64 E. Randolph Richards and Brandon J. O’Brien, Misreading Scripture with Western Eyes: Removing Cultural Blinders to Better Understand the Bible (Downers Grove, IL: InterVarsity Press, 2012), 70-90.
65 Richards and O’Brien, Misreading Scripture with Western Eyes, 76-77.
much like other cultures in which favors given or received are usually the consequence of kinship-based reciprocal obligations, rather than individual acts of kindness. These are not important values or styles of social interaction for them. If a culture does not have a word for something, then it is likely not of importance to them.

I posit that ‘barley’ is a keyword for the Ṣalmāt Qaqqadi, being that it was used to make most bread and beer—key items of sustenance. While English has one word for ‘barley’ and ‘rice,’ many agricultural linguacultures have multiple words for the food product in different contexts. Indonesians have a dozen or so words for rice, including sawah (rice field), padi (rice plant), beras (uncooked rice), and nasi (cooked rice). Likewise, Akkadûm has many words related to ‘barley,’ including še’um (barley or grain), iprum (barley ration), aldûm (barley reserve), karûm (barley pile prepared for storage), bît karê (barley storehouse), ikkaram (barley farmer), ikkarûtûm (barley work), and kurûmatum (barley allowance). Barley was so central that nomads were despised because ‘they know no barley.’ The barley stalk was so important to the Ṣalmāt Qaqqadi that it became a religious symbol.

Ethnophraseology: A Cultural Keyphrase

Ethnophraseology is the study of culturally salient phrases within the linguaculture. Many linguacultures have a folk term for irreversible happennings that shape peoples experiences in

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66 See Wierzbicka, Semantics, Culture, and Cognition for a general discussion of the absence of these types of verbs, 391. See Benjamin R. Foster, “The Person in Mesopotamian Thought,” in OHCC for the Akkadian absences, 123-124.
67 Richards and O’Brien, Misreading Scripture with Western Eyes, 72-73.
some way by means of outside forces not in their control—be it called fate, destiny, lot, karma, kismet, providence, or luck.\(^\text{70}\)

Regarding Akkadûm, I posit that the substantive noun šîmtu\((m)\) is an Akkadûm ethnophilosophical keyword related to this idea of uncontrollable forces. The word comes from the verb šiāmu which means ‘to fix, decree, or determine.’\(^\text{71}\) In English and the American speaking community with our can-do attitude, the concept of an external controlling force is not a cultural keyword, or even mentioned much—though one could argue the optimistic concept of ‘luck’ is a less important English ethnophilosophical keyword. But in Šumeri-Akkadi culture the experience of being shaped to some extent by external forces outside their control must be recognized and given expression. The Akkadûm noun šimtu is often translated as ‘fate,’ ‘destiny,’ or ‘divine decree’ in English,\(^\text{72}\) which is misleading.

When the concept is set before māti (of-land) or nīši (of-people) it is often translated as ‘customs or cultural conventions’ of a land or people. But most often scholars focus on the concept’s use within a certain keyphrase. The phrase is ṭuppi šīmāti, which is often translated as ‘tablet of destinies.’\(^\text{73}\) In most Akkadûm literature whoever possesses this tablet (or tablets) was the supreme ruler of the cosmos and the ultimate controller of the affairs of all other gods and all humans—which varied from Enki, Tiamat, to Marduk, depending on the time period and place.\(^\text{74}\) This special clay tablet invested its holder with the cosmic power to determine ‘the destinies’ of


\(^{72}\) Both *CAD* and *CDA* mainly define it this way.

\(^{73}\) Almost all scholars use the term ‘tablet of destinies.’ Walton, with whom I agree on the general gist of the term still translates it as ‘destinies.’ See Walton, *Ancient Near Eastern Thought and the Old Testament*, 90.

\(^{74}\) This idea reminds me of the children’s cartoon *He-Man and the Masters of the Universe* in which the hero’s possession of an object, the sword of power, makes him all-powerful. There were many times as a kid I also mimicked his war-cry, “I have the power!” in battles with my sister. The fact that the object in Akkadûm culture is a tablet is also telling, as these tablets were central to their tradition.
the world, possibly because the special tablet written with powerful words acted as a cosmic bond which linked the above-place with the earth-place and nether-place.\textsuperscript{75}

Many scholars who study Akkadi culture invariably remark on the peoples’ religion and their relationships with the deities. The Ṣalmāt Qaqqadi believed that cosmic deities were manifest in an associated cosmic element, giving the deity jurisdiction over the element’s cosmic functioning. Thus, Šamaš was the god manifested in the sun, overseeing, animating, and actively working through the solar disc and solar rays to give daylight, give warmth, and grow plants. As Walton explains it, “The sun is the manifestation of the god and the expression of the god’s attributes. The god is the power behind the sun.”\textsuperscript{76} In this view, the ṭuppi šīmāti is a tablet imbued with an impersonal, animating force that gives its possessor the ability to ordain the divine allotment of these jurisdictional cosmic operative functionings which control specific workings of the tri-partite world—making the possessor the ultimate work delegator. These operative functionings are neutral, being neither inherently good nor bad, unlike the English terms destiny and fate.\textsuperscript{77} A possible translation would then be: ‘tablet of power to decree jurisdictional cosmic functionings.’

And the word šimtu I would translate as ‘operative-functionings,’ such that šīmāt nišī means ‘operative-functionings of people,’ šīmāt šarrūti means ‘operative-functionings of ruler,’ šimatušā marṣa means ‘operative-functionings-her difficult,’ ana šimti alāku means ‘operative-

\textsuperscript{75} See Black and Green’s definition in Gods, Demons and Symbols of Ancient Mesopotamia, 173.
\textsuperscript{76} Walton, Ancient Near Eastern Thought and the Old Testament, 97.
\textsuperscript{77} The concept ‘destiny’ in English is usually applied to specific things and people, as in: “we were destined to meet.” It has an optimistic and purposeful gist, conveying that something good was or hopefully will be achieved, usually as the result of a divine being or other-worldly forces. The concept of ‘fate’ in English is usually applied to uncommon and general phenomena. It has a pessimistic, final, and meaningless gist, conveying that something bad has or will likely occur as the result of earlier causes, as in: “it is the earth’s fate.” Interestingly and provocatively Wierzbicka posits that the old English concept of ‘weird’ probably more closely resembles other languages concepts of numinous and impenetrable forces at work in an enchanted world. See Wierzbicka, Semantics, Culture, and Cognition, 65-116, for a discussion.
functionings are-going’ (it is usually translated ‘to die of natural causes’), and bīt šimti would mean ‘house of-operative-functionings.’ It is wordy, but I do not think translations need to be one word for one word when it comes to these kind of important keywords.

In sum, by examining the features of the Șalmāt Qaqqadi’s language we are better able to understand why they thought, felt, wanted, and said what they did. The structure, syntax, words, phrases, and communicative behaviors of their language linguistically programmed them to be attuned to (1) the full context via tri-consonantal roots and the prominence of topics, (2) verbal actions via VSO word ordering, (3) the continuity of substances via continuos scripting and textual materiality, (4) the standard use of maleness via gender-inflection, and (5) the affective power of spoken or written words via polysemity, collective writing, a refined language, and a cultural keyphrase.

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Not only do all minded someones possess pre-installed data like semantic primes which through low-level programmatic capabilities become the building blocks of a specific and unique language, but they possess pre-installed logical programs. As stated in discussing the mind construct, all someones possess built-in capabilities (think, feel, and want) and resultant understandings (know)—something like computer software programs with pre-installed low-level functions and outputs. All minded someones rely on these same innate mental programs, the same functional tools for mentation and cognition. One of these programs involves logical reasoning, which we will discuss next.
VI. CHAPTER SIX: LOGICS

Logic is the foundation of the certainty of all the knowledge we acquire.

—Leonhard Euler

That is the only logical explanation.

—Spock (Star Trek TV show)

All minded someones share the same pre-installed stock of semantic primes and basic mental capabilities. It is also assumed by many scholars that people everywhere in every time use these same mental tools to think the same way—that all people think like they do. Research has rather shown that there is more than one way to think, classify, perceive, and understand. While the mental equipment and toolbox of processes are universally shared, the kind of mental processes or tools likely to be applied in a situation differ. As Nisbett concludes, “If people really do differ profoundly in their systems of thought—their worldviews and cognitive processes—then differences in people’s attitudes and beliefs, and even their values and preferences, might not be a matter merely of different inputs and teachings, but rather an inevitable consequence of using different tools to understand the world.”¹

Thus, we must explore the different mental tools or programs chosen by the Kaldi to begin to understand and explain the world around them, beginning with the program they used for classifications. How the semantic primes are organized into the resultant categorizations and taxonomies can differ greatly in linguacultures, depending on the kind of classifying and attributing utilized to order thoughts, concepts, and knowledge.² All minded someones depend

¹ Nisbett, The Geography of Thought, xvii.
² The explication of the types of logical reasoning deeply involved in lifeframing depends mainly on Hiebert, Transforming Worldviews, 33-45; Richard E. Nisbett, Mindware: Tools for Smart Thinking (First paperback ed.; New York: Farrar, Straus and Giroux, 2016), 205-242; and Henrich, Heine, and Norenzayan, “The
on logic and reason, but different cultures prioritize the use of different logics to order the
thoughts of their mindscape. We first explore classifications and memberships.

6.1 Classifying Sets

I agree with Mary Douglas that all humans have an innate urge for mental and social order which
brings systems of classification into existence.\(^3\) I also agree with Redfield that we structure our
perceptions of the world around us into human-centered conceptual domains.\(^4\) Unfortunately,
both these theorists assumed for the most part that there was only one way to classify.

There are two main ways of classifying material or conceptual items: delineated or
indistinct classification. These two options are easily distinguished by the structural character of
the produced semantic set of related word meanings. Like Douglas, I assume all someones
classify based on shared schemas. But unlike her, I argue that this shared schema (i.e., what is
compared and how it is compared) differs between cultures (see section 6.5 for a discussion of
Douglas’ assumptions). In every linguaculture either delineated or indistinct classifying is the
preferred and default way of producing set categories utilized in most spheres of life.

6.1.1 Distinct Classifying and Firm Sets

Well-formed, tight, or strong sets are produced by classifying that adopts a finite number of
clearly delineated members. Members in these bounded sets are seen as possessing uniform,
definable criteria. Members cannot belong to two categories at the same time because this logic
is based on mathematical intervals, as in: \{0 or 1\}. This is sometimes called the rule of the

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\(^3\) Douglas, *Purity and Danger*, 5.
\(^4\) Redfield, *The Primitive World and Its Transformations*, 90-93.
excluded middle. It is amenable to using Douglas’ dualistic paired opposites in which membership to a set is assessed in binary terms so that an element either belongs or does not belong to one of two sets.\textsuperscript{5} Thus, members in a set are determined to be white or not white, without any intermediate categorical options. It restricts its membership options to the two endpoints of the unit interval. See Figure 23 for an illustrative example.

Delineation allows the modeling of phenomena that are perceived to possess distinct, precise, and unambiguous features. It results in bounded sets with a finite number of members within a domain. Thus, set A comprised of three members \{ @, #, $\} represents a domain range of three in which all elements equal 1 to be included in the set. It is unlike and autonomous from set B comprised of five members [red, blue, green, orange, yellow] with a domain range of five.

Modern American linguaculture defaults to using a well-formed set classificatory scheme in its modeling of the world. We prefer clear boundaries, exclusive memberships, and static domains. There is a bifurcation of the cosmos into a supernatural heavenly realm and a natural earthly realm, as well as a division of life spheres into private and public and religious and secular. Likewise, in classical music and Western music, the most common tuning system since the eighteenth century has been the 12-tone equal temperament system which divides the octave into 12 equal intervals of 1.059 which is close to a whole number with the intervals being the same in all key signatures.\textsuperscript{6} Westerners love whole numbers and distinct, equal steps.

\textsuperscript{5} It is only within delineated classifying that Douglas’ assumption about the schemata used for classifying holds true. That the structuring of experience often occurs through a system of paired opposites or antinomies, like male-female, purity-dirt, form-formlessness, being-nonbeing, order-disorder, and life-death.

6.1.2 Indistinct Classifying and Leaky Sets

Weak-formed, leaky, or fuzzy sets are produced by classifying that adopts an infinite number of indistinct members of related items, often in gradations between two polar opposites, often defined in terms of {0 to 1} where each member is given a fractional number between zero and one to represent its placement. It is based on mathematical ratios. There is an infinite number of steps included for each gradated set and between one set and another. Rather than having distinct binary membership (yes=1 or no=0), there is fuzzy graded membership (more <=1 to less >=0). Members can be permitted partial, overlapping membership because a property of the items can be possessed to varying degrees. Thus, members in sets are perceived as shading from one to another with no sharp dividing boundaries; it is an imprecise gradation of degrees. It is a continuum of white shading into gray shading into black. See Figure 23.

Fuzzy sets allow the modeling of phenomena that exhibit some kind of vagueness, imprecision, or ambiguity. Thus, set A comprises \{a, ä, ã, …, á, â\}, in which ã can be quantified
as 0.2 or weak membership. It is similar and related to set B which comprises \{i, į, ..., i, ĭ\} in which \(i\) can be quantified as 0.8 or robust membership.

Most ancient, medieval, and modern Eastern linguacultures default to using a weak-formed set classificatory scheme. There are no clear boundaries between sets and many sets are connected to one another. A binary division between the supernatural-natural, religious-secular, or private-public spheres is meaningless to this way of thinking.

The Șalmāt Qaqqadi’s default classification mode also used indistinct, graded classifying which produced weak-formed and fuzzy sets. This is unsurprising considering Akkadûm cuneiform signs could simultaneously possess logographic, syllabic, or numerical values, creating many polysemous meanings. They were comfortable with ambiguity, multiplicity, and complexity. While many Westerners are monotheists, believing in one, unique God with specific attributes, most ancients were ‘divinishistic,’ believing many someones and somethings had divine membership.\(^7\) In Șumeri-Akkadi linguaculture many hundreds of someones and somethings were included within the set of divine entities denoted by the determinative dingir, as in: dingir Anu, meaning deity Anu. These superior beings were designated as ‘divine-ish.’ Someones who were divine-like (usually termed a ‘god’ in scholarship) were perceived to be long-living, powerful, radiant, and able to transcend the earthly plane, including: (1) celestial, terrestrial, and civilizational elements of the world like the sun, a river, agriculture, or fertility; (2) lesser spirits and demons like the protective creature lamassu or the sinister creature pazûzu; (3) hybrid beings like the anzâ (eagle with a lion’s head) or kullullû (fish-man); and (4) some divinized kings, including Lugalbanda, Gilgameš, and Narām-Sîn. While a variety of someones possessed

\(^7\) Terming these cultures as polytheistic or believing in ‘many gods’ seems to be too simplistic a description in this view, considering their concept of divinity includes not only a numerical plural quantity, but a difference among these divinities regarding divine qualities and divine graded memberships.
divinity, somethings which were divine-like were rather invested with the divine quality of a
connected divine someone, including: (5) cultic objects such as idol statues, chariots, thrones,
and temples. In particular, Gilgameş is described as being two-thirds divine and one-third man.
This compositional ratio can only be the case within a fuzzy set where the boundaries between
divinities, humans, and objects is blurred.

This fuzziness can also be seen in their standard weights and measurements, which were
based on natural phenomena and our embodiment. In weights, a talent represented the load a
typical man could carry. One shekel of silver equaled one gur load of grain. In basic lengths, one
cubit represented the standard measure which equaled the length of the typical forearm. Thirty
fingers equaled one cubit forearm, one step equaled two cubit forearms, and one reed equaled six
cubit forearms. Most of these units represent ratios based on the sexagesimal or decimal systems
with a lot of fuzziness or variability of approximation for the standard unit utilized.

Likewise, regarding music, they used a heptatonic scale with seven pitches per octave
comprising five whole steps and two half steps. They employed elements of what became known
as Pythagorean tuning which uses intervals of the circle of fifths or a 3:2 ratio. Ratios and
related fuzziness abounded in their way of thinking in many areas of life.

6.2 Attributing Membership

Once a classificatory scheme has been chosen as the default, programmatic mode, the next step
is to apply members into the sets. The primes LIKE and KIND are used to determine attributes and
membership (i.e., A is LIKE B or A and B are of the same KIND). There are two forms of

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9 Lenzi, *An Introduction to Akkadian Literature*, 113.
attribution of membership to a set—intrinsic and extrinsic attribution—distinguished by how properties of conceptual items are characterized.

6.2.1 Essential, Intrinsic Attribution

Essential or intrinsic attributing utilizes inherent, essential, and personal properties of the items to define the membership in a set, which do not change. Things with the same or like kinds of essential properties get grouped together. Often, essential attribution is utilized with delineated classifying to produce very crisp sets. In this view, I would be described according to my inherent features as a brown-haired, short, female adult.

Modern America utilizes essential attribution most often. English, like many Indo-European languages, encourages a focus on nouns and attributes, having a SVO syntax. Adjectives describing attributes precede the noun it modifies and can become nouns by adding a suffix like ‘ness’ or ‘like,’ as in whiteness or dog-like. Similarly, it has been found that most Westerners teach their young children more about attribution by focusing on noun objects and their adjective properties, as in: “what’s that?” or “what color is it?” Crisp sets are likewise denoted most often by nouns and adjectives which are focused on attributes.

As an example, when given four possible items (three grown people and one growing person) and told to choose which one does not belong to the set, most modern Westerners are going to choose the child as not belonging to a set of adults. When utilizing essential attributes, the child is the oddity; it is young, small, and immature, whereas the others are old, big, and mature. When given another four possible items (a hatchet, log, hammer, and saw), most modern Westerners choose the log as the oddity which does not belong to the set of tools.\(^\text{12}\)

\(^{12}\) The study is quoted in Hiebert, 43-44. The original study was conducted by A.R. Luriia in 1976 among the Kirghiz of Central Asia.
6.2.2 Relational, Extrinsic Attribution

Relational or extrinsic attributing utilizes relational, extrinsic, and functional properties of the items to define membership, which can change. The things with the same or like kinds of relations, functions, or behavior get grouped together. To this way of thinking, all things are interrelated and objects and attributes are altered by context. Often, relational attribution is utilized with indistinct classifying to produce very fuzzy sets. In this view, I would be described in relational terms as the daughter of Bill and Idona, sister of Amanda, and from the town of Yucaipa.

Likewise, most ancient, medieval, and Eastern cultures use relational attribution, often focused on functions. Many of these cultures exhibit a VSO syntax which focuses on the verb and adverb. Most non-Westerners socialize their young children into relationships which involve verbs, as in: “I give it to you. Now give it back to me” or “say thank you.” Fuzzy sets are likewise denoted most often by verbs and adverbs which are focused on functions.

Returning to the four possible items scenario, most non-Westerners choose one of the adults as the oddity for the set. The thinking being: one grown person is the father, the second grown person is the mother, and the third growing person is their child. The additional adult, seen often as a related uncle, is not as central to the relational family set. In the second group of four the hammer is the oddity because the log is needed for fires and building and the saw and hatchet are needed to cut up the log in a functional material set. Without nails a hammer is useless. I think theŞalmāt Qaqqadi would have also chosen the third adult and the hammer as the oddities for similar reasons.

Likewise, theŞalmāt Qaqqadi attributed members to indistinct sets via relational or functional characteristics. For example, all someones or somethings which are perceived to
function in some jurisdiction to maintain order within the cosmos are considered to be divinized elements and are part of an indistinct set of divinities. Interestingly, not all celestial or terrestrial entities are denoted as a divinity with the dingir logographic determinative. In the *Enuma Eliš* story, before the heavens and earth are differientiated and any cosmic jurisdictions have been established, the two pre-existing primeval watery substances, female Tiāmat (sea waters) and male Apsû (fresh waters) passively mingle their waters and the first dingered divinities (*Laḫmu, Laḫamu, Anšá-r, Kišár*) are formed within them and arise. But these pre-existing watery substances are not denoted as divinities themselves with the dingir determinative before their names. The next few lines explain why: “When divinity not caused-to-be-manifest anyone / or not named šimati (operative functions) not šimu (operationalized) / they-formed divinity arrive-he.” Divinities are defined by the naming and instantiating of operative functions within a specified jurisdiction. Before operative functions can be instantiated for either of these primeval watery entities to classify them as functioning divinities they are both killed. Their divvied “corpses” or watery substances become celestial (rain and clouds) and terrestrial (seas and rivers) jurisdictions for their divinized offspring who are later appointed operative functions by Marduk.

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13 While most scholars transliterate the cuneiform for the third divinity as *Anšár* in which the dingir determinative is rather a syllable (an) and yet denote it as a divinity with the others with no explanation, there is evidence for the sign to be read as a double. For instance, in lexical lists, if the actual word begins with the same sign as the determinative, no determinative is used, as in: *giš-numbar* (date palm) rather than *giš-giš-numbar* (wood date palm). In this case the name would be *Anšár*. See N. C. Veldhuis, ‘Elementary education at Nippur. The lists of trees and wooden objects’, Dissertation thesis, Doctor of Philosophy (University of Groningen, Groningen, 1997), 84. In the AN = 4 Anum god-list Anšár likewise has one cuneiform sign representing one or both the determinative and first syllable, even though all other deity names in tablet one are listed with the determinative dingir. See Richard L. Litke and Yale Babylonian Collection, *A Reconstruction of the Assyro-Babylonian God-Lists, an:Da-Nu-Um and an:Anu Sá Amēli* (Texts from the Babylonian Collection, V. 3; New Haven: Yale Babylonian Collection, 1998), 20-65.

14 I base my translation on the original cuneiform transcript and transliteration by Thureau-Dangin, available here: https://drive.google.com/file/d/13BoZbQ6pv-9v7AJ-lxrWTXlhKA_t1AY0/view/.
Within scholarship, Tiāmat and Apsû are usually termed primal creatures, chaotic monsters, demiurges, or primordial deities, with no attention paid to the lack of the divinity classifier to understand their identities and roles. Most scholars view them as deified personifications of the salt and fresh waters existing at the beginning of the creation of the world because they are described as having emotions, having bodies, having a radiant ‘aura’ or melammu, having a spouse, having viziers, and performing actions like many of the great divinities.¹⁵

Yet, as Karen Sonik notes, only Tiāmat, Apsû, and all but one of the monsters¹⁶ created by Tiāmat to battle deity Marduk lack the dingir determinative denoting they are divinities in the story.¹⁷ I also note that besides deity Qingu—who accepts the tablet of power to decree jurisdictional cosmic functionings and then is also killed by deity Marduk—only those someones who lack the dingir sign are bound and killed (Tiāmat, Apsû, and the monsters) in the story, never to have had any jurisdictional functions instantiated for them. Apsû and Tiāmat are never attributed divinity with the dingir sign before their names which would add them to the indistinct set of divinities because they always lacked the functional and extrinsic attributes required; they

¹⁵ Bottéro terms both Apsû and Tiāmat ‘gigantic divine liquid masses’ in Religion in Ancient Mesopotamia, 75; Horowitz terms both ‘deified waters’ in Mesopotamian Cosmic Geography, 109-111; Lenzi terms both ‘primeval deities’ in An Introduction to Akkadian Literature, 85; Black and Green term them ‘personifications’ of fresh and salt waters in Gods, Demons and Symbols of Ancient Mesopotamia, 27, 177; Walton terms them ‘primeval waters’ in Ancient Near Eastern Thought and the Old Testament, 188; and Stephanie Dalley terms Tiāmat as ‘salt water personified as a primeval goddess’ in Myths from Mesopotamia, 329; Alasdair Livingstone terms them ‘primeval monsters’ in Mystical and Mythological Explanatory Works of Assyrian and Babylonian Scholars (Winona Lake, IN: Eisenbrauns, 2007), 79; Douglas B. Miller and R. Mark Shipp term them both ‘personified as a primordial god or goddess’ in An Akkadian Handbook: Helps, Paradigms, Helps, Glossary, Logograms, and Sign List ( Completely revised and expanded ed.; Eisenbrauns, 2014), 88, 150.

¹⁶ The monster Laḫamu is excepted if the frontal cuneiform sign is transliterated as the dingir logographic determinative (dehyLaḫamu) rather than the syllable ‘an,’ which is how most scholars transliterate it. Though I am inclined to transliterate the monster’s name as ‘Anlaḫamu’ to be consistent, making the monster not a divinity in keeping with the rest of the monsters listed. It would also differentiate this character from the second divinity formed in Tablet One, Line 10 who is usually identified as dehyLaḫamu.

always remain uninstantiated, formless, and undifferentiated watery substances without a
specified cosmic jurisdiction to function within until their deaths. In this explanatory view I
disagree with most previous scholarly translators who have regarded them as deities or pseudo-
deities. In the text they clearly are not. As all divinized characters are viewed by the Ṣalmāt
Qaqqadi as part of an indistinct set with functional or relational membership, it is an easy
mistake to make.

Using both classification and attribution yields four possible combinations, though only
the fully crisp set of the upper left quadrant and the fully fuzzy set of the lower right quadrant are
typical. See Figure 24 for an illustrative and representative typology.

*Figure 24: Hiebert's Typology of Sets*
Note: From Hiebert, *Transforming Worldviews*, 36.

6.3 Rank Ordering

It is also possible to order the members within a set, once the set is formed and the members applied. There are two forms of rank ordering of members within sets—linear or relational ordering—distinguished by the structure of the relationships produced.

6.3.1 Linear, Progressive Order

Linear rank ordering of conceptual items follows a step-by-step sequence with a beginning and an end point, creating a vertical or horizontal hierarchical continuum in which each item has one predecessor and one successor. In this progressive type, the ordering of the elements matters, producing a patterned sequence or permutation.

Western and American culture often default to this way of thinking. We stand in lines and expect to be served according to the ranked order of the line. We like to order things alphabetically, temporally, topically, or geographically which often produces a linear or hierarchical product. Many moderns still hold to the classical Greek model of the order of things in our reality, termed the *scala naturae* or ‘chain of being’ in which all beings are hierarchically linked to form one interconnected chain, from the most basic plants to animals to humans to angels to the very highest and most perfect, which is God. A different systematic, hierarchical ordering can be seen in the first modern scientific biological classifications by Linnaeus in the mid 1750s of all living things based on shared, intrinsic attributes. There are eight levels of rankings, developing from the general to the specific. Thus, humans share a domain (Eukarya), kingdom (Animalia), phylum (Chordata), class (Mammalia), order (Primate), and family
(Hominidae) with chimpanzees, but differ regarding genus (homo) and species (Sapien). In the Linnaean system, humans are classified as a kind of animal.18

6.3.2 Non-linear, Relational Order

Non-linear rank ordering involves multidirectional sequencing, creating a web or tree of interrelated concepts or categories. In this type, the positional ordering of elements is less important than the relations among related items.

Many Asian and non-Western cultures default to this way of ranking. They do not stand in lines but besiege a front counter from all sides. They do not default to a linear, progressive sequence for ranking items or explaining causes. They like to order things by relational importance which often produces a matriced network.

There is a vast amount of long lexical lists in the cuneiform corpus, which arise with the first writings. By the first millennium many of these lists included thousands of entries, always listed in the same order. Some lists, like The Standard List of Professions, originated circa 3100 BCE and was copied for over 1,500 years, even after many of the professions it listed no longer existed. Markus Hilgert argues persuasively that these inventoried, classified lists of signs and words contain practical, explicit linguistic knowledge (about the word and possibly a bilingual translation from Šumerûm into the equivalent Akkadûm) and ideological, implicit representational or conceptual knowledge about the relations between the items based on their arrangement. Where other scholars have seen only disorder, inconsistencies, incompleteness, randomness, or a simple hierarchy Hilgert noticed a complex pattern in the arrangements. Most lexical lists exhibit a rhizomatic network of knowledge which represents an expansive, dense,

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multidimensional, transversal, and intertwined structure whose nodes branch out in all directions (see Figure 25). It is characterized by variability, openness, and complexity. Yet the tacit reasoning basis for the clustered connections (i.e., based on graphemics, grammar, or semantics) remain unmarked and unexplained within the lists.19

This non-linear rhizomatic structure is very different from an analytical, hierarchically structured, and unified tree model with a base root which propagates dichnotomously outward to produce well-ordered branches.

Figure 25: Rhizomatic Structure Showing Links between WWW Pages

Note: Source image from Hilgert. The structure references the “Linking Open Data” project.

Examining other complicated lexical lists reveals this rhizomatic structure as well. Reconstructions of a 2,000 itemized Šumerûm god-list (AN = 𒀀Anum) from the Akkadi dynasty (Old-Bbn) shows that it is an explanatory, encyclopedic list which seeks to clarify the jurisdictional functionings and familial relationships between the hundreds of members of the divine set or pantheon. The deities are relationally arranged according to familial circles to produce multiple radials in a rhizomatic structure, as with other lists, like those for temples. The supergods of the major celestial and terrestrial functions, such as Anu (sky-heaven), Enlil (wind, air, and storms), Inana (love, beauty, war, and fertility), Enki (subterranean freshwater), Nanna (moon), and Utu (sun), provide the major divisions in the series. Thus, Anu’s familial group takes up lines 1-95 on tablet one. Most of the deities listed are lesser divinities who are explained to be subordinate familial members within the circle of an important god, including the parents, spouse, children, and servants. Other such god-lists arrange the deities and their familial circle in different relational orders, depending on the time period and region.

6.4 Taxonomic Structures

The previous default programmatic classification mode, attributive mode, and ordering mode produce taxonomies (from the Greek, meaning ‘arrangement method’) from the classifications, attributions, and orderings of items that tell the place and relation of things. There are two main types of taxonomies: formal and folk. In both types, some background knowledge of the relevant items is needed for the creation of a taxonomy.

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21 While no other scholars have termed this list’s structure as rhizomatic, all agree that it is based on familial relations, which if graphically illustrated would show such a structure. See Bottéro, Religion in Ancient Mesopotamia, 48-55; Hrusa, Ancient Mesopotamian Religion, 39. Temple lists are also often arranged according to city-place relations (termed ‘geographical arrangement’) or according to divine owner (termed ‘theological arrangement’).
6.4.1 Formal Arrangements

Formal, scientific taxonomies utilize low-context, highly abstract and firm categories based on intrinsic attributes, like those found in crisp sets with distinct classifying and essential attribution. They are designed to tell us about the objective nature of reality and make distinctions between sets in the same domain (i.e., fruits and vegetables) based on scientific knowledge. If there is a linear hierarchy, all members of any lower general levels are directly connected to members of all associated higher orders. Single classification structures unifying many elements of the world eventually arose, beginning with the Greeks, which resulted in theories about the world with real explanatory power. Formal taxonomies are commonly used in science and philosophy but are becoming more common elsewhere.

We have already discussed the first formal taxonomy, Linnaeus’ biological classification system. Even one of the first questions in the ‘Twenty-questions’ guessing game often utilizes Linnaean’s formal, systematic categorizations: ‘is it animal, vegetable, or mineral?’ Most Westerners utilize formal taxonomies in professional areas of life that are often said to represent universal categories, including in education (Bloom’s taxonomy of learning), psychology (Maslow’s hierarchy of needs or Myers-Briggs personality types), and chemistry (periodic table of elements). As can be seen, there is much focus on humanity, causing knowledge of humans to dominate the inferential reasoning.

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22 Goddard points this out in Semantic Analysis, 198.
6.4.2 Folk Arrangements

On the other hand, folk taxonomies utilize high-context, highly functional organizations, like those found in fuzzy sets encompassing indistinct, gradated categories with functional membership. As Hiebert notes, all sociocultural groups use folk taxonomies in everyday life. These structures communicate functional relations between items based on social, experiential knowledge. Like formal taxonomies, they proceed from generalizations to specifics, often in hierarchies.

For example, many non-Western folk biological taxonomies differentiate between things that can be eaten and things that cannot be eaten, things that can be used as a medicine and things which cannot, or between raw things and cooked things. These functional groups of items usually contain an assortment of things, including biologically and/or culturally edible things like grains, fruits, nuts, vegetables, insects, birds, and animal meat. There is much focus on the natural world and living things, causing knowledge of plants, animals, and terrestrial elements to dominate the inferential reasoning. Yet, in many of these cultures there is no generic life-form word for ‘animal,’ only words for groups of animals with certain functions, such as animals that can be eaten, animals that are livestock, or animals that are wild.

Many of the Şalmāt Qaqqadi’s folk taxonomies can be seen within the lexical lists of grouped items with specific functions which were based on experiential knowledge. There are a number of lexical lists for domestic animals classified into ovine (sheep, goat) and bovine (cattle, donkey) species—the livestock that had important relational and functional significance to them. While they used many animal-related determinatives, including ones denoting fishes (kušu), birds (mušen), and sheep or goats (udu), Akkadûm has no generic word meaning ‘animal’ with which

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to attribute all living creatures. The closest equivalent according to AGA is \( \text{nammaštû}(m) \) which loosely translates as ‘moving beings’ in CDA. Another possibility is \( \text{umāmu} \) which is often translated as animal or beast; it is used of domesticated, wild, and fantastical creatures alike.

There are also a number of medicinally related lexical lists that represent folk taxonomies related to health treatments. They detail the appearance and therapeutic importance of the listed substances for many treatments, including the list URU.AN.NA = maš / itakal.\(^{24}\) The list is grouped according to determinatives representing different base substances, including plants (\( ûr \)), herbs (\( šîm \)), wood (\( giš \)), salts (\( mun \)), minerals (\( na₄ \)), insects (\( nim \)), flying locusts and birds (\( baras \)), oil (\( i \)), and fats (\( i.udu \)).\(^{25}\) Likewise, Akkadûm has no generic word meaning ‘plant.’ The closest equivalent is \( \text{šammu}(m) \) which loosely translates as ‘grass; herb.’ It could be argued that Akkadûm does not need these generic terms because there are no formal taxonomies that require a word to describe all things that are a certain like type or kind of life-form.

Besides lexical lists, the use of determinatives in general gives insights into their taxonomic structures. It has already been shown that Akkadûm does not possess a categorizing word meaning KIND that is used to build taxonomies, but rather uses determinatives before or after nouns as a classifier expression attributing membership to an informal, folk category, as in: \( bābilîm^{ki} \) (Babylon\(^{place} \)). Their folk taxonomic system does not formally or comprehensively classify things. The Şalmât Qaqqadi did not use any all-encompassing determinatives (their only method of direct classification) to classify and denote membership for all things which were considered animals, plants, or elemental natural substances. For example, all known physical, material substances are not grouped together into an overall taxonomy denoted by a


determinative in the language. Only important construction related substances worth noting, including wood, reed, stone, leather, wool, and metal, each with their own specific determinative to denote the thing in question is of that particular substance, regardless of its form. For example, they used a determinative (giš) to denote a variety of woodish things, whether they were natural trees, parts of trees, or drugs from trees (i.e., thornbush, cypress, forest, orchard, almond) or manmade transportation (i.e., boat, chariot, wagon), manmade furniture (i.e., vessel, table, door), or manmade tools (i.e., plow, bow, shovel).26 Likewise, they classified and attributed membership to named rivers and canals, as in: ùdPurattu (river Euphrates), but not all water bodies, waterways, or watery substances. They were more interested in grouping things—mostly continuous substances like those which have woodishness rather than discrete objects—that they knew could be used for certain functional purposes.

6.5 Order and Disorder

For Mary Douglas, all cultures have principles of patterning on which they construct their universe. Douglas argues that all humans classify based on a shared schema, but in organizing experience the human-devised classifications produce aberrations, anomalies, and ambiguities, labeled dirt that is out of place. It is disorder that does not fit the created schema. I would argue that Douglas was assuming that all cultures utilize crisp sets and interval logic, especially if using antinomies and dichotomies. But what if a sociocultural group utilizes fuzzy sets and ratio logic? Is there any dirt in such a classificatory system?

I posit that there is dirt in any conceptualized classification of material and conceptual knowledge of reality, as I agree with Douglas that while there is no absolute dirt, no specific kind...

26 Veldhuis, 'Elementary education at Nippur. The lists of trees and wooden objects', 84-86.
of disorder or pollution that is universally recognized, all classificatory systems have residuals, breachers, and one-offs. No system is perfect. Though, I would also posit that any culture utilizing fuzzy sets and ratio logic as their default modes will have less dirt to reclassify, exile, eliminate, or avoid through ritual means. It would seem that the main area of maintained social purity in the Šumeri-Akkadi linguaculture relates to the temples cults, the places where divinity intersected with humanity, specifically the temple buildings, idol statutes, and temple personnel. What was part of the divine world could be polluted by what was part of the human world through interaction, presence, or handling of divinized someones or somethings. Pollutions that required purifications included building work on a temple, repairs to a divine statue, when a divine statue participated in a festival outside the temple, or the induction of new temple personnel. Rituals (sacrifices, sung laments, water washings) were performed to deal with these pollutions. This is thought-provoking, but requires further research.

6.6 Logical Reasoning

At a fundamental level, lifeframes are shaped by how people reason and form mental sets to create semantic spaces. Each sociocultural group chiefly utilizes either delineated or indistinct classifying, intrinsic or extrinsic attribution, and linear or relational ordering as their default way to understand and organize the world in their mindscape. Similarly, each sociocultural group defaults to utilizing certain logical reasoning within certain spheres of life. These defaults greatly influence and are influenced by what is perceived in the world and how it is perceived, the second-level perceptions of the resultant lifescape.

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There are three main kinds of logical reasoning, distinguished from each other by the use of crisp or fuzzy sets. All types of reasoning can be applied to the same problem, generating different conclusions: a formerly valid one (analytical), a useful one (relational), or a similar one (comparable). As with all other options, while all sociocultures can and do utilize all options, one option is always the default mode.

6.6.1 Interval Logic: Abstract, Algorithmic Reasoning

Interval reasoning regarding any concept, phenomenon, problem, or situation is based on precisely defined ‘crisp’ sets with each set possessing a finite number of clearly delineated members with essential attributes.

The main form of interval logic is abstract, algorithmic logic.\(^28\) It involves following an ordered, step-by-step, strict, limited set of instructions, an algorithm, on crisp data which produces one correct, unambiguous answer. It follows four argumentation principles: objectivity, neutrality, internalism, and universalism. (1) Regarding objectivity, it positions the observing, independent thinker outside the picture as an unrelated, objective, and impersonal analyzer. It separates knowledge gained by autonomous reason from knowledge gained by external authority and tradition. (2) Regarding neutrality, this detached, objective observer must set aside subjective feelings, thoughts, and wants to process the data using abstract reasoning. It separates the knower from the known. (3) Regarding internalism, it uses axiomatic rules that can be described in purely abstract terms without any reference to real-world situations or facts. It

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\(^{28}\) There are also three flavors of this logic. There are two kinds of deductive (or top-down) logic: syllogistic and propositional. Syllogisms are used for categorical reasoning: if Category A and Category B are the same, and X is an A, then X is a B as well. Propositional logic utilizes argumentative premises to produce valid conclusions that follow necessarily from the premises outlined. There is also inductive (or bottoms-up) logic which reasons from observations to general conclusions.
separates content from context. (4) Regarding universalism, the answers produced are seen as universally applicable. This often leads to creating formal taxonomies to represent these discoveries.

Western culture, especially since the Enlightenment, has defaulted to a more abstract, algorithmic style of reasoning in many areas, especially the hard sciences. Westerners are more likely to default to relying on these self-contained rules and identity attributes in reasoning. Most philosophical propositions in the social sciences and humanities are also produced with this logic. In academia, we call it critical thinking.

Many post-modernists have criticized the tunnel vision and reductionism of this form of precise, self-contained, abstract logic. They have opted to reinvigorate ratio logic in which there is no objectivity, only perspectives, no facts, only interpretations, no universal truths, only social constructions. To them, as to many ancients, reality is complicated, multi-faceted, and ultimately fuzzy.

6.6.2 Ratio Logic: Situational, Relational Reasoning

Ratio logic regarding any concept, phenomenon, problem, or situation is based on ‘fuzzy’ sets with relational membership. Rather than think in abstract, detached contexts about crisp phenomena, these thinkers default to thinking in concrete contexts about fuzzy relations.

Thus, the main form of ratio logic is situational, relational logic. This form of logic involves an orientation to the whole context, including a focus on relationships and a preference for explaining events by such relationships. Parts are meaningful only in relation to the whole. It positions the observing thinker inside the center of the picture, where she must understand the situation using her personal relations to process the data. To have some knowledge of someone
or something is to know it personally and relationally, not abstractly or objectively. Her position and participation shapes what relationships she observes. It leads to a human-centered view of things in which what pragmatically works becomes the basis of knowledge; it builds up into traditions.

It follows three argumentation principles: change, irregularities, and relationships. (1) Change is inevitable and constant. The world is not static but in flux; concepts reflecting reality are fluid and subjective. (2) Because the world is constantly changing, anomalies and irregularities are constantly being produced. (3) Nothing exists in an isolated and independent way. To know someone or somethings we must attend to all its relations. Relationships are key.

This form of contextual reasoning is based on concrete situations and utilizes concrete thinking. It is not formal, deductive or inductive, or amenable to abstractions. It produces relational inferences, not one universal answer. Its goal is to reach useful conclusions, not valid truths. It allows for multiplicities, contradictions, and fragmentations. It embraces subjectivity and toleration of many ‘truths.’

Modern traditional non-state societal justice utilizes situational, relational reasoning to repair societal harm. Legal cases are often decided on a case by case basis with the aim being compensation if possible (usually with goods), emotional reconciliation between the two sides, and the restoration of the previous relationship. No legal precedents are invoked with the aim being to establish guilt or innocence and access financial damages which will deter others.29 They are likely to default to relying on contextual embeddeness and relational roles and obligations in reasoning.

Likewise, the Ṣalmāt Qaqqadi often defaulted to using situational, relational reasoning, which is not surprising considering how much their language requires contextualized readings to determine meaning as a result of its high frequency of polyvalent and homophonic signs. This situo-relational reasoning is reflected in their legal system. Outside of court proceedings, arbitration utilizing joint decision-making by a group of peers familiar with the situation and disputants was often used to resolve legal disputes which relied on conciliation and negotiation between the parties involved.\textsuperscript{30}

Within courts, situo-relational reasoning also applied. Over forty legal texts have been found, including from the Kaldi Empire (Neo-Bbl), though many are fragmentary. The most complete and famous one is the Code of Hammurabi from the Amurri-Bābilim Kingdom (Old-Bbl) in the mid 1700s BCE. With more than 3,500 lines inscribed on a stele, it is the longest and best-preserved legal text from this culture.\textsuperscript{31} It contains 282 ‘articles’ of if-then conditional statements that describe a concrete situation in the past or present tense, followed by a result in the future tense. For example: ‘if of awīlum (free male citizen) or ox or sheep or donkey or pig and or boat he-had-stolen if of god if of palace as-far-as thirty possess he-will-give; if of muškēnim (male subjects) as-far-as he-will-replace; if thief of given not possess he-is-killed.’\textsuperscript{32}

Much later in the text another similar example is given: ‘if of awīlum (free male citizen) plough for fields he-had-stolen; 5 shekels silver to owner plough he-shall-give.’\textsuperscript{33}

\textsuperscript{31} Van de Mieroop, \textit{A History of the Ancient Near East}, 133-134.
\textsuperscript{32} Example comes from paragraph 8 of the code. Transliteration based on Huehnergard (2013, p. 88). See Boban Dedović, “Electronic Hammurabi: A Digital Version of the Law Code of Hammurabi,” OMNIKA Foundation, n.p. [cited July 6, 2023]. Online: https://ehammurabi.com. Bottéro translates it: ‘If man stole either ox or sheep or ass or pig or boat… belonging to private citizen: he shall make good ten times the value of what he had stolen. If thief does not have sufficient means to make restitution he shall be put to death.’ \textit{Mesopotamia}, 162-163.
\textsuperscript{33} Example comes from paragraph 259 of the code. Transliteration based on Richardson (2004, p. 112) which can be found at eHammurabi at https://ehammurabi.com/. Bottéro translates it: ‘If man has stolen a plough from a field: he shall give five shekels of silver to the owner of plough.’ \textit{Mesopotamia}, 163.
Most scholars see the differing ‘then’ clausal results as inconsistent or contradictory and argue that it was not a normative, authentic, enforced law code for many reasons. As Van de Mieroop recently explains, “historians today are unclear about why it was created and how it was used in antiquity.” Yet Van de Mieroop asserts a few sentences later, “Hammurabi did not codify a new body of laws for his kingdom to guide legal proceedings and inform citizens of their rights and duties.”

Most Assyriologists tend to agree with Van de Mieroop’s conclusions. According to most scholars, this ‘code’ did not contain ‘real’ casuistic laws that could be re-applied. Nor did the code cover all areas of society. Nor did it distinguish between civil and criminal offenses. Nor did its cases compare to other code’s cases. Nor were people treated equally. Nor did it give names of victims or perpetrators. Nor did it give judicial verdicts or deter criminals. It only contained highly particularized, concrete situations that could not be generalized. Thus, some view it as representing the king’s inspired, perpetual, and ideal royal propaganda on how decision-making should be formulated by future rulers. Others view it as a scholarly treatise on law used to train scribes since it was copied so often and so long. It is often called ‘illogical,’ but this is only so according to Western ways of thinking.

If we consider this ‘code’ in light of situational reasoning on the basis of relationships, then it makes more sense. The concrete descriptions provide the context and give focus to the

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36 Bottéro goes so far to say that the code is “certainly not a code in the true sense of the word…What makes the assimilation of the “articles” of the “code” with laws inexcusable is first their content, then their illogicality, and finally their manifest inefficiency.” *Mesopotamia*, 161-162. Note the use of quote marks by Bottéro.
relationship in question. In the above two examples, the free citizen (awīlum) and restricted, dependent subject (muškēnum) provide the focus regarding the thief’s obligations. Both terms do not designate an absolute category of social status. They are always employed in a relative, contextualized sense, so that someone could be a dependent muškēnum in one situation and an independent awīlum in another situation. The term awīlum denoted an autonomous citizen who possessed authority over himself in the context, often used of rulers, divinities, and heads of households. The term muškēnum denoted any male ruled in some way by another within the context, such as a subject of the ruler who was a citizen of the state (who could also be a free awīlum) or the sons of an awīlum. While a ruler could be an awīlum, he could not be a muškēnum, because he was not a subordinate subject to any other person (though the ruler could be termed a wardum or ‘servant’ of the gods). The higher distinction of an awīlum does not rest on greater freedom, wealth, or lineage; it rested on sociopolitical power; they were part of the ruling elite. “The muškēnum was subordinate to authority, while the awīlum exercised it.”

In the above situations the first theft was of something belonging to an awīlum, temple, or palace, requiring greater compensation and possible execution. Additionally, the first situation’s theft of draft livestock or transportation is harder to restore and is more important for livelihood than the second situation’s tool in an agricultural society, possibly explaining the harsher compensation in the first instance to alleviate the social harm done. The differing results based on the victim’s and the thief’s status makes sense in relational reasoning within a hierarchical society.

Thus, any theft, insult, injury, or damages incurred by an awīlum by the actions of a lower status person in the situation incurred greater penalties (the greater the status difference

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38 While Van de Mieroop claims this is not a legal code, he does recognize the relational pattern of ‘social differences’ contained within it. King Hammurabi of Babylon, 105-106.
incurring greater penalties), often in the form of bodily injury or execution for the perpetrator.
For example, “if servant of-awīlim cheek son of-awīlim struck, ear-his severed.”\textsuperscript{39} The social
difference between a servant and the son of the ruling elite required irreversible bodily injury.
But if a lower ordered ruling elite was the perpetrator against a higher order ruling elite member,
the social difference was minimal, requiring temporary bodily injury. As in, “if awīlum cheek of-
awīlim of above great struck, in assembly with whip\textsuperscript{leather} of-ox one-by-one sixty he-will-be-
struck.”\textsuperscript{40} In the reverse, if the perpetrator was of higher status than the victim, the outcome was
minimal compensation. For example, “if [awīlum] tooth of-muškēnim knocked, one-third mina
silver he-will-pay.”\textsuperscript{41} When the two parties involved were of similar relational status the outcome
often reflected the crime. Whatever crime occurred (theft, insult, injury, damages) was dealt to
the perpetrator—so that “if awīlum tooth of-awīlim corresponds-him knocked, tooth-his will-
knock.\textsuperscript{42} Or minimal compensation was given. As in, “if son of-awīlim cheek son of-awīlim of
same him struck, 1 mina silver he-will-pay.”\textsuperscript{43} It is the relationships defined by social status in
these situations that explain the details and the outcomes.

Ḫammurāpi in his role as ruler saw himself as reproducing the cosmic order of divine
justice in his kingdom. As the epilogue to the main text states:

\begin{footnotesize}
\begin{enumerate}
\item Example comes from paragraph 205 of the code. Transliteration based on Huehnergard (2013, p. 34)
which can be found at eHammurabi at https://ehammurabi.com/. Huehnergard translates it as: “If a man’s slave has
struck the cheek/side of a member of the awīlim class, his ear will be cut off.”
\item Example comes from paragraph 202 of the code. Transliteration based on Huehnergard (2013, p. 95)
which can be found at eHammurabi at https://ehammurabi.com/. Huehnergard translates it as: “If a man has struck
the cheek of a man who is of higher rank than he, he will be struck with an ox whip sixty times in the assembly.”
\item Example comes from paragraph 201 of the code. Transliteration based on Huehnergard (2013, p. 55)
which can be found at eHammurabi at https://ehammurabi.com/. Huehnergard translates it as: “If he has knocked out
the tooth of a muškēnum, he will pay out one-third mina of silver.”
\item Example comes from paragraph 200 of the code. Transliteration based on Huehnergard (2013, p. 47)
which can be found at eHammurabi at https://ehammurabi.com/. Huehnergard translates it as: “If a man has knocked
out the tooth of a man of his own rank, his tooth will be knocked out.”
\item Example comes from paragraph 203 of the code. Transliteration based on Huehnergard (2004, p. 104)
which can be found at eHammurabi at https://ehammurabi.com/. Huehnergard translates it as: “If one man has struck
the cheek of another such man of similar status, he shall pay one mana of silver.”
\end{enumerate}
\end{footnotesize}
To judge the judgment of the land, to decide the decisions of the land, to succor the injured, I wrote on my stele the precious words and placed them before my likeness, that of a righteous king… The oppressed who has a suit to prosecute may come before my image, that of a righteous king, and read my inscription and understand my precious words and may my stele elucidate his case… In the future, in days to come, at any time, let the king who is in the land, guard the words of righteousness which I have written on my stele. Let him not alter the judgment of the land which I judged nor the decisions I decided. Let him not destroy my basrelief.”

Ḫammurāpi certainly seems to view the code as actual cases that are normative and enforceable, so much so that he wrote it on a seven foot tall basalt stele and placed it in the Ē-SAĞ-ÍL.LA (meaning “house top lofty”), referring to the temple house of Marduk in Bābilim for all to see and reference, including future rulers.

The laws and results for theft in the Kaldi Empire remained similar to the above Code. Theft of temple property usually resulted in payment of thirty times the amount stolen. While penalties for theft of private property varied, from simple compensation equal to the amount stolen to twice the amount, to imprisonment and all assets sold to pay the penalty.

Differing from previous scholarship, in this view, the Law Code of Ḫammurāpi and other similar legal texts represented codified and enforced sets of sitio-relationally based laws. Inconsistent compensations and remedies made to people of different gender, age, or

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44 Quoted from Hammurabi, “Epilogue” in Code of Hammurabi (trans. Rev. Claude Hermann Walter Johns; WS, 2018). The prologue in the text also states that Ḫammurāpi was commissioned by the gods to “cause justice to prevail in the land to destroy the wicked and the evil, that the strong might not oppress the weak.” Quoted in Orlin, Life and Thought in the Ancient Near East, 18.

socioeconomic class can be explained by the type of relationship that needed to be restored. While names need not be given, the social status of the two parties is almost always given. These highly contextualized results do not have to compare to any other cases from other legal texts. These laws do not have to cover all areas of society because these are the specific cases that occurred. If a restored relationship between two particular people is the true goal, then two results can be dissimilar and not require or desire equal treatments. In most cases the ‘then’ clause allowed for multiple possible outcomes, rather than one guilty or innocent verdict and penalty, in order to give allowance for relational types and varied restorative actions. Most of the laws do not discriminate between civil and criminal offenses, but instead discriminated between relational statuses. If viewed in these ways, the laws are not illogical, inconsistent, or unenforceable. The laws reflect sitio-relational logic in highly contextualized settings that were the enforceable decisions of the land.

Another similar logic that is often used, but dismissed in most Western thinking is comparative reasoning.

6.6.3 Either Interval or Ratio Logic: Analogue, Comparative Reasoning

While interval logic utilizes crisp attributes to reason abstractly and ratio logic utilizes fuzzy relations to reason contextually, comparative reasoning utilizes analogies, which can be based on either type of referential data. Though whatever type of reference data is used (crisp or fuzzy) as the source domain will lead to using this type of data for the target domain of the comparison.

Analogical, comparative logic explains a concept, phenomenon, problem, or situation by comparing it with realities we already understand, are familiar with, or have a relationship with—whether the comparison uses well-formed or weak-formed sets for reference. Analogies
aid in the recognition of shared patterns and characteristics and differences. It draws on the human imagination to explore possibilities and transfers knowledge from one domain to another.

It follows three argumentation principles: similarity, amplification, and unguaranteed conclusion. (1) Regarding similarity, it is observed that X is similar to Y in certain known ways. (2) Regarding amplification, X is observed to have some further feature Q. (3) Therefore, it can be reliably concluded that Y also possesses the feature Q (or some feature Q similar to X’s Q). In this way, there is an analogy being made between some select feature(s) (i.e., objects, attributes, relations, or functions) of the source domain labeled X and the target domain labeled Y in a one-to-one mapping. Yet, not all other features in X’s and Y’s domains have to be placed in correspondence.46

Analogical reasoning is foundational to modern Western law. Known legal rules are only generalizations; there is no algorithmic formula that can be applied to particular cases. Legal reasoning compares a target case to source cases where similarities are observed and it applies whichever precedent rule of law (feature Q) that is inherent in the source cases to reach a concluding verdict.

Comparative reasoning is also foundational within much of the Şalmāt Qaqqadi thinking about how the cosmos is structured and how it works.47 They analogized from the familiar to other proposed realms and beings, “like an amplified projection.”48 They imagined an above world where anthropomorphic deities lived and ruled from and a nether world where some other anthropomorphic deities ruled over all the dead ancestors of humans. As Orlin explains it, the

47 While many previous scholars have described the comparisons and analogies made by these people, none have formally labeled or explained this thinking as comparative reasoning with its concomitant argumentation principles.
48 Bottéro, Religion in Ancient Mesopotamia, 44.
gods “were thought to have organized their realms in the same way as did humans. Divine society thus could be imagined to have kings, assemblies, divisions of labor, and a wide variety of administrative functions.”\(^{49}\) Whatever political, social, and economic level of complexity predominated in human affairs was analogically reflected in these other realms. As Bottéro explains it, “the ancient Mesopotamians doubled their universe with a parallel universe.”\(^{50}\) It is often explained as ‘as above, so below.’ But in reality, the phrase should be ‘as below, so above’ or more accurately ‘as here, so everywhere.’

Moreover, these other divine realms and deities were interconnected with our humanly realm. These divine beings, in one way or another, were invested and manifested in the human jurisdiction that they were believed to cause to function. The regional human ruler was seen as a mediator between these interconnected realms, making rulers and kingship important.

Analogical reasoning can thus also be found behind the scenes in their judicial thinking. Šamaš, the divinity of the sun and justice, had cosmic operative jurisdiction over legal proceedings in the divine world and analogically in the human world. Justice was a divine quality he exhibited and wielded and human-based “judgment was thus a transposition of divine practices into the human sphere.” Šamaš’s human counterparts acted as his representatives to restore order within the human world, which is why Ḫammurābi is depicted as receiving from Šamaš a measuring rod and measuring tape on the top of the stele inscribing his code of law.\(^{51}\)

Similar to how the divine and human realms are constructed, interconnected, and analogically similar, comparative logic also predominates within Šumeri-Akkadi divinatory practices. Ominous phenomena were perceived to be divine messages or signs and their

\(^{49}\) Louis L. Orlin, Life and Thought in the Ancient Near East, 113.  
\(^{50}\) Bottéro, Religion in Ancient Mesopotamia, 44  
interpretations represented divine judgments, portends, or consequences. Ominous phenomena were seen in the above world (celestial signs) and here world (terrestrial, medical, physiognomic, dream, and entrail or extispicy signs). Like court decisions, if-then conditional statements were used, as in: ‘If an anomalous, unknown, ambiguous, or dangerous phenomena is seen and perceived to be an ominous sign; then some portent will occur.’ Scholars have long wondered at the underlying logic of these conditional statements, which do not seem to rely on causal or empirical connections for the stated relationship. In addition, subsequent if-then statements seem to nominally vary the conditional if-statement based on thematic schemata, including binaries (up to down), symmetries (progressing through the four cardinal directions), and other standard sequences (proceeding through colors). Some of these conceived schemata substitutions create impossible to be observed if-statements that can never occur, such as the sun appearing at midnight.

As more recent scholarship observes, the connection seems to be phonetic or semantic between a word in the if-statement and a word in the then-statement based on sound, visual, or conceptual analogies. Noegal goes further and observes that the polysemy and paranomasia in divinatory omen if-statements (feature Q in the X domain) function as hermeneutical tools to produce the then-statement interpretations (feature Q in the Y domain).

For instance, within many omen texts paranomasia (wordplay based on like-sounding words) was often used between the if-statement and the then-statement. For example: ‘If a man dreams that he is eating a raven [arbu]; he will have income [irbu].’ Or this example: ‘To him

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54 Cited in Lenzi, An Introduction to Akkadian Literature, 63. Original example comes from Noegel, Nocturnal Ciphers, 2007, 11-18.
who meets an imêru (donkey) in a dream; the imertu (vision) of children is promised.’55 This similarity of sound was not coincidental to the omen, but revealed a functional and comparative relationship inherent in the nature of reality between ravens and income or donkies and visions. The similar sounds of the two focal words displayed a meaningful, analogical relationship between two things of the world. As Bottéro explains it, “each phonetic similarity was to be considered serious and very significant: two realities whose names coincided were bound as closely together as their designations.”56 These comparative-sounding words were perceived to be the concrete functional expression of the real substances referred to which existed in a harmonic, convergent, or bidirectional relationship of importance.

All people and all cultural groups can and do utilize both abstract and contextual types of reasoning and both fuzzy, relational and crisp, intrinsic categorizing. But much of what people think about and how they think about it depends on the culture they are immersed within. Different societies apply different logics and categorizing in different contexts to order their thoughts, with one type seen as foundational and predominating in use as the default mode. In modern Western societies abstract algorithmic logic and well-formed, intrinsic categories predominate as our default modes. This reasoning is used to create scientific taxonomies of animals, plants, chemicals, etc. In the Šumeri-Akkadi linguaculture and much of the ancient world contextual or comparative logic and fuzzy, relational categorizing predominated. It has been found that most modern traditional cultures are similar to this ancient way of thinking in this regard with their folk taxonomies and mythic stories.

In sum, by examining the logical categorizing and reasoning the Šalmât Qaqqadi defaulted to using we are better able to understand their taxonomic, legal, and cosmographic

55 Cited in Bottéro, Mesopotamia, 121.
56 Bottéro, Mesopotamia, 121.
conceptions and related behaviors. The focus on ratios, externalities, concreteness, and linkages logically programmed them to prefer (1) gradations via the usage of indistinct classifying, (2) functional properties via the usage of extrinsic attribution, (3) radials and rhizomes via the usage of relational orderings, and (4) relationships and analogies in concrete situations via the usage of situo-relational and comparative reasoning.

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Not only do all minded someones utilize preconceptions and programs as part of their lifeframe, they also use other components, which are discussed next.
VII. **CHAPTER SEVEN: OTHER LIFEFRAme COMPONENTS**

I have discussed in-depth the foundational linguistic and logical components upon which a lifeframe is built. Below are the other three levels explained to round out the lifeframe model, which because of time and space remain unexplored in this work.

7.1 Deep Enacted Perceptions

All minded someones are taught or socialized to use certain default mental programs in certain areas of life. Moreover, the use of specific cognitive tools by all minded someones result in filtered observations, inferences, or interpretations—different seen, heard, thought, and known perceptions. No one has a direct readout of the worldly place. All perceptions are inferences, allowing for much variability of what is perceived—by our senses and by our minds. Often, the features of the default language and the default modes of logical thinking influence the choice of the deep-level perceptual presets working in the background of a lifeframe. Our language and logics tell us what to notice and what is not worth noticing. These parameters underlie and shape the more explicit thinking and knowing. Furthermore, these enacted perceptions set the stage for the shape of the overall lifeframe that appears, the higher-level default priorities, prescriptions, and propositions.

Each perceptual choice exists on a continuum with two opposed terminal options that are held in tension. The below descriptions describe the extreme poles as pure types for each continuum.\(^1\) Most sociocultural groups exist somewhere in between the two extremes, with considerable individual-level variation of members within each group.

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\(^1\) I have taken the idea of continuums encompassing two ‘themes’ from Kraft and Hiebert, who built upon Morris Opler’s work of themes and counterthemes, Parsons et al.’s work of systems of action, and Kluckhohn and
7.1.1 Perceptions about the World

The most basic orientative perceptions concern the understanding of the worldly place we live in. These default presets are mostly used implicitly by minded someones according to how they have been socialized into differences of perceptual focus.²

**Perception of Target of Focus for the Worldly Place.** There are two basic types of attentional focus within audio-visual habits: field dependence or field independence. All minded someones are able to use both mental styles. But one or the other is always dominant, the default preset, used to give focus to visual, auditory, and/or tactile cues in the surroundings.

**Field-dependence and Diffuseness.** When a perceiver mainly perceives the whole context, rather than perceiving specific objects, their perception is dependent on the field. They are a contextualizer. Using a wide-angle lens, their attentional focus is on the whole system and the complex interactions and interrelationships exhibited among bounded, embedded components. They have less awareness of any specific particularities of the context or foreground objects. They will be more skilled at finding the inserted background differences between two similar pictures.

**Field-independence and Specificity.** When a perceiver mainly perceives specific objects separate from the environment, their perception is independent of the field. They are an objectifier. Using a zoom lens, their attentional focus is on the array of distinct objects and the properties exhibited by those objects. They have less awareness of the broad context, background surroundings, and relationships between objects. They will be more skilled at finding an object like Waldo in the foreground of a Where’s Waldo picture.

² The explication of default perceptions about the world relies (with modifications) mainly on Nisbett’s Geography of Thought, Hiebert’s Transforming Worldviews, and Kraft’s Worldview for Christian Witness.
Perception of Components of the Worldly Place. The default mode of perceptual focus influences the perceived composition of the context. There are two basic types of perceived makeup of the world: a continuum of substances or collection of discrete objects.

Continuum of Substances. A high context, field-dependent perceptual style leads many perceivers to want to understand the context in terms of a unified whole, rather than in terms of separate parts. Utilizing indistinct classifying and fuzzy categories, they view the context as consisting of continuous, interrelated material and immaterial substances or masses of transphysical stuff (like water, wood, or air). By giving attentional focus to the system, they focus on the interrelationships, continuities, and complexities of the context. They use a part-to-whole relational frame of reference. They live in a networked world of large, interconnected masses of substances.

Collection of Discrete Objects. A low context, field-independent perceptual style leads many perceivers to want to understand the separate parts apart from any whole. Utilizing delineated classifying and crisp categories, they view the context as consisting of a collection of discrete, separable objects (like lakes, trees, or sky). By giving attentional focus to particulars of the context, they focus on attributes and properties of the objects. They use a one-to-many relational frame of reference. They live in a modularized world of unconnected objects or things.

Perception of Dynamism of the Worldly Place. The default mode of perceptual focus and world composition also influences the perceived dynamic quality of the world. There are two basic types of perceiving the dynamism of the context: changeableness or stability.

A Changeable Context. Those that default to perceiving the whole, complex field with its many moving, interrelated parts are also more likely to default to perceiving that field in constant change. Change in a particular direction does not indicate continued change in that same
direction because there are so many moving and interconnected parts. The change is more likely a sign that events are about to reverse direction, favoring pendular movement and cyclical reversions to the mean.

A Stable Context. Those that default to perceiving the objects apart from the field are more likely to default to perceiving that field as a simple, stable, unchanging place. When change is perceived, it is assumed it will be permanent and in the same direction as previous change, favoring linearity of movement, advancement, and progress.

Perception of Functioning of the Worldly Place. The default modes regarding field focus, world composition, and world dynamism influence the perceived workings of the world. The world is either analogized to be a complex organism or a predictable machine.

A Living Organism. Those that dependently perceive a whole, complex, dynamic field full of interrelated substances, are also more likely to analogize that the worldly context is built to function like a living organism. All worldly contents are perceived as organic, animate, and personal (or semi-personal) in some way, which exhibit willful, sensitive, and capricious energies and powers in an open, responsive, and unpredictable system.

A Lifeless Machine. Those that independently perceive a stable world of discrete objects, are also more likely to analogize that the worldly context is built to function like a lifeless, efficient machine. All worldly contents are perceived as a collection of inert, independent, and material parts of the self-sufficient machine, each working according to fixed, constant laws in a closed and predictable system.

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3 The explication of this continuum is partially based on insights from Stephen C. Pepper’s Root-metaphor Theory as proposed in World Hypotheses: A Study in Evidence (Berkeley and Los Angeles: University of California Press, 1942).
7.1.2 Perceptions of Linkages within the World

The second area of default perceptual presets of all lifeframes concerns aspects within the worldly context. How the overall worldly context is perceived greatly influences the default perceptual presets for these aspects.

**Perception of Existence of Contents within Worldly Place.** How the world and components of the worldly place are perceived also influences what contents are recognized as actually existing in the context, regardless of how they came about. There are those that define existence in terms of doing and there are those that define existence in terms of being.

**Functional Existence.** Those that default to perceiving a dynamic context full of interrelated and animated substances are also more likely to default to recognizing the existence of those material or immaterial substances (all someones and somethings) by their perceived possession of a functional property. Those things seen as existing fulfill roles and purposes in their acting. Doing precedes and allows for recognized being.

**Substantive Existence.** Those that default to perceiving a stable context full of separate and mostly inert objects are also more likely to default to recognizing the existence of those material or immaterial objects (all someones and somethings) by their perceived possession of an essence/nature, extension (as matter and/or spirit), and associated properties. They take up space and/or exhibit definable properties. Being precedes and allows for recognized doing.

**Perception of Powerful Causal Forces within Worldly Place.** All minded someones seek to explain experiences, events, and behaviors—the circumstances of life—in terms of causes, those perceived powerful forces which bring about something else, an effect. Often, the

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4 The explication of default perceptions happening within the world relies (with modifications) mainly on Nisbett’s *Geography of Thought*, Hiebert’s *Transforming Worldviews*, Kraft’s *Worldview for Christian Witness*, and Hofstede, Hofstede, and Minkov’s *Cultures and Organizations*. 
offered culturally dominant causal explanations for occurrences are based on the aforementioned default mode of attentional focus and assumed dynamism of the context.

**Situational, External Causal Attribution.** Those minded someones who are inclined to use a field-dependent mode to perceive a highly dynamic world also are more likely to attribute causes to something external in the field, a contextual explanation. When the full field in all its systemic complexity is in focus, the causes are perceived to be many and within the context, including natural (weather, gravity), personal (human, god, demon), and impersonal (karma, fate, luck) forces. Moreover, they are more likely to reason about possible causes of an event or a behavior by examining the full context and working forward through the perceived effects produced.

**Dispositional, Internal Causal Attribution.** Those minded someones who are inclined to use a field-independent mode to perceive a stable world full of someones and somethings are also more likely to attribute causes to an object or something internal within agential minded someones, human and nonhuman alike. When unbounded objects, especially individualistic agents, are in focus, the causes are perceived to be few and properties within agents, such as personality traits, desires, or needs, a dispositional explanation. Moreover, they are more likely to reason about possible causes by working backward, starting from the perceived effects produced.

**Perception of Relation of One toward Others within Worldly Place.** All minded someones classify others into in-groups or out-groups with reference to the self. We innately perceive we-versus-they memberships. Other someones that a minded someone perceives to be fellow in-group members are considered to belong in the ‘we’ circle. Others that a minded someone perceives to be outsiders are considered to belong to a ‘they’ circle. There are always
multiple in-groups to which someone belongs, including the family, local community, and society.

There are two opposing presets a culture can adopt for how the self is perceived to relate to in-groups and out-groups, determined by whose interests prevail: interdependent collectivism or independent individualism. Every society and individual is able to and does behave according to both self-to-group orientations. But the default societal preset is constantly being reinforced through cultural cues. In this regard, collective groupism is the norm in our world, while individualism is the exception. It was not until the modern era that the individualistic orientation arose as an opposing orientation. Even today, only a minority of people in the world live in individual-oriented societies.

**Interdependent Collectivism.** Those societies in which most minded someones are inclined to give attentional focus to the whole field and the interrelations of all someones, are more likely to view people as always existing within group settings from birth onwards, bounded by relationships of mutual obligations. In a collectivistic society power resides in the collective group and the interests of the group prevail over the interests of individuals. Collectivist cultures perceive all individual someones in terms of their embedment in in-groups in which they share similarities. Identity is externally-based on one’s place in in-groups and one’s defined relations with others. All personal attributes are fluid, being conditioned on social, relational, and situational circumstances. Relationships are of prime importance. Group members are dependent on the in-group for protection and security. Resources are shared amongst the closest in-group. Conformity to the group is a chief goal and direct confrontation is avoided. They prefer ordinariness and blending in of self, environment, and possessions. There is a focus on knowing the feelings of others with whom one is interrelated. They are more likely to describe personal
experiences from a third-person ‘we’ point of view, looking on as an observer would and including others’ orientations and activities. Their self-descriptions are mostly dependent on specific contexts, social roles, and include other people.

**Independent Individualism.** Those societies in which most minded someones are inclined to give attentional focus to objects within the field and their properties, are more likely to view people as unbounded, free agents with only loose ties to other individuals. Individualistic oriented someones perceive each someone as connected to but not fully embedded within their in-groups. Individuals can move from in-group to in-group and setting to setting without changes of personal attributes and identity. Identity is interiorly-based on personal attributes. Membership in groups and relationships of an individual to any others is voluntary, rather than being automatic and prearranged. Privacy is of prime importance. Resources are individually owned, even for children. In an individualistic society power resides in each individual and the interests of individuals prevails over the interests of the associated group. Each individual is independent and responsible for herself. Confrontation, speaking one’s mind, and having one’s own opinions are chief goals. There is a focus on individual benefits, preferences, and goals. They prefer uniqueness and distinctness of self, environment, and possessions. Individual-oriented cultures are more likely to describe personal experiences from a first-person ‘I’ point of view, looking outward on the context and including many personal details and self-references. Their self-descriptions often include personality traits, occupation, and activities that they consider to define them.
7.1.3 Perceptions of Spatiality and Temporality of the World

Importantly, perceptions of the spatial and temporal characteristics and structure of reality align with the socioculture-wide default mental modes of perceiving, reasoning, and explaining occurrences in the world.5

**Perception of Spatial Characteristics within Worldly Place.** All minded someones possess a sense of embeddedness in a place and default to perceiving their spatial surroundings as either differing in some aspects or qualities, or as the same everywhere.

**Heterogeneous, Variable Space.** Many someones in societies that perceive the world as an organism full of animate substances also perceive space, especially the known land, as heterogeneous in terms of possible power, substance, and sacredness. Different locations have differing degrees of potential power, substance makeup, and specialness. They often use visible topographical features, such as rivers, piles of rocks, and mountains as local, allocentric frames of reference to identify these differing spaces.

**Homogeneous, Uniform Space.** Many someones in societies who perceive the world as a lifeless machine composed of nonliving parts also perceive space, all known and unknown land, as homogeneous in its governance by natural laws, neutral (secular) regarding possible power and sacredness, and extending uniformly in all directions, making possible the application of global, invisible grid lines for latitude and longitude as a global frame of reference to identify this uniform space. Though, cyberspace and virtual reality are beginning to disrupt this spatial view.

5 The explication of default perceptions about the space and time of the world relies (with modifications) mainly on Nisbett’s *Geography of Thought*, Hiebert’s *Transforming Worldviews*, and Kraft’s *Worldview for Christian Witness*. 

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Perception of Characteristics of Larger Cosmic Place. All minded someones possess a sense of embeddedness in a larger place than their own known place, with some defaulting to perceiving a closed system and others perceiving an open system.

Closed World of Immanent Beings. In a closed cosmic system nothing and no one exists or enters the cosmic box or leaves the box. The cosmic box’s boundaries are completely closed. All causes, exchanges, and doings occur within the cosmic box, including causes for its origins. The cosmic box is isolated and autonomous unto itself. All minded someones exist only in the cosmic box as immanent presences.

Open World of Immanent and/or Transcendent Beings. In an open cosmic system someones and/or somethings can exist outside the cosmic box, as well as within the box. The cosmic box’s boundaries are permeable, able to be crossed by these outside entities. All causes, exchanges, and doings can occur either within the box or enter from the larger surroundings outside the cosmic box. Minded someones can exist within the box as immanent presences or outside the box as transcendent presences (often recognized as divinities).

Perception of Spatial Structure within and/or without Worldly Place. All minded someones perceive the world (and possibly the larger cosmos) in terms of a structure with definable aspects, some form it takes in terms of levels and dimensions, whether it be one realm or many realms, all physical or both physical and metaphysical in its components.

One Realm. Those minded someones in societies that are inclined to perceive a mechanistic, stable world, are also more likely to perceive the world, however defined and whatever the scope, as consisting of only one spatio-temporal realm, often also consisting only of what can be physically seen.
Multiple Realms. Those minded someones in societies that are inclined to perceive an organismic, changing world, are also more likely to perceive the world, however defined and whatever the scope, as composed of multiple spatio-temporal realms (whether part of the cosmic box or not). This includes the physical realm that can be seen, and often other inaccessible, metaphysical, and supranatural realms (often above and below the current worldly realm).

Perception of Time’s Passage within Worldly Place. All minded someones in all societies possess a sense of time’s passage and of being embedded in a temporal context. But this sense of temporality is variable and thus perceived and structured differently in different spheres of life in different societies, using different imagery. While every culture can be characterized by one dominant mode of time, no culture is fully controlled by only this one perception of time. Although all someones everywhere experience time that is perceived to repeat in cycles (daily movement of the sun, monthly phases of the moon) and time that is perceive to be sequential (aging of the body), societies can differ on which spheres of life are characterized by these perceived repeating and nonrepeating times.

Renewable, Cyclical, Repeating Time. This concept of time perceives a series of events as regularly repeating over and over again in the same order forever, such as the cycles of day/night and agricultural seasons for tilling, planting, and harvesting observed in the world. Time in these spheres is perceived to be cyclical, like an endless circle, spinning wheel, or a snake that bites its own tail. This time is eternal, including no initial beginning and no final ending. The cycle is repeated or continually renewed by returning to its origins in a rebirth or new beginning. The past and present are endlessly connected. The future is the past. They are oriented to the past to know the future. They strive to continue past traditions into the future. Because time repeats endlessly, there is often less focus on long-term past history.
**Pendular, Oscillating, Repeating Time.** This concept of time is also repetitive, but without any depth or extension so that the cycle becomes a flat ping-pong motion. Time is perceived as a repetition of repeated reversals, a series of oscillations—moving one way and then the opposite way, slower and faster, with sudden stops along the way. Time is perceived to be pendular, like a pendulum swinging back and forth, oscillating between opposite events like day and night, summer and winter, famine and plentitude, life and death. The past has no depth, because there is no forward momentum, only movement between polar opposite positions. There is only now, the timeless present.

**Constant, Linear, Clock Time.** This concept of time perceives a series of events as nonrepetitive, irreversible, and unidirectional, with each successive event different from what has come before. Time is perceived to be linear, like a straight line, a timeline, or a path we travel. This forward momentum instills notions of progress and evolution. Many modern industrialized societies default to a linear, clock-based perception of time for spheres like business, industry, science, and history. Time in these spheres is not eternal; it has an initial beginning and a final ending. It is constant and uniform, with all measurable units (minutes, days, centuries) able to be divided into an equal duration and interval. The invention of the clock and clock-time only strengthened this view. The sport of football is a linearly timed happening because it operates according to clock time, each quarter involving the same amount of given time. Time as a uniform constant is also perceived to be independent of our experience of it. The timeline can be separated into three distinct sections, a past, a present, and a future. Thus, those that are dominated by this conception are usually embedded in the present and oriented toward the future with the past perceived to be behind them. They are focused on a better tomorrow.
Variable, Linear, Event Time. This concept of time perceives a series of events as sequential and linear, but the time of each event is not constant, uniform, or of equal duration. Each event in the series is a distinct unit of time, possessing a measurable interval with a variable duration involving its own beginning, set of activities, and end, such as lunch-time, free-time, or game-time. Rather than being focused on the quantity of time that has occurred, event-oriented time is focused on the quality of relationships and meaningful activity undertaken during the event. The sport of baseball operates according to event time, with each inning ending when three strikeouts are reached. There is a long ago past full of specific events, a present full of events (meal-time, work-time, and tv-time), and an anticipated future full of unknown events. They are oriented toward the timeless present and what event is occurring now. There is no day but today. Most Americans perceive weekends, vacations, and all leisure time according to event time.

Sacred, Mythic, Dream Time. This concept of time is imaginary or experienced outside of reality. It involves leaving ‘normal’ time and entering the eternal Now, in which dead, living, and unborn beings all can unite. It is commonly perceived to be instantiated in rituals and altered states of consciousness. At completion, there is a reentry into normal time, however perceived.

7.2 Intermediate Evaluative Priorities and Prescriptions

A sociocultural group’s default perceptual presets influence the types of default priorities and prescriptions also held as part of their lifeframe. It is within this intermediate level of the framework that much of the social and moral order are defined regarding what to highly value and what is appropriate to do.
As with perceptual choices, each priority and prescription exists on a continuum with two opposed terminal options (and sometimes a third option in the middle). The below descriptions describe the extreme poles as pure types for each continuum. Most sociocultural groups exist somewhere in between the two extremes, with considerable individual-level variation within each group.

7.2.1 Prioritized Values

Prioritized values refer to what the sociocultural group evaluates to be a higher important, worthwhile, or useful good thing relative to other things. These include preferences regarding actionable virtues, attitudes, and power differentials.

Prioritized Virtues and Vices. All minded someones prioritize certain perceived-to-be-good goals and actions as virtues and other perceived-to-be-bad goals and actions as vices.

Sharing and Cooperation. Most people in group-oriented societies prioritize the group’s interests over their own. This leads them to strive to maximize the outcome for the group, even if this means sacrificing some personal gains. Outcomes are based on cooperation and prescribed to be shared by the group. Thus, they highly value such virtues as hospitality, filial piety, group loyalty, self-sacrifice, self-effacement, and sharing. Self-centeredness, hoarding, and stinginess are perceived to be the greatest vices.

Competence and Competition. In many individual-oriented societies people prioritize their own interests and strive to maximize personal gains before considering outcomes for other people. It is believed that if everyone seeks their own interests, society benefits. Outcomes are

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6 The explication of default priorities relies (with modifications) mainly on Nisbett’s *Geography of Thought*, Hiebert’s *Transforming Worldviews*, Kraft’s *Worldview for Christian Witness*, and Hofstede, Hofstede, and Minkov’s *Cultures and Organizations.*
based on an individual’s competence and prescribed to belong to the individual. Thus, they highly value such virtues as self-realization, self-fulfillment, independence, industry, ambition, perseverance, and ingenuity. Laziness, irresponsibility, and selfishness are perceived to be the greatest vices.

**Prioritized Power Differential Within Society.** In all large-scale, state-based societies some degree of social stratification is inevitable. The type and degree of stratification differs based on differing preferred power differentials.

**Inequality, Immobility.** In most group-oriented cultures in which status is ascribed, people are perceived to be intrinsically and inherently unequal in terms of worth, respect, status, and power. A hierarchical social arrangement is thus considered normal, accepted, necessary, and good. There is no social mobility. Most often social hierarchies are based on kinship and ancestral descent, which determines a person’s given power, authority, social class, occupation, and inheritance of lands, goods, and familial responsibility. Expected behavior differs according to position, with more responsibilities and restraint required of higher statuses and more service and dependence required of lower statuses.

**Equality, Mobility.** In many individual-oriented cultures in which status is achieved, people are perceived to be intrinsically and inherently equal in terms of worth, respect, and rights. All are equal regarding rewards, punishments, and expected behavior. This egalitarian view is considered normal, necessary, and good. There is the possibility of social movement. Different cultures define, value, and apply this equality and a sense of fairness differently. Equality can be defined as an equality of opportunity, equality of given rights, equalizing of socioeconomic class, or an equalizing of outcomes. For those that define equality in terms of
opportunities and rights, a social hierarchy is accepted, as long as all have the rights and opportunities to rise in social station.

**Prioritized Way to Maintain Society.** Both order and freedom are beneficial to maintain in any society. But sociocultural groups differ as to how they determine to balance communal safety and order against individual freedoms and rights.

**Order Maintained Through Control.** In most group-oriented, inequality-valuing cultures that perceive the organismic society as one whole, indivisible system, the dominant priority is the maintenance of social order by those governing by any means necessary. Prioritizing order reduces freedoms. Order is often achieved through perceived-to-be-acceptable violence and the use of institutional police or military forces. Whoever holds the power is perceived to be right and good. It leads to a sense of security based on a goal of protection for all.

**Freedom Maintained Through Rights.** In most individual-oriented, equality-valuing cultures that perceive the machine-like society as an aggregate of individuals, the dominant priority is the maintenance of personal freedoms by those governing above all else, including above equality. Prioritizing freedom reduces order. Freedom is often realized through perceived-to-be-inalienable rights and the protection and enforcement of them by institutions. The use of force to maintain freedoms should be legitimate and based on moral criteria of good and evil. It leads to a sense of permissiveness based on a goal of self-fulfillment for all.

**Prioritized Life Mood.** All minded someones are disposed to a certain affective outlook or mood regarding the agreeableness of life and life’s situations.

**Optimistic Mood.** When a majority of the someones in a sociocultural group perceive explanatory causes as dispositional and able to be affected and they are able to tolerate uncertainty, the culture is more likely to have a dominate mood characterized by optimism. This
mood involves attitudes of hopefulness, favorableness, and personal efficacy, based upon the perceived ability to control, affect, or change present events and the future.

**Pessimistic Mood.** When a majority of the someones in a sociocultural group perceive explanatory causes as situational and unable to be greatly affected and they are intolerant of uncertainty, the culture is more likely to have a dominate mood characterized by pessimism. This mood involves attitudes of fear and anxiety, based upon the perceived inability to greatly control, affect, or change present events or the future.

**Fatalistic Mood.** When the majority of the someones in a sociocultural group perceive explanatory causes as situational and unable to be affected and they perceive a limited supply of good things, the culture is more likely to have a dominate mood characterized by fatalism. This mood involves attitudes of near-hopelessness, near-powerlessness against predetermined outcomes, and impossibility of progress of any kind.

**Prioritized Dimension.** All minded someones in all cultures either prioritize space or time as more important.

**Space.** Space is prioritized in many premodern, oral cultures that are dependent on agriculture for sustenance. Time is perceived to separate people, generation from generation and alive someones from dead ancestors. But space brings all together by bringing the past into the present. History is tied to specific geographic sites. Ancestors are buried in nearby spaces. Communicating with each other requires spatial presence. Space, especially land, is more important than time and the long-ago past.

**Time.** Time is prioritized in many modern, literate cultures that are dependent on industry and commerce. Time is perceived to be the only commodity that cannot be controlled or changed. Time is often likened to money, which can be spent, wasted, or treasured.
Prioritized Frame of Reference. All minded someones in all cultures either prioritize an allocentric (centered on others) spatio-temporal frame or an egocentric (centered on self) spatio-temporal frame of reference.

Cardinal-Directions Frame of Reference. Most group-oriented cultures prioritize an allocentric system of reference for temporal and spatial orientation and directions in physical space centered in absolute cardinal positions (north, south, east, and west)—sometimes called a geocentric system (i.e., ‘the ant is on your southeast leg.’). It requires constant directional orientation. Time is often framed in spatial terms of the Eastern direction so that time proceeds from East to West.

Object-Centered Frame of Reference. Some individual-oriented cultures prioritize an allocentric system of reference for spatial orientation and directions in physical space centered in an object relative to some coordinate system anchored to the object (i.e., ‘the ant is on your leg near the house.’). Time is often framed in spatial terms related to the direction of writing, either proceeding left to right (as in Spanish) or right to left (as in Hebrew), or top to bottom (as in Taiwanese Mandarin).

Self-Referential Frame of Reference. Most individual-oriented cultures prioritize an egocentric system of reference for spatial orientation and directions in physical space centered on the self (i.e., ‘the ant is on your right leg.’). Time is often framed in spatial terms of one’s own body so that time proceeds forward with the future ahead and the past behind.

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7.2.2 Prescriptive Behaviors

Prescriptive behaviors refer to what the sociocultural group evaluates to be the proper way of behaving in various contexts. While actual exhibited behaviors are a part of the cultural level, the rules of conduct for behaving are part of a lifeframe.⁸

**Prescribed Manner of Relating with the Worldly Place.** All minded someones in a sociocultural group must relate to the worldly environment in some approved way, whether it be perceived to be with nature, under nature, or over nature, which influences their study and understanding of the worldly place.

**Harmony and Symbiosis.** In many more optimistic collectivistic cultures—which often view the world as an ever-changing, living system full of active, interrelated substances—it is perceived to be possible to partially control the worldly environment. It is proper for them to seek harmony with this environment, exercising partial control in certain circumstances. They should accept and preserve the world as it is and strive to live in a symbiotic relationship with the world, its substances, and with others.

**Subjugation and Appeasement.** In many other more pessimistic collectivistic cultures—which often view the world as an ever-changing, living system full of active, interrelated substances—it is perceived to be impossible for them to exercise any control over the worldly environment. They are subjugated by the causal forces active within the context. It is also assumed that by doing certain acts, those forces or powers will be appeased and possibly serve the ends of the subjugated.

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⁸ The explication of default prescriptions relies (with modifications) mainly on Nisbett’s *Geography of Thought*, Hiebert’s *Transforming Worldviews*, Kraft’s *Worldview for Christian Witness*, and Hofstede, Hofstede, and Minkov’s *Cultures and Organizations*. 
Domination and Exploitation. In many more optimistic individualistic cultures—which often view the world as a stable, predictable machine consisting of independent parts—it is perceived to be possible to dominate, control, and exploit the world and its objects for our needs. Desiring to control a nonliving environment requires gaining knowledge of how it functions.

Prescribed Manner for Responding to Perceived Disorder. All minded someones in all sociocultural groups must deal with perceived disorder and uncertainties in life. Different groups differ in the level of tolerance they have of the uncertain, the ambiguous, and the anomalous that crosses some ordered boundary, creating perceived disorder. The more the disorder is perceived to be a threat, the more anxious the people will be and the more intolerant they will be of the disorder. Likewise, when anxiety levels increase in a culture (due to war, poverty, disasters), disorder intolerance increases as well.

Disorder Intolerant. In many field-dependent cultures in which order and the order-related values of purity, cleanliness, holism, tradition, structure, and expertise are prioritized, uncertain situations, objects, ideas, and people that have crossed some ordered boundary induce high anxiety and are not tolerated. Classifications regarding what is perceived to be dirty and dangerous are tight and absolute. Anything that is perceived to transgress established and ordered boundaries or classifications—through a transfer of something/someone to something/someone else which does not belong (imparted impurity) or the removal of something/someone that should be there (incomplete purity), or a newly unknown something/someone—is perceived to create a state of disorder because it is ambiguous, anomalous, and uncertain. The disorder is to be regarded as taboo, polluting, or dirty (matter without a place). It is a dangerous threat. In

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9 I have incorporated Mary Douglas’ insights from her work *Purity and Danger* into this continuum.
10 While Douglas terms the dirt as ‘matter out of place,’ I term the disordered dirt as not having a place, it is without a place in the ordered system.
order to reduce the anxiety this produces, the disorder must be dealt with. It must be reclassified, physically controlled by exile or elimination, or avoided. There are strong systems of formalized rules, regulations, and norms related to these uncertain disordered dangers.

**Disorder Tolerant.** In many field-independent cultures in which freedom and the freedom-related values of convenience, innovation, imagination, relativism, open-endedness, and generalism are prioritized, uncertain situations, objects, ideas, and people are to be regarded as normal, ignored, a curiosity, or able to enrich life. They recognize the disordered dirt which has no place in the system but they are comfortable with it. There are more flexible, lenient, and informal rules and norms regarding these uncertain novelties.

**Prescribed In-group and Out-group Dynamics.** All minded someones belong to groups and differentiate between ‘us’ in-groups and ‘them’ out-groups, often based on ethnic, class, gender, or age related distinctions. Sociocultural groups differ on how in-groups and out-groups are to be related.

**Tight In-groups, Distant Out-groups.** In most group-oriented cultures, the in-groups in which one is embedded invoke loyalty and trust. Many behaviors are prohibited against one’s in-groups that are acceptable towards outsiders, such as stealing and killing. This exclusionism creates different rules for in-groups versus out-groups. Often, other members of one’s in-group receive special or preferential treatment in the form of favors, services, and privileges. All out-groups are considered to be relationally distant and able to be exploited as subhuman.

**Loose In-groups, Near Out-groups.** In most individual-oriented cultures, the voluntary in-groups to which one is associated are based on shared preferences, beliefs, and goals. Out-groups are not as excluded, dissimilar, or relationally distant compared with one’s in-groups. Using an
inclusive mindset, rules apply to everyone. All people, whether of one’s in-groups or not, are to be treated fairly and equally.

**Prescribed Manner of Defining Social Status.** Social status refers to the level of social position and value someone possesses in the society in terms of respect, honor, power, and accorded deference. Sociocultural groups differ regarding how this status is applied.

**Assigned by Who Are.** In most group-oriented, inequality valuing cultures, someone’s value in the society is assigned or ascribed by their relationships, usually defined based on kinship and ancestral descent. One usually acquires through birth, marriage, or admission one’s fixed, unequal, and unchangeable status. High status is equated with superiority. These relationships and memberships are valued as signs of status. Failure in one’s status-based roles leads to frustration and shame. Personal achievement only operates in restricted areas within the larger social system.

**Achieved by What Do.** In most individual-oriented, equality valuing cultures, someone’s social position and value in the society is not predetermined based on any relationships, but achieved by doing or what attributes one gains through accomplishes. Status is not fixed, but changeable. Performance and competence are valued as the means to attain advancement. Success in one’s status-based roles is equated with superiority. Material wealth is valued as the proof of successful achievements. Failure is blamed on the individual and leads to loneliness and guilt. Acquired status only operates in restricted areas within the larger social system.

**Prescribed Manner of Decision-making.** All minded someones in sociocultural groups must make important decisions in life, whether the deciding is done solo or by consensus.

**Group-based, Multi-level Decision-making.** In most group-oriented cultures, there is corporate responsibility based on collaboration and consensus. Most major decisions in most
spheres of life involving such issues as marriages, occupations, or adopting changes, are made by the in-group’s older, mature, often male leaders meeting, discussing, and communally deciding the matter based on corporate interests. Often, lower status males and women have an opportunity to give input within their extended family to a higher-level leader. The final decision is announced by the highest leaders to the group.

**Individual Decision-making.** In most individual-oriented cultures, there is individual responsibility. Most major decisions in most spheres of life are made by the individual herself, based on her own preferences, interests, and goals, with possibly the input of other members in her closest in-groups. Necessary group-based decisions require each individual to decide, with either a consensus or majority votes deciding the outcome.

**Prescribed Manner of Responding to Norm Violations.** All minded someones will violate socially approved norms and rules, but the experienced response by someones may differ, from externally induced shame to internally induced guilt. While both can be felt by all someones, one reaction is the dominant, socially approved way to respond.

**Induced Public Shame.** Those that violate norms and rules of society within a group-oriented culture most often experience a sense of public shame as a result of the loss of approval and respect of the community or ‘loss of face’ and the loss of honor for the in-group for the violating member having failed to meet obligations. The violator has let down his group, family, ancestors, and possibly the god(s). This felt shame is social in nature because it invokes humiliation before one’s in-group and acts as a pressure for conformity and social approval. Shame is experienced when the infringement becomes known by others in one’s group. The group knowing about the violation is more of a source of shame than the initial violation itself.
Induced Personal Guilt. Those that violate norms and rules of society within an individual-oriented culture most often experience a sense of personal guilt and a loss of self-respect for one’s own perceived failure. The violator has let down herself and possibly her god(s)’ according to set personal standards. Guilt is the product of an individually developed conscience that acts as a moral compass which convicts us for what wrong thing we chose to do. Guilt is felt whether or not the violation or misdeed is known by others.

Prescribed Manner of Responding to Impulses. Like many other perceptions, priorities, and prescriptions, the prescribed manner of impulsivity may differ in different spheres of the sociocultural group. While every group can be characterized by one dominant manner of approved impulsivity, no group is fully controlled by only this one prescription for responding to impulses.

Impulse Control. In many group-oriented cultures, impulse control is stressed for most spheres of life. Likewise, emotions should be subdued and expressed indirectly. They value discipline, self-control, and calmness regarding desires and associated feelings.

Impulse Gratification. In many individual-oriented cultures, impulse gratification is acceptable or permissible in most spheres of life. Likewise, emotions can be expressed freely and directly. They value permissiveness, self-expression, and excitement regarding desires and associated feelings.

Prescribed Basis for Defining Good and Bad Behavior. All minded someones in sociocultural groups must define appropriate social behavior in some way, on some basis, whether it be based on relationships, laws, or purity standards.

**Right Relationships for Peace.** In many field-dependent and group-oriented cultures, the defined code of conduct is based on relational role-based obligations to the specific group. It is an ethic of communal solidarity. This sense of morality is violated when communal obligations are not met and relationships are broken, which invokes shame in the offender. To determine moral consequences for the betrayer those deciding outcomes take the broad context and specified external standards into account. In juridical or legal decisions, the decider takes into account the character of those involved, their history of behavior in the community, their social status, and all extenuating circumstances. The legal decision is meant to minimize animosity and foster peace and solidarity in the community. The greatest punishment is ostracism from the group. Reconciliation, restitution, and restored relations renew the moral order. It leads to relationship-based behavior for all within the same group.

**Divine Standards for Holiness.** In some field-dependent and group-oriented cultures, the defined code of conduct is based on revealed relational obligations which created, conscientious creatures have to an authoritative divinity. It is an ethic of divine commands. This sense of morality is violated when divinely-commanded moral obligations are not met and relationships between divinity and humanity are broken, which invokes shame (and possibly guilt) in the offender. To determine moral consequences for the oath breaker those deciding outcomes take revealed sacred punishments and divine decisions into account. In juridical or legal decisions, the decider takes into account the intentions of those involved and their level of remorse. The legal decision is meant to minimize divine animosity and foster holy obedience in the community. The greatest punishment is ostracism from the divine and the divinely-led group. Repentance, obedience, and restored divine relations renew the moral covenant or moral order. It leads to relationship-based behavior for all under the same divinity.
Right Etiquette for Purity. In many group-oriented and disorder intolerant cultures, the defined code of conduct is based on group-specific complex rules for maintaining purity and rules for regaining purity. There is an etiquette of purity that prevails. The higher the group is positioned (which is usually seen to be the result of moral activity in a previous life), the greater the degree of purity possessed by members which must be preserved in all social interactions. An act that may pollute someone, may be harmless to another of a lower group. This sense of morality is violated through defilement of pure people, things, and places (usually through contact with a polluting element such as a corpse, menstruating woman, or a lower-caste person), which invokes repugnance and disgust in the offender. Moral order is restored through washings and purifications to restore cleanliness and renew a state of purity in the defiled someone or something. It leads to rule-based behavior which is different for different groups.

Universal Principles for Justice. In many field-independent and individual-oriented cultures, the defined code of conduct is based on laws formulated by societies using human reason that apply equally to all. It is an ethic of autonomous selves in which each individual self is restricted only when actions may inflict harm or encroach on rights of others. This sense of morality is violated when someone breaks a law, which invokes guilt in the offender. To determine moral consequences for the lawbreaker the decider takes only the narrow context into account. In juridical or legal decisions, the decider focuses only on the specific dispute of the case, excluding all other factors. The legal decision is derived from universal ethical principles and based only on the considerations prescribed by previous case law and regulatory law. It is meant to maximize fairness and foster justice. The greatest punishment is death or imprisonment. It leads to rules-based behavior for all.
Prescribed Manner of Communication. Whether a sociocultural group communicates primarily via speaking and hearing, writing and reading, or a convergence of modes influences their perception of time and space, the use of powerful words, and the view of knowledge.

Oral Speaking and Hearing. Many premodern and group-oriented cultures prioritize audial mediums of communication in everyday life perceived through the hearing of direct speech (even if they have a writing system and the means to write). The oral communication is immediate, transient, and relational because words are spoken to others face-to-face and then disappear. Spoken words are intangible and invisible, because they are only accessible in the present moment. Certain rightly spoken words are perceived to be sacred and causatively powerful. The audio message is embedded in time and space as an event. Words are short-lived if not stored in memory, remembered, and transmitted via telling to others and conserved via learning by others. For the words to be remembered, the people often utilize mnemonic devices, such as rhymes, parallels, acrostics, and word plays. Specialists become storytellers. The oral communication involves feedback, as it is transactional and bidirectional. It is subjectively relational as it involves a specific situation and participants using tone, gestures, and facial expressions as additional communication pathways. Thoughts and expressions of thoughts are communicated via a simple additive style for continuity with the use of many connective clauses, such as ‘and,’ ‘furthermore,’ ‘also,’ ‘moreover,’ or ‘in addition.’ Discussions often involve meandering progression, fluidity of topics, and multiple voices in a participatory context. Oral cultures tend to use more concrete concepts in situated, high context frames of references that are minimally abstract.

12 I have incorporated insights from Walter J. Ong, Orality and Literacy: The Technologizing of the Word (London: Methuen, 1982), 31, 37-49.
Visual Writing and Reading. Many modern and individual-oriented cultures prioritize visual mediums of communication in everyday life perceived through the reading of writing. The communication is mediated, delayed, and impersonal, because words are written and then read one step later without the addition of tone, gesture or facial expressions to aid the message—though punctuation marks aid somewhat. Written words are tangible and visible, being accessible via stone, papyrus, clay, paper, or screen. Words are long-lived, preserved, and able to be reproduced. Written words have causative power, but the spoken word correctly read aloud from the written text has more power. Specialists become scribes. The visual communication involves no immediate feedback or response, as it is unidirectional—though cellular text messages are dissolving the time lag for response to written messages today. It enables communication over far distances. Its message is detached from time and space. Thoughts and expressions of thoughts are communicated via an analytically reasoned and subordinate style for continuity with the use of many causal and time-based clauses, such as ‘therefore,’ ‘then,’ ‘when,’ or ‘because.’ Discussion is univocal, involving a linear progression of words structured by the nature and technology of writing. Writing objectively separates the knower from the known, involving no relationship. Writing or print cultures tend to use more abstract concepts in imagined or theorized referential frames.

Multimedia Convergence. Many late modern and postmodern cultures now prioritize audiovisual mediums of communication in everyday life perceived through sight and sound, especially image and screen-based video-and-audio messaging. This produces a convergence of mediums for communication, including speech, gesture, writing, print, images, and music.

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We have discussed the often-overlooked deeper levels of lifeframes. The last level of a lifeframe includes the more explicit top-level propositions so familiar in most worldview theorizing.

7.3 Apical Explicative Propositions

It is on the basis of the foundational mental abilities and encoded preconceptions that the deep enacted perceptions and intermediate priorities and prescriptions form that become implicit default presets in a lifeframe. Upon these deeper levels, a final top level forms which includes the explanatory and more explicit belief or knowledge systems which are full of propositions and systematized understandings. Most often these belief systems are typologized into a set of ideal types according to controlling beliefs regarding divinity, creating worldview types like monotheism, atheism, and polytheism, with sub-categories for specific religions. It is this level that many previous theorists and researchers have contended with when they have focused on the ‘big questions’ of life. I agree with them that there are additional questions-and-answers within each worldview not covered in the previous levels. It is within the apical explanatory level that subsequent questions are answered which become default orientations as well, utilizing the preset framework already provided as a guide.

I have listed some of these questions in what follows, organized according to the typical worldview categories of many theorists. Some typical questions will have already been answered in the former sections. Not all subsequent questions will be asked by all lifeframers.

**Ontology and Epistemology, The Nature of Doing, Being, Existence, and Knowledge.**

Why does anything exist? What is the cause or origin of our being and our known reality? By what means is knowledge gained?
Cosmogony and Cosmology. *Creation and Structure of the World.* How did the world as we know it form? When did this happen? Is there a separation between the natural world and a supernatural world? How big is the world? Are we the center of the world?

Theogony and Theology. *The Origin and Nature of the Divine.* Where do gods or divinities come from? Who are they? What are they like and made of? Can they die? How many are there? Where do they live? What do they do or like? Are they benevolent? Are they able to be placated and manipulated? Can we communicate with them?

Horology, Proxemics, and Causality. *The View of Time, Space, and Causes.* How is time experienced and space allocated in the home, social life, and rituals? What are some popular metaphors and imagery for time and space? How does the language distinguish between past, present, and future in the use of tenses? Are they focused mainly on this world or another realm? Is there a division between sacred and secular space? What is considered private space or private property? Do they use causal magic in some form? How do words have power?

Anthropogony, Anthropology and Eschatology. *The Origin and Nature of Humanity, View of Afterlife.* What or who created humans? Why? What is the nature of the human condition? What are the characteristics of good people (heroes) and bad people (villains)? How is evil and suffering in the world explained and remedied? Are the genders perceived and treated differently? What happens to a person at death?

Ethics and Teleology. *Morality and Purpose.* What is the basis for morality? Are ritual performances or ethical principles central in cultivating a moral life? What is of highest value? What are the highest allegiances to maintain? What is the purpose of life?

Aesthetics, Emotions, Style, and Taste. What is considered beautiful? What styles or forms of music, art, and dance are preferred? What kinds of emotions are exhibited in
celebrations, rituals, and artwork? What kinds of decorations are popular, symbolic? What style of clothing is fashionable? Do men and women dress differently? What prominent goods have been transformed into symbols of status and power? What important rituals and festivals do they perform and why?
VIII. **CHAPTER EIGHT: CONCLUSION**

And that’s all I have to say about that.
——Forest Gump (*Forest Gump*, 1994 film)

This project has examined through textual evidence how the early first millennium BCE Kaldi peoples thought, reasoned, communicated, and wrote in order to begin to reconstruct the macro-lifeframe of the Šalmāt Qaqqadi of the Kaldi Empire using the transdisciplinary approach of worldview analysis. Within this approach, it is argued that underlying surficial cultural behaviors there exists deeper levels of cognition regarding how to reason, perceive the world, prioritize values, prescribe behavior, and explain all of life. With this in mind, some preliminary conclusions are possible.

Specifically, this work has examined the language and logic reflected in the textual archive to demonstrate their way of thinking, communicating, organizing, and reasoning. The work’s most basic question was: how did the people of the Kaldi Empire orient themselves within the most foundational level of encoded linguistic and logical preconceptions? Returning to my thesis, based on my research, I argue that one finds at the foundational level of the ancient Kaldi macro-lifeframe two related components. They were linguistically programmed to be attuned to (1) the full context, (2) verbal actions, (3) the continuity of substances, (4) the standardization of maleness, and (5) the power of affective words. And that they were logically programmed to prefer (1) gradations, (2) functional properties, (3) radials and/or rhizomes, and (4) relationships and/or comparisons. By addressing this underlying, implicit cognitive software the Kaldians constructed and used, one is better able to understand the Šumeri-Akkadi culture’s more observable and obvious religious, legal, political, and social features. Thus, this approach is better able to present a more contextualized view of Šumeri-Akkadi civilization—one that is not
constrained and bound to Western WEIRD thinking. It demonstrates the uniqueness of the Ṣalmāt Qaqqadi of the Kaldi Empire and how they influenced subsequent Western Civilization.

Using this understanding we can return to the Uruk vase we discussed in section 3.4.1. Many past scholars have ‘read’ this scene in different ways, as temple redistribution of goods, as a statement of social inequalities, as a harvest festival, and as a sacred marriage rite. Knowing what we now know about comparative realms, the importance of resources like barley and sheep, and the mediative role of the ruler to serve and provide for the gods, let us reconsider the scene (see Figure 26 below).

*Figure 26: Uruk Vase Diagram Revisited (Source Unknown)*
The bottom register of water, two types of grain (barley? and date-palm?), and two types of animals (sheep? and goats?) seem to represent the main resources of the land. Then there is a break before a second register of nude slave men who are holding various baskets or vases of food and drink that are produced from the resources of the bottom register. This register is separated from the top register in which a servant attends to a local ruler while the ruler’s nude slave presents a similar basket of food to the goddess Inana, denoted by her headdress. The goddess seems to be standing next to or in front of her temple from which she rules her jurisdiction of love, war, and fertility, designated by the symbolic barley stalks directly behind her, known as ring doorposts. Inside the temple are two temple attendants (as other familial deity statues or human servants) and more collected resources, like the ones being offered, as well as two elongated vases comparable to the Uruk Vase itself—as if this vase is going to become a temple artifact.

Using what we have learned, this is a scene of cosmic maintenance. The land produces resources which are then made into tribute goods by slaves which are presented by the ruler to the goddess to supply her with the needed food and drink so that she can continue to fulfill her jurisdictional operative functions related to fertility.

No interpretation is without its criticisms. But any interpretation that jives with the other available evidence must be considered. It remains to be seen if this interpretation remains uncorrected once a fully reconstructed Kaldi lifeframe has been completed.

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Like any project, work has been left undone. As this is the first substantial study of this subject using this methodology, the analysis and conclusions are limited. There are still three other lifeframe component levels which are built on the encoded linguistic and logical
preconceptions and programs which remain to be explored; the perceptual presets, evaluative priorities and prescriptions, and the explicative propositions. This project necessarily focused on the scribal texts, but further research needs to expand the voices being heard as much as possible to include others besides the elite males of the scribal tradition.

There are also other avenues of research related to lifeframes (the methodology) and the Kaldi Empire (the subject) which need to be explored. Reconstructing the ancient Kaldian lifeframe will allow scholars to compare and contrast it to other ancient nearby cultures, including Egypt, Assyria, and Israel, in order to understand continuities and differences and what accounts for them. One can open a dialogue between these ancient cultures at a deeper level. And it provides a basis for understanding how the Šumeri-Akkadi linguaculture contributed to Western civilization and thought. This study invites similar ones in ancient Near Eastern studies and ancient studies in general.
APPENDICES

Appendix A: Historical Timeline of the Subject

The below chronology for the central-southern Birīt Nārāti region utilizes the Middle Chronology for dating and most often follows Van De Mieroop’s dates and terms. My own emic terms follow a patterned, consistent methodology. Each term: identifies the ruling cultural group (Šumeri, Akkadi, Amurri), the capital city of the larger rulerships (Agade, Uru, Bābilim), and the type of sociopolitical unit of organization (village, chiefdom, city-state, kingdom, or empire).

<table>
<thead>
<tr>
<th>Dating (BCE)</th>
<th>Linguistic Periodization</th>
<th>Etic Term for Rulerships</th>
<th>Emic Terms Utilized</th>
</tr>
</thead>
<tbody>
<tr>
<td>6500 - 3800</td>
<td>Prehistoric</td>
<td>Ubaid Culture</td>
<td>Ubaid Villages</td>
</tr>
<tr>
<td>3800 - 2900</td>
<td>Sumerian</td>
<td>Uruk Culture</td>
<td>Šumeri Chieftoms</td>
</tr>
<tr>
<td>2900 - 2288</td>
<td>Early Dynasties</td>
<td></td>
<td>Šumeri City-States</td>
</tr>
<tr>
<td>2288 - 2111</td>
<td>Old Akkadian</td>
<td>Akkadian Dynasty</td>
<td>Akkadi-Agade Kingdom</td>
</tr>
<tr>
<td>2110 - 2003</td>
<td>Ur III Dynasty</td>
<td></td>
<td>Akkadi-Uru Kingdom</td>
</tr>
<tr>
<td>2002 - 1792</td>
<td>Isin-Larsa Dynasty</td>
<td></td>
<td>Isin-Larsa-Bābilim City-States</td>
</tr>
<tr>
<td>1792 - 1595</td>
<td>Old Babylonian</td>
<td>Old Babylonian Kingdom or First Babylonian Dynasty</td>
<td>Amurri-Bābilim Kingdom</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Region</th>
<th>Dynasty</th>
<th>Kingdom</th>
</tr>
</thead>
<tbody>
<tr>
<td>1595 - 1500</td>
<td>Near East</td>
<td>Dark Age of Near East</td>
<td>Galši-Băbilim Kingdom</td>
</tr>
<tr>
<td>1475 - 1155</td>
<td></td>
<td>Middle or Standard Babylonian Dynasty</td>
<td></td>
</tr>
<tr>
<td>1157 - 1026</td>
<td></td>
<td>Babylonian</td>
<td>Second Isin Dynasty</td>
</tr>
<tr>
<td>1100 - 900</td>
<td></td>
<td></td>
<td>Dark Age II of Near East</td>
</tr>
<tr>
<td>900 - 627</td>
<td></td>
<td>Mixed Dynasties</td>
<td>Mixed Regional Dynasties</td>
</tr>
<tr>
<td>626 - 539</td>
<td>Neo-Babylonian</td>
<td>Neo-Babylonian Empire or Chaldean Empire</td>
<td>Kaldi Empire</td>
</tr>
<tr>
<td>539 - 484</td>
<td>Late Babylonian</td>
<td>Persian Empire</td>
<td>Pārsa Empire</td>
</tr>
</tbody>
</table>
Appendix B: Akkadûm Semantic Primes with English Equivalents

Exponents of primes may be words, bound morphemes, or phrasemes. They can have combinatorial variants or allolexes (indicated with ~). Exponents of primes can also be polysemous, meaning they can have other, additional meanings in the language. I doubt the primacy of six of the standard primes which seem to be decomposable, including DON’T WANT (explained via NOT WANT), THE SAME (explained via LIKE and NOT ANOTHER), SOME (explained via NOT MUCH, NOT A LITTLE), A LONG TIME (explained via MUCH TIME), A SHORT TIME (explained via A LITTLE TIME), FOR SOME TIME (explained via NOT MUCH TIME, NOT A LITTLE TIME). I could not find any of these six primes (except DON’T WANT) in Akkadûm.

<table>
<thead>
<tr>
<th>Semantic Prime Exponents</th>
<th>Agential Someone Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAMMA ~ MANNU SOMEONE ~ WHO</td>
<td>Indefinite Doer</td>
</tr>
<tr>
<td>NIŠÛ PEOPLE</td>
<td>Human Doer</td>
</tr>
<tr>
<td>ANĀKU ~ YÂTI, ATTA (m.) / ATTI (f.) I ~ ME, YOU</td>
<td>Idential Doer</td>
</tr>
<tr>
<td>YÂ’U (m.) / YATTU (f.), ATTÛ- (with poss. pronoun suffix) (IS) MINE</td>
<td>Possession by Doer</td>
</tr>
<tr>
<td>ŢÁBU ~ DAMQU, LEMNU ~ BÎŠU (only Neo-Bbl), KÎNU GOOD, BAD, TRUE</td>
<td>Evaluations by Doer</td>
</tr>
<tr>
<td>AMÂRU, ŠEMÛ, LAPÂTU SEE, HEAR, TOUCH</td>
<td>Sensory Experiences</td>
</tr>
<tr>
<td>KABATTU ~ LIBBU, ḤASÂSU, ḤAŞÂHU FEEL, THINK, WANT</td>
<td>Mental Experiences</td>
</tr>
<tr>
<td>IDÛ ~ UZNU KNOW ~ SEE ~ HEAR</td>
<td>Mental Evidences</td>
</tr>
<tr>
<td>BALÂTU ~ (W)AŠABU LIVE</td>
<td>Presence of Doers</td>
</tr>
<tr>
<td>MAQÂTU, EPĒŠU, ALÂKU, QABÛ, MÂTU HAPPEN, DO, MOVE, SAY, DIE</td>
<td>Evidential Events</td>
</tr>
<tr>
<td>*concept expressed through juxtaposition</td>
<td>Attributes Specified by Doers</td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>BE (SOMEONE/SOMETHING)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semantic Prime Exponents</th>
<th>Inert Something Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIMMA ~ MĪNU</td>
<td>Indefinite Item</td>
</tr>
<tr>
<td>SOMETHING ~ THING ~ WHAT</td>
<td></td>
</tr>
<tr>
<td>ZUMRU</td>
<td>Specific Relational Item</td>
</tr>
<tr>
<td>BODY</td>
<td></td>
</tr>
<tr>
<td>AMĀTŪ</td>
<td>Speaking Item</td>
</tr>
<tr>
<td>WORDS</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>*concept expressed through determinatives</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>KINDS, PARTS</td>
<td>Relational Item</td>
</tr>
</tbody>
</table>

| KĪMA ~ KĪ | Similarity |
| LIKE ~ AS ~ WAY | |

| išTEN (m.) / IŠTEAT, IŠTET (f.), ŠINĀ (m.) / ŠITTĀ (f.), KALŪ, MĀDU / MĀ’DU (m.), MĀTTU (f.), MAṬŪ | Quantifiers |
| ONE, TWO, ALL, MUCH ~ MANY, LITTLE ~ FEW | |

| ANNŪ ~ AGÂ (only Neo-Bbl), ŠANÛ | Determiners |
| THIS, OTHER ~ ELSE ~ ANOTHER | |

| RABŪ, ŠIHĪRU ~ QALLU (only Neo-Bbl), MĀDIŠ, ELI | Descriptors |
| BIG, SMALL, VERY, MORE ~ ANYMORE | |

| LĀ ~ UL, MINDE, LE’Ū, AŠŠU, ŠUMMA | Logical |
| NOT, MAYBE, CAN, BECAUSE, IF | |

| ADANNU ~ MATI, ANUMMA ~ INANNA | Substantive Temporality |
| TIME ~ WHEN, NOW | |

| SURRI | Durative Temporality |
| MOMENT | |

| LĀMA, ULTU ~ WARKI | Sequential Temporality |
| BEFORE, AFTER | |

| BAŠŪ, IBASĪ (present tense) | Substantive Presence |
| BE (SOMEWHER), THERE IS | |

| AŠRU ~ ĖKĀNU (only Neo-Bbl), AKANNA (only Neo-Bbl) | Substantive Positionality |
| PLACE ~ WHERE ~ SOMEWHERE, HERE | |

| ELŪ, ŠAPLŪ, QERBĒNU, INA IDI, RĒQU, QERBU | Relational Positionality |
| ABOVE, BELOW, INSIDE, SIDE, FAR, NEAR | |
Appendix C: Sample Combinatorial Possibilities of Semantic Primes

Note: This table is not comprehensive. It is replicated from Kumon, “How Qoheleth Thought,” 67-74.

| I ~ ME | I want to do/know/say something  
I want this, I don’t want this  
I don’t know  
something bad can happen to me  
someone like me |
|--------|-------------------------------------------------------------------------------|
| YOU    | I want you to do/know/say something  
something bad can happen to you  
you are someone like me |
| SOMEONE| this someone  
the same someone  
someone else  
this other someone  
someone does/says something |
| SOMETHING~THING | this something~thing  
the same something~thing  
something else~another something  
something big  
something small  
something of one kind |
| BODY   | someone’s body  
people’s bodies  
part of someone’s body  
a body of one kind  
bodies of two kinds  
something bad happens inside someone’s body  
someone feels something in the body |
| PEOPLE | these people  
many people  
some people  
few people  
many people think like this: …  
people can say …  
people of one kind |
| KIND   | this kind  
the same kind  
another kind  
this other kind  
something/someone of one kind  
people of one/two/many kinds |
| PART | part of someone’s body  
|      | this **part**  
|      | the same **part**  
|      | another **part**  
|      | this other **part**  
|      | this something has two/many **parts**  |
| WORDS | many **words**  
|       | other **words**  
|       | one **word**  
|       | **words** of one kind  
|       | say something with (not with) **words**  
|       | say something in other **words**  
|       | say these **words**  
|       | these **words** say something  |
| THIS | **this** someone (something)  
|      | **these** people  
|      | **this** kind  
|      | **this** part  
|      | at **this** time  
|      | in **this** place  
|      | because of **this**  
|      | it is like **this**: …  |
| THE SAME | **the same** someone  
|        | **the same** thing  
|        | **the same** part  
|        | **the same** kind  
|        | at **the same** time  
|        | in **the same** place  
|        | someone says/does/thinks/knows/wants/feels **the same**  |
| OTHER~ELSE~ANOTHER | someone **else**  
|                   | something **else**  
|                   | at **another** time  
|                   | somewhere **else**  
|                   | **other** parts  
|                   | **other** kinds  
|                   | this **other** part  
|                   | this **other** kind  
|                   | this **other** someone  
|                   | this **other** thing  |
| ONE          | **one** someone  
|             | **one** thing    
|             | **one** part     
|             | **one** kind     
|             | in **one** place 
|             | at **one** time  
|             | **one** of these things/people 
|             | something of **one** kind 
|             | **one** more thing |
| TWO         | **two** things   
|             | **two** parts    
|             | **two** kinds    
|             | **two** of these things/people 
|             | **two** more things |
| MUCH~MANY   | **many** people  
|             | **many** things  
|             | **many** parts   
|             | **many** kinds   
|             | at **many** times 
|             | in **many** places 
|             | **much** of this something (e.g., water) 
|             | **much** more    
|             | **many** more    |
| ALL         | **all** people   
|             | **all** things   
|             | **all** parts    
|             | **all** kinds    
|             | at **all** times 
|             | in **all** places 
|             | **all** of this something (e.g., water) |
| SOME        | **some** people  
|             | **some** things  
|             | **some** parts   
|             | **some** kinds   
|             | at **some** times 
|             | in **some** places 
|             | **some** of these things/people 
|             | **some** of this something (e.g., water) |
| LITTLE~FEW  | **few** people   
|             | **few** things   
|             | a **little** of this something (e.g., water) 
|             | very **little**  
|             | very **few**     |
| TIME~WHEN                  | (at) this time  
|                          | (at) the same time  
|                          | at another time  
|                          | at this other time  
|                          | at some times  
|                          | at many times  
|                          | at the time when  
| NOW                      | something is happening here now  
|                          | When I say this now, …  
| MOMENT                   | It happens in one moment  
|                          | a moment before  
|                          | a moment after  
|                          | at this moment  
| (FOR) SOME TIME          | some time before  
|                          | some time after  
|                          | it happens like this for some time  
|                          | someone does this for some time  
|                          | [during this time = at this time, for some time]  
| A LONG TIME              | a long time before  
|                          | a long time after  
|                          | a very long time  
|                          | for a long time [=for some time, a long time]  
| A SHORT TIME             | a short time before  
|                          | a short time after  
|                          | a very short time  
|                          | for a short time [=for some time, a short time]  
| BEFORE                   | before this  
|                          | some time before  
|                          | a short time before  
|                          | a long time before  
| AFTER                    | after this  
|                          | some time after  
|                          | a short time after  
|                          | a long time after  
| WANT                     | I want this  
|                          | someone wants something  
|                          | someone wants to do/know/say something  
|                          | someone wants someone else to do/know/say something  
|                          | someone wants something to happen  
|                          | I want it very much  
| DON’T WANT               | I don’t want this  
|                          | someone doesn’t want this  
|                          | someone doesn’t want to do something  
|                          | someone doesn’t want something to happen  

<p>| 292 |</p>
<table>
<thead>
<tr>
<th>Category</th>
<th>Example Sentences</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEEL</td>
<td>someone feels something (good/bad) in part of the body. Someone feels something good/bad towards someone else/something.</td>
</tr>
<tr>
<td>DO</td>
<td>someone does something (to someone else). Someone does something with something else/part of the body. Someone does something with someone else. Someone does something good (for someone else)/bad (to someone else).</td>
</tr>
<tr>
<td>SAY</td>
<td>I say: … Someone says something (good/bad) (to someone). Someone says something (good/bad) (about someone/something). Someone says something like this: … Someone says something with words. Someone says a word to someone.</td>
</tr>
<tr>
<td>KNOW</td>
<td>I know this. Someone knows it. Someone knows something (a lot) about someone/something. People can know this.</td>
</tr>
<tr>
<td>SEE</td>
<td>Someone sees someone/something (in a place). People can/can’t see well in this place. Someone/People can/can’t see this something.</td>
</tr>
<tr>
<td>HEAR</td>
<td>Someone hears something. People can feel something bad when they hear this word.</td>
</tr>
<tr>
<td>THINK</td>
<td>Someone thinks about someone else/something. Someone thinks something good/bad about someone else/something. Someone thinks like this: … Many people think like this: …</td>
</tr>
<tr>
<td>BE (SOMEWHERE)</td>
<td>Someone is somewhere (in a place). Something is somewhere (in a place). Someone is with someone else.</td>
</tr>
<tr>
<td>LIVE</td>
<td>Someone lives for a long time. Many people live in this place. This someone lives with someone else. It is good if someone lives like this.</td>
</tr>
<tr>
<td>DIE</td>
<td>Someone dies at this time. All people die at some time.</td>
</tr>
<tr>
<td>Term</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>THERE IS</td>
<td>there is something in this place</td>
</tr>
<tr>
<td></td>
<td>there is someone in this place</td>
</tr>
<tr>
<td></td>
<td>there are two/many kinds of ...</td>
</tr>
<tr>
<td>BE</td>
<td>this someone is someone like me</td>
</tr>
<tr>
<td>(SOMEONE/SOMETHING)</td>
<td>this is something of one kind</td>
</tr>
<tr>
<td></td>
<td>this something is big/small</td>
</tr>
<tr>
<td></td>
<td>I know who this someone is</td>
</tr>
<tr>
<td>(IS) MINE</td>
<td>this thing (knife, shirt, etc.) is mine [this thing is someone else’s = someone else can say about this thing: it is mine]</td>
</tr>
<tr>
<td>MOVE</td>
<td>someone moves (in this place)</td>
</tr>
<tr>
<td></td>
<td>something moves in this place</td>
</tr>
<tr>
<td></td>
<td>parts of this someone’s body move as this someone wants</td>
</tr>
<tr>
<td>TOUCH</td>
<td>something touches something else (somewhere)</td>
</tr>
<tr>
<td></td>
<td>something touches part of someone’s body</td>
</tr>
<tr>
<td></td>
<td>someone/people can/can’t touch this something</td>
</tr>
<tr>
<td>INSIDE</td>
<td>inside this something</td>
</tr>
<tr>
<td></td>
<td>inside this someone</td>
</tr>
<tr>
<td></td>
<td>inside part of this someone’s body</td>
</tr>
<tr>
<td>PLACE<del>WHERE</del>SOMEWHERE</td>
<td>(in) this place</td>
</tr>
<tr>
<td></td>
<td>(in) the same place</td>
</tr>
<tr>
<td></td>
<td>somewhere else</td>
</tr>
<tr>
<td></td>
<td>(in) this other place</td>
</tr>
<tr>
<td></td>
<td>in some places</td>
</tr>
<tr>
<td></td>
<td>in many places</td>
</tr>
<tr>
<td></td>
<td>in the place where ...</td>
</tr>
<tr>
<td>HERE</td>
<td>something is happening here now</td>
</tr>
<tr>
<td>ABOVE</td>
<td>above this place</td>
</tr>
<tr>
<td></td>
<td>far above this place</td>
</tr>
<tr>
<td></td>
<td>someone above other people</td>
</tr>
<tr>
<td>BELOW</td>
<td>below this place</td>
</tr>
<tr>
<td></td>
<td>far below this place</td>
</tr>
<tr>
<td>ON ONE SIDE</td>
<td>on this side</td>
</tr>
<tr>
<td></td>
<td>on the same side</td>
</tr>
<tr>
<td></td>
<td>on one side</td>
</tr>
<tr>
<td></td>
<td>on two sides</td>
</tr>
<tr>
<td></td>
<td>on all sides</td>
</tr>
<tr>
<td>NEAR</td>
<td>near this place</td>
</tr>
<tr>
<td></td>
<td>near someone</td>
</tr>
<tr>
<td>FAR</td>
<td>far from this place</td>
</tr>
<tr>
<td>NOT~DON’T</td>
<td>not good</td>
</tr>
<tr>
<td></td>
<td>not bad</td>
</tr>
<tr>
<td></td>
<td>not like this</td>
</tr>
<tr>
<td></td>
<td>I don’t know</td>
</tr>
<tr>
<td></td>
<td>someone can’t do this</td>
</tr>
<tr>
<td><strong>CAN</strong></td>
<td>someone can do something</td>
</tr>
<tr>
<td></td>
<td>someone can’t do something</td>
</tr>
<tr>
<td></td>
<td>someone can’t not do something</td>
</tr>
<tr>
<td></td>
<td>something (good/bad) can happen</td>
</tr>
<tr>
<td></td>
<td>it can be like this: …</td>
</tr>
<tr>
<td><strong>BECAUSE</strong></td>
<td>because of this</td>
</tr>
<tr>
<td></td>
<td>it happened because this someone did something before</td>
</tr>
<tr>
<td></td>
<td>… not because of anything else</td>
</tr>
<tr>
<td><strong>IF</strong></td>
<td>if it happens like this for some time, …,</td>
</tr>
<tr>
<td></td>
<td>if you do this, …</td>
</tr>
<tr>
<td></td>
<td>if someone does something like this, …</td>
</tr>
<tr>
<td><strong>MAYBE</strong></td>
<td>maybe it is like this</td>
</tr>
<tr>
<td></td>
<td>maybe it is not like this</td>
</tr>
<tr>
<td></td>
<td>maybe someone else can do it</td>
</tr>
<tr>
<td><strong>LIKE<del>AS</del>WAY</strong></td>
<td>it happens like this: …</td>
</tr>
<tr>
<td></td>
<td>it is like this: …</td>
</tr>
<tr>
<td></td>
<td>someone thinks like this: …</td>
</tr>
<tr>
<td></td>
<td>someone like me</td>
</tr>
<tr>
<td></td>
<td>this someone does it like this</td>
</tr>
<tr>
<td></td>
<td>it happens as this someone wants</td>
</tr>
<tr>
<td></td>
<td>… do/say it in this way, not in another way</td>
</tr>
<tr>
<td><strong>VERY</strong></td>
<td>very big</td>
</tr>
<tr>
<td></td>
<td>very small</td>
</tr>
<tr>
<td></td>
<td>very good</td>
</tr>
<tr>
<td></td>
<td>very bad</td>
</tr>
<tr>
<td></td>
<td>very far</td>
</tr>
<tr>
<td></td>
<td>very near</td>
</tr>
<tr>
<td></td>
<td>a very short time</td>
</tr>
<tr>
<td></td>
<td>a very long time</td>
</tr>
<tr>
<td></td>
<td>I want it very much (=very)</td>
</tr>
<tr>
<td></td>
<td>very very big</td>
</tr>
<tr>
<td></td>
<td>very very good</td>
</tr>
<tr>
<td></td>
<td>very very far etc.</td>
</tr>
<tr>
<td><strong>MORE~ANYMORE</strong></td>
<td>someone wants more</td>
</tr>
<tr>
<td></td>
<td>someone does more</td>
</tr>
<tr>
<td></td>
<td>someone wants to know/say/think more about it</td>
</tr>
<tr>
<td></td>
<td>one more</td>
</tr>
<tr>
<td></td>
<td>two more</td>
</tr>
<tr>
<td></td>
<td>many more</td>
</tr>
<tr>
<td></td>
<td>not more</td>
</tr>
<tr>
<td></td>
<td>not living anymore</td>
</tr>
<tr>
<td></td>
<td>not like this anymore</td>
</tr>
</tbody>
</table>
| SMALL      | something **small**  
a **small** place  
very **small** |
|------------|----------------------|
| BIG        | something **big**    
a **big** place  
very **big** |
| BAD        | something **bad**    
someone **bad**  
something **bad** happens  
do something **bad** (to someone)  
feel something **bad**  
this is **bad**  
it is **bad** if … |
| GOOD       | something **good**   
someone **good**  
something **good** happens  
do something **good** (for someone)  
feel something **good**  
this is **good**  
it is **good** if … |
| TRUE       | this is **true**     
this is not **true** |
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