

## THE SURVIVAL FITNESS OF MEMES IN THE INHERITANCE DIVISIONS FROM OLD BABYLONIA SIPPAR

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### ABSTRACT

Today, the clay tablets chiselled by Old Babylonian scribes from the city-state of Sippar are our only evidence of the legal conventions from oral agreements between family members in the division of their inheritance. But why would the Old Babylonians, a predominantly oral culture, go to the expense of hiring a scribe? On face value, it seems understandable that the recording of the division of the inheritance was for the sake of standardisation, legibility and simplification (Yoffee 1991). However, there is more to it. In this paper, I present Dawkins' meme theory (1976) and assert that the legal conventions of division agreements and scribal school practices in Old Babylonian Sippar are a "meme complex", a group of memes that co-adapt in order to ensure their own replication (Blackmore 1999, Dawkins 1976, Dennett 1991). The question still remains: why do these memes survive? I propose that the structures of the filters of such memes — driven by simplicity — are standardisation, certainty and legibility. They promote the memes in their evolutionary algorithm of variation, selection and retention. Thus, the recording of the oral division agreement is merely a record designed to protect and carry on the division agreement's scribal school practices and, to a lesser degree, its legal conventions.

### INTRODUCTION<sup>1</sup>

In Mesopotamia,<sup>2</sup> even elaborate Old Babylonian<sup>3</sup> (OB) division agreements pose a

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<sup>1</sup> In this article, Sumerian terms are in bold font. Akkadian terms and any other foreign language terms are in italicised font. I follow the transcription of the Chicago Assyrian Dictionary (CAD) concerning Akkadian and Sumerian terms. The abbreviated term for Old Babylonia/n is OB.

<sup>2</sup> Ancient Mesopotamia refers to the area between the Tigris and Euphrates rivers which today stretches from Baghdad to the Persian Gulf. It is a popular subject for study by ancient Near Eastern scholars. See Van de Mieroop (2007).

<sup>3</sup> Scholars today assign OB to the Mesopotamian period, circa 2000–1600 B.C.E. From the second half of the nineteenth century C.E., scholars have deciphered, translated and

puzzle of vague or absent information regarding the rationale, specific provisions and actual meanings of the agreement, as well as the consequences for the contractual parties involved. Often we have to resort to speculation and sometimes guesswork. However, the contractual parties remembered the details of their oral agreement many years after the conclusion of the division of their inheritance, notwithstanding minor details chiselled onto a clay tablet. It seems this was due to “multi-sensory”<sup>4</sup> communication tools and the collaboration of other members of the community who acted as witnesses to the oral agreement.<sup>5</sup>

Old Babylonian division agreements cover inheritances ranging from high value to low value, and in some cases even insignificant value. Those agreements dealing with high-value divisions presumably belonged to the prosperous of OB society. This may also be the case in an agreement of lesser-valued assets, for wealthy contractual parties may have decided to divide only certain assets from the inherited estate. However, in some OB Sippar divisions of insignificant value, the contractual parties use symbolic expressions<sup>6</sup> to mention that they have divided the entire inheritance.

Furthermore, the recording of a division agreement by an experienced, well-trained scribe meant a financial expense for the family.<sup>7</sup> The OB scribe underwent years of arduous study to accumulate generations of scribal knowledge.<sup>8</sup> It thus follows that the affluent levels of society could have afforded such luxury, while the

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discussed thousands of excavated OB tablets.

<sup>4</sup> “Multi-sensory communication” is a term coined by Hibbits (1991) and is the transfer of information through the overall performance of visual, aural, tactile and savoury communication acts (Hibbits 1992:955).

<sup>5</sup> Hibbits (1992:873–960 esp. p. 874) warns us not to superimpose our perceptions of the written medium onto the written recordings of Mesopotamia. Mesopotamia was a predominantly preliterate society and legal acts were performed through the medium of all of the senses of a Mesopotamian (Hibbits 1992:951–956).

<sup>6</sup> Malul (1988, esp. 449–450) states that the functional goal of ancient written documents was to capture the most important details of the agreement. The symbolic act, or at least its ceremonial details, were not always pertinent in the document itself, but played a vital role in the performance of the legal act.

<sup>7</sup> See discussion by Van Wyk (2013a:160–163; 2013b:429; 2013c:316) regarding the OB written medium used by the scribes in division agreements.

<sup>8</sup> The scribe notated the provisions by specific phrases. The complexity of such phraseology required training at an advanced level. See Claassens-Van Wyk (2013:59–63).

less affluent would have relied on the advantages of memory acquired by multi-sensory communication tools.

The following questions remain: what if the whole of the inheritance was divided, as inferred from symbolic expressions, and such a division held small values in financial worth? Why, in a predominantly-oral community, would Old Babylonians considered it necessary to burden themselves with financial expenses in the recording of only some aspects of an oral agreement, since unlike our written division agreements,<sup>9</sup> the clay tablets included no background story and the details of specific provisions were usually omitted and sometimes even the parties' names?

In this paper, I reconsider the rationale for recording both the division agreement of smaller estates, and the abridged recording of an oral agreement that omits the detailed provisions and/or conditions and/or even essential facts. I propose that the recorded legal conventions and scribal school practices of the Sippar division agreements are memes acting in co-adaptation, driven by certainty, legibility and standardisation.

I start by introducing Yoffee's (2001) proposal of the OB (Mesopotamian) state's goals of simplicity, legibility and standardisation. I propose that, although OB division agreements include these goals, there is more to it, which leads me to a discussion of Dawkins' (1976) meme theory — "meme" being the cultural analogy of the gene. After providing the background to meme theory, I apply the theory to the family division agreement from the OB city-state of Sippar.<sup>10</sup>

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<sup>9</sup> Even today, irrespective of time or place, there are division agreements in the different law "systems" and "traditions". See Claassens (2012/1:1–2).

<sup>10</sup> The application of the meme theory in the different scientific disciplines has drawn a wide range of criticisms. Tim Tyler (2011:129–170) gives an outline of these criticisms and some of the theory's outstanding issues (2011:170–184). Unfortunately, the scope and length of my article does not permit a discussion of the criticisms and the theory's outstanding issues, since the article is only an introductory overview of the meme theory and its application to the division agreement from OB Sippar. However, in a follow-up article — focusing on the meme theory's application to the OB Nippur division agreement — I plan to expand on the introductory overview, explaining why the meme concept is a scientifically useful metaphor used as a template to serve as a new hermeneutical key in our understanding of the recorded division agreement.

## YOFFEE'S EVOLUTION OF SIMPLICITY

Yoffee (2001:767–769)<sup>11</sup> takes Scott's (1998) perspective of the emerging state and proposes that in Mesopotamia, the “creation of the state” and “what keeps the state alive” was based on three goals, i.e., standardisation, legibility, and simplification. Yoffee (2001:758) adds, “(t)he State can only through these concepts exert its power” For instance, legibility appeared with the emerging Mesopotamian state in making society legible through writing.<sup>12</sup> The writing system included compilations of different lists and the establishment of scribal schools (Yoffee 2001:768).<sup>13</sup> Standardisation on a progressive scale is noticed in the Sumerian language from the third millennium B.C.E.<sup>14</sup> as an official written language and other cultural aspects. Other examples include the bevelled bowls in the late Uruk period, used by temple and palace officials in the distribution of grains in rations;<sup>15</sup> the calendric,<sup>16</sup> weight, and measures systems (Yoffee 2001:768);<sup>17</sup> the regulation of irrigation and field systems (Yoffee 2001:769);<sup>18</sup> and the law collections that show “trends toward unifying legal discourse” (Yoffee 2001:768).<sup>19</sup>

Yoffee (2001:769) contends that the Mesopotamian state failed in the continuous

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<sup>11</sup> Yoffee (2001:767) explains that for Scott (1998), modern states make society legible by creating a standard for complex and illegible social practices. The authorities can record, monitor and control these practices, e.g., permanent last names, standardisation of weights and measures, implementation of cadastral surveys, uniformity in law practices, as well as the promotion of official languages.

<sup>12</sup> See Pearce (1995:2265–2278) for a general overview of scribal traditions in Mesopotamian society.

<sup>13</sup> See Falkenstein (1953:125–137), Kramer (1949:199–215), Lukas (1979:305–332), Veldhuis (1997), Tinney (1998:40–50, 2004:33–62), Robson (2001:39–66) and Tanret (2004).

<sup>14</sup> See Michalowski (2000:177–202, 2006:159–184) referring to Sumerian as the “artificial written language”.

<sup>15</sup> See Pollock (1999:94–95) and Postgate (1990:228–240; 1992).

<sup>16</sup> See Cohen (1993).

<sup>17</sup> See Powell (1989–1990:457–517; 1996:224–242) and Price (1932:174–178).

<sup>18</sup> Potts (1997). See also Harris (1968:7272–732) regarding the centralisation of government, Oats (1990:338–406) regarding decorative and structural techniques of mud-brick structures, and Müller (1940:151–180) outlining the different types of Mesopotamian houses.

<sup>19</sup> See Roth's (1995) translations of Mesopotamian law collections and other scribal school exercises, and Westbrook (2003).

control of all aspects of production, consumption and exchange. Political authorities did not enforce these goals of uniformity, standardisation of language, measurements and beliefs systems. Rather, the goals served as “logical developments of deep prehistoric interaction of commonalities.”<sup>20</sup>

Yoffee’s (2001) opinion influenced me to look at both the recorded and oral division agreement from an evolutionary memetics perspective; in the following section I thus introduce the meme theory.

## THE MEME THEORY

### The origin and development of the meme theory

Richard Dawkins, a biological zoologist sometimes referred to as an “evolutionary biologist”, popularised Charles Darwin’s (1859) theory of evolution. In 1976 he introduced the concept of the “selfish gene” in a popular science book by the same title, and its cultural analogue, the “meme”.<sup>21</sup>

Other scholars extended the meme theory into fields such as the humanities,<sup>22</sup> social media and communication platforms such as the Internet.<sup>23</sup> However, the most popular fields of study for memetics are religion and consciousness, with controversial contributions by Richard Brodie (1996) and Aaron Lynch (1996), Daniel Dennett (1991:199–208, 1995),<sup>24</sup> Richard Dawkins (1989, 1999) and Susan Blackmore (1999). Blackmore (1999)<sup>25</sup> holds an extreme view of memetics and postulates that from a “meme’s eye view” memes are the “evolving replicators” and we are only “meme

<sup>20</sup> Yoffee (2001:769) proposes that a “social evolutionary theory” still needs to be examined.

<sup>21</sup> In later contributions, Dawkins extended on the meme theory (e.g., 1999:108–112, 2004a:278–280, 1998:306–309 and 2004b:137–172).

<sup>22</sup> See Chesterman (1997) and Shennan (2002).

<sup>23</sup> See Bauckhage (2011), Davison (2012), Dawkins (2004b:151–172) and Shifman (2013).

<sup>24</sup> According to Blackmore (1999:ix), Daniel Dennett (1991, 1995) has adopted the idea of the meme as the cornerstone of his theory of the mind. Dennett (1995:52–60) extended the theory of evolution by natural selection and considered it as an algorithmic process. Algorithm in this sense means a long division, with sometimes some significant degree of randomness.

<sup>25</sup> See Blackmore (2000: 65–66) and replies by Dugatkin, Boyd and Richerson and Plotkin (Blackmore 2000:67–73).

machines” (Blackmore 2000:66).<sup>26</sup>

However, there is resistance among scholars to applying the meme theory to different disciplines, including law,<sup>27</sup> and one reason is the overall popular and scientific attention to religion<sup>28</sup> and consciousness.<sup>29</sup> Nevertheless, the concept of the meme has caught on, as evidenced by various scholarly contributions,<sup>30</sup> as well as the establishment in 1997 of *The Journal of Memetics*, which aims to publish online scholarly articles regarding evolutionary models of information transmission.<sup>31</sup>

### The “meme”

Richard Dawkins (1976; 2006:192) coined the term meme to describe a “noun that conveys the idea of a unit of cultural transmission, or a unit of imitation”. It is

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<sup>26</sup> Blackmore (1999:7–8) alleges that even our ideas are not our own creations, but rather ideas are “autonomous selfish memes” with the aim of getting themselves copied. In the copy process, we only hold the powers of imitation and are the hosts of the self-replicating memes (Blackmore 1999:27).

<sup>27</sup> Legal memetics is a branch of memetics and some philosophers of law have applied the principles of legal memetics to the development of common law in Anglo-American and Western jurisprudence. See, for instance, Fried (1999:291–316, esp. 303ff.), Goodenough (2001), Gordon (2001:1809–1834), Oeser (2003:85–118), Niblet, Posner and Shleifer (2010:325–358). Deakin (2002, 2011, 2015a, 2015b) focuses on the evolutionary role of economics and law. See also Dennett’s (1991:264–266) summary of this evolutionary algorithm.

<sup>28</sup> Dawkins (1976:193–194) considers religion as a meme stored in the brain and passed on through imitation by the whole society, with belief in God or an afterlife. Blackmore (2000:66) opines that the “threats of death or eternal damnation, and the promises of everlasting bliss” help to let the meme-religion survive. The memes need to survive and require a proportional income of human followers in “propagating” the memes (Blackmore 2000:66).

<sup>29</sup> See Dennett’s (1991:346, 209–226) remarks on the consciousness of memes and us as the virtual machines. Dennett (1991:209–226) in a narrative reflects on an analogy of memes, and Alan Turing and John von Neumann’s practical and theoretical hypothesis of computer development.

<sup>30</sup> See Balkin (1998), Laland and Brown (2002), Shennan (2002) and Aunger (2002), Gordon (2002), Heylighen (1992) and the continuously updated version of Wilkins and Hull’s (2014) “Replication and reproduction”. See also Tim Tyler’s (2011) outline of the basic concepts of memetics, including an overview of its history, applications and developments, as well as its critics’ main views.

<sup>31</sup> Although the *Journal of Memetics* was discontinued in print in 2005, Wilkins and Hull (2014) continue publishing online.

conceivably derived from the Greek root *mimeme* meaning imitation. Dawkins (2006:192) abbreviated *mimeme* to the monosyllabic “meme” (with an apology to his classicist friends).

Dawkins (1999:vii–viii) remarks that nowadays the “meme” is defined in the Merriam Webster Dictionary as “an idea, behaviour or style that spreads from person to person within a culture”. For Dawkins (1999:vii–viii) the “more accurate” definition is found in the Oxford English Dictionary with its inclusion of “imitation”, defining the meme as “an element of a culture that may be considered to be passed on by non-genetic means, especially imitation”.<sup>32</sup>

### **What memes are**

The term “meme” refers to the transmission of words, ideas, fashion, mannerisms, etcetera (Dawkins 1999:vii; 1976:206). Other examples of memes are tunes, ideas, catch-phrases, clothes, fashions, ways of making pots, building arches (Dawkins 2006:192), popular songs, stiletto heels, religious laws (Dawkins 2006:189–190, 194), as well as skills learned by imitation such as stone tool-making, weaving, and techniques for fishing and pottery (Dawkins 1998:306). Dennett (1995:144, 344) includes in the concept of memes “all ideas” that are “distinct memorable units”, though not acting in isolation. Thus, all achievements of human culture such as language, art, religion, ethics and science are artefacts of the same process as its biological equivalent, such as bacteria, mammals and homo sapiens (1995:344), but in the form of “more or less identifiable cultural units” (Dennett 1991:201).

The meme does one thing: it imitates (Blackmore 1999:3ff.; 1998).<sup>33</sup> From the meme’s viewpoint, we are the “imitators and selectors” and “act as replicating

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<sup>32</sup> Gordon (2002:196) states differently that “a meme acts as a unit for carrying cultural ideas, symbols, or practices that can be transmitted from one mind to another through writing, speech, gestures, rituals, or other imitable phenomena with a mimicked theme”. See also Dawkins’ (2004b:141–142) historic narrative of the coined term.

<sup>33</sup> Dawkins (1976:206, 2004a:278–281) agrees. Blackmore (2000:65–66) opines that only humans have the ability to imitate at an advanced level and this is why we have evolved into having the biggest brains among all species. See replies of Dugatkin, Boyd, and Richerson and Plotkin (2000:67–73).

machinery”, as well as being the “selective environment for the memes” (Blackmore 1999:15). We, as the clever species on earth, are the only ones capable of “extensive and generalised imitation”. We can copy and recopy ideas and concepts by means of imitation (Blackmore 1999:3–15). It is due to the memes as the second replicator that we have evolved, having bigger brains and consequently culture and language (Blackmore 1999:15).<sup>34</sup> Blackmore (1999:37ff.) explains that to understand the meme’s view is to “imagine a world full of hosts (e.g. brains) for memes and far more memes than can possibly find homes”. Then we must ask, “Which memes are more likely to find a safe home and get passed on again?” Dennett (1995:346) attests that from the meme’s perspective, “A scholar is just a library’s way of making another library.”

However, not everything is a meme and certain aspects can be excluded, such as “perceptions, emotional stages, cognitive maps, experience in general or anything reliant and subject to an instant experience” (Blackmore 1999:15; 1998).

### **The meme’s basis as the second replicator**

The so-called replicators are at the heart of memetics and refer to everything that is copied by human imitation.<sup>35</sup> What is a replicator? In biology, the first replicator would be the gene on a DNA or RNA molecule (Dawkins 1999:83; 1976:206; 1999:83, 108–110). The second replicator is the meme. In essence, the meme is the replicator of cultural evolution and the gene is the replicator of biological evolution (Dawkins 2006:189–201, 322).

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<sup>34</sup> Dennett (1995:338–342, 346–347) opines that it is language and culture that makes us different to other species. Cultural evolution is grander and takes place at a much faster pace than genetic evolution. However, although our cultural evolution has given us a “completely different outlook on life”, it also makes us “erroneously impose” our outlook on other living forms (Dennett 1995:338–339, esp. p. 339). Dennett (1995:341) claims that the reason is due to the invaders, called memes, that infested our brains.

<sup>35</sup> Dawkins’ (1999:81–95) definition is “any entity in the universe of which copies are made”.



### **The meme and the gene: similarities and differences**

Genes and memes (as replicators) obey the general principles of evolutionary theory, but for the rest “they are related only by analogy” (Blackmore 1999:17).

The theory of evolution by natural selection describes three conditions that exist in genetic evolution, namely:<sup>36</sup>

- variation, or the introduction of new change to existing elements, on a continuous basis;
- heredity or replication, or the capacity to create copies of themselves; and
- differential “fitness”, or the opportunity for one element to be more or less suited to the environment than another, depending on interactions between such element and the environment (Blackmore 1999:17–18; Dennett 1995:343, 345; 1991:200).

Memes are the cultural analogues to genes in that they self-replicate, mutate and respond to selective pressures. Both the meme and gene are “inherently selfish”, although we must be clear what “selfish” in this context means.<sup>37</sup> The only interest genes and memes have is their own replication to survive the transfer to the next generation. It is irrelevant to the gene and meme whether this is to the host’s advantage or not (Blackmore 1999:5, Dawkins 2006:198).

Our human brains and minds are a combined product of genes and memes. As Dennett (1991:207) puts it, “a human mind is itself an artefact”. Memes restructure a human brain by adapting it to hold a “better habitat for memes”. Still, the memes as replicators in the memetic selection “drive the evolution of ideas”, but for the interest of replicating the memes, not the genes.

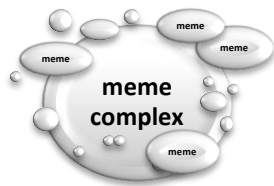
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<sup>36</sup> Deakin (2015a:1–15) applies the VSR (variety, selection and retention) evolutionary algorithm to the study of the development of English common law and investigates how English judges apply the common law method with their language. The latter reflects judges’ perceptions for the “need for stability with adaptability”. Deakin (2015b) opines that the common law and its memes are also embedded in social practices. My sincere thanks to Prof. Simon Deakin for putting this new edition and other contributions at my disposal.

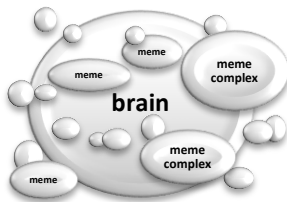
<sup>37</sup> Dawkins (1999:57, 291) explains biologists’ restricted use of altruistic behaviours and their various shades of meaning.

## Meme complexes

In the meme pool, there are “compatible memes,” termed “memeplexes or co-adapted meme complexes” as part of a group that enhances the memes’ replication (Dawkins 1999:xiv, Blackmore 1999:19). This is why Dawkins (2006:199) called them co-adapted memes.<sup>38</sup> See unscaled schematic analogue of a meme complex, hosting memes in Figure 1, and the unscaled analogue of the brain hosting meme complexes and memes in the meme pool of the brain in Figure 2.



**Figure 1.** Unscaled analogue of meme complex, hosting memes



**Figure 2.** Unscaled analogue of brain, hosting memes and meme complexes

Clusters of memes or meme-complexes can be cultural or political doctrines and systems that are “self-organising and self-protecting structures”. Their co-adaption and replication as a group enhances their ability to prevent, inhibit or allow the acceptance of new memes and repel memes that are not part of their meme complex structure (Dawkins 2006:197–199; Blackmore 1999:231).<sup>39</sup>

<sup>38</sup> See Dawkins (2006:197–199).

<sup>39</sup> Henke (2007:16–17) opines that in law the smallest part of the meme is the if-sequence – if someone does something, then the person must be punished. In an area of law, the meme complexes could entail legal principles or legal constructions, including a composition of mutually-supporting memes (Henke 2007:16–17). Henke (2007:16–17) contends that memes in the law are mainly if-then-follow principle and the if-then-order adapted from

## **Vehicle or interactor**

Vehicles are, for instance, pictures, books, sayings, tools and buildings that carry the invisible memes (Dennett 1995:347–348). Dawkins (1999:302) defines the vehicle or interactor as “any relatively discrete entity, such as an individual organism, which houses replicators (memes) and which can be regarded as a machine programmed to preserve and propagate the replicators (memes) that ride inside it”.

While the replicator (meme) poses the power of imitation and “is anything of which copies are made” (Blackmore 1999:5), the memes can form part of a vehicle or interactor, therefore the vehicle or interactor<sup>40</sup> interacts with the environment and carries and protects the memes (Blackmore 1999:5). However, individual organisms are not the only entities that might be regarded as vehicles in this sense. There is a hierarchy of entities embedded in larger entities, and, in theory, the concept of vehicle might be applied to any level of the hierarchy (Dawkins 1999:112).

While a meme’s success is measured by its capacity to survive in the form of copies, a vehicle’s success is measured by its capacity to propagate memes inside it (Dawkins 1999:114; Dennett 1995:347).

In addition, the memes act as a “structure of filters” in the “meme construction of considerable robustness” (Dennett 1995:350). For example, in our academic world the memes and the transmission of memes in editing and criticism have filters such as blind-refereeing, specialised journals, book reviews, etcetera (Dennett 1995:351). The memes had to “break through” these filters and so the “arms race” began (Dennett 1995:351).<sup>41</sup>

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social conditions.

<sup>40</sup> Hull (2001) prefers the term “interactor”, because an interaction takes place in the evolutionary algorithm process of variation, selection and retention. For Hull (2001:22), the interactors are “cohesive wholes” that interact with the environment, making replication necessary. See also Hull (2001:22–23, 45).

<sup>41</sup> See discussion of vehicles by Dennett (1991:203–206). In essence, in Dennett’s words, the vehicle is a “potential friend or foe ... bearing a gift that will enhance our powers or a gift horse that will distract us, burden our memories, (and) derange our judgment” (Dennett 1995:352).

## Phenotype of a meme

The phenotypic effects of a meme are stored in every conceivable form – for example, in books, tapes, computers, music, visual images, styles of clothes, facial or hand gestures (Henke 2007:17, Dawkins 1999:109). In the law, phenotype examples are judgments, books, essays or courses (Henke 2007:17).

How do a meme's phenotypic effects contribute to its success or failure in being replicated? The answer is any effect that a meme has on the behaviour of a body bearing it may influence that meme's chance of surviving (Dawkins 1999:110). If the phenotypic effect of a meme is a tune, the catchier it is, the more likely it is to be copied. If it is a scientific idea, its chances of spreading through the world's scientific brains will be influenced by its compatibility with the already-established corpus of ideas (Dawkins 1999:110; Dennett 1991:207, 1995:349).

Thus, the memes which come into contact with one another will “adjust to each other” and “swiftly change their phenotypic effect” to comply with the circumstances, and the new varied phenotype will get replicated and transmitted (Dennett 1995:355, 1991:207).

## EVOLUTIONARY ALGORITHM OF THE DIVISION AGREEMENT FROM OLD BABYLONIAN SIPPAR<sup>42</sup>

In this section, I apply the meme theory to the written division agreement,<sup>43</sup> consisting of scribal school practices and construed legal conventions which we may glean from the fossil<sup>44</sup> remains of the record. The schematic outline *infra* supports my discussions

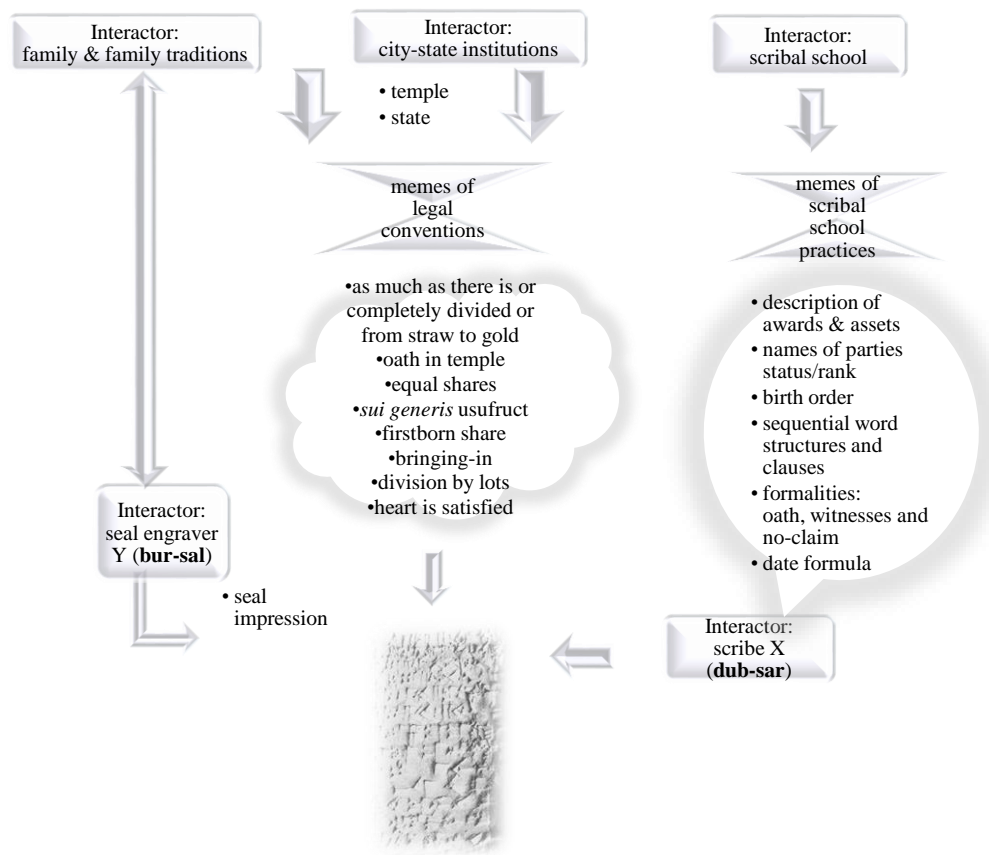
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<sup>42</sup> In my unpublished doctoral thesis (Claassens 2012/1 & 2), I studied forty-six elective division texts from the OB city-states of Larsa, Nippur and Sippar. My other contributions regarding the OB division agreement are van Wyk (2013 a, b, c; 2014a, b) and Claassens-van Wyk (2013).

<sup>43</sup> There are a wide range of criticisms against the application of the meme theory in the different scientific disciplines.

<sup>44</sup> Fried (1999:307) considers legal memes to be those that are recorded on paper and which leave an “observable record” — a memetic “fossil record”. However, this is in contrast to those memes transferred by “vocal transmission”, which are difficult to detect through time and generations. Although memes cannot be identified by their place and manner of storing,

of the interaction of the division's memes and meme complexes, i.e., the legal conventions and scribal school practices in the written division. As shown and discussed *infra*, the hierarchical interactors (vehicles) are in a symbiotic interaction with one another, protecting the division's memes and meme complexes.



**Figure 3.** Interaction of interactors, co-adapted memes and meme complexes of an inheritance division

Susan Blackmore (1999) mentions that the “central question” of memetics is why memes survive – is it either by tricks or by convenience? For Blackmore (1999), Dawkins (1975) and Dennett (1991), looking from the viewpoint of the meme, the

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their fossil record on paper can identify the memes in their “standard forms” (Fried 199:307). In addition, the “standard reporters” give an added advantage to their fossil record, e.g., law libraries and the “standardised citation forms” (Fried 1999:308).

meme acts for itself and all that matters is its own replication.

I propose that when looking from a memetic perspective at the Old Babylonian division agreement, the meme complexes and memes of such an agreement in the city-state of Sippar are indeed “selfish” and all that matters is their self-replication. However, there is more to this. The structures of the memes and meme complexes have filters (see figure infra), driven by simplicity, that entail certainty, standardisation and legibility.



Figure 4. Schematic analogues of the filters

Thanks to these filters and the hierarchical interactors, the division agreement as an option to discontinue co-ownership in a family inheritance survives the evolutionary algorithm of variation, selection and retention.

In this section, I first explain what the division agreement is and then its memes and meme complexes in the bigger picture of the imitation of the construction and components of the division agreement in OB Sippar. Lastly, I present the hierarchical interactors and their position in the evolutionary algorithm.

## A memeplex-phenotype: The division agreement<sup>45</sup>

### What is a division agreement?

A division agreement<sup>46</sup> was a family agreement that forms part of Mesopotamia’s vast legal corpus of cuneiform texts. The agreement contained simple and/or complex

<sup>45</sup> There are different types of division agreements, i.e., quasi-adoption, dissolution of partnership, and living estate division agreements (van Wyk 2013a:154–159).

<sup>46</sup> Different names are assigned to the so-called division agreement, e.g., “redistribution agreement” in South African contemporary law and “family agreement” in the nineteenth century. Other names in Hindu law and other countries include division, partition or distribution agreement (van Wyk 2013a:150–151).

provisions, its main rationale being the ending of co-ownership in the family inherited estate.

The conclusion of the agreement entailed a three-stage process.<sup>47</sup> In stage one, the family members inherited as co-beneficiaries a communally-shared inheritance from the parental estate. Then during the next stage, the beneficiaries for an indefinite period were co-owners of the inherited family estate, sharing in the management of the communal inheritance. Stage three starts with conflict or uneasiness over the communal inheritance and one solution was to divide some or all of the inheritance into portions of sole ownership. If this option was selected, the parties had to engage in lengthy negotiations in the trading of the inheritance assets, taking cognisance of agricultural and architectural challenges and personal choices (van Wyk 2013a:153, 2013d:304–306). The contractual parties had three options. 1) They could equally divide the portions of assets among themselves in an exchange. 2) They could choose to donate some or all of the shared assets to each other. 3) Instead of opting for the donation, the enriched party/parties could agree to compensate the disadvantaged party by the bringing-in of an asset of value in order to equalise the awards. In essence, the contractual parties agreed in an oral agreement to divide and reshuffle the family inheritance by means of 1) a sale and/or (2) a donation and/or (3) a bringing-in (van Wyk 2013c:152).

### **Analogy of the division agreement as a memplex phenotype**

I present the concept of a “house” as an analogy for a memplex phenotype in my explanation of another memplex phenotype: the division agreement.

We recognise a house as a sheltered structure for the protection and safekeeping of our body and possessions from the hazards of the environment, hostile forces and creatures. For a house to be a house, it must at least contain a roof, walls and movable barriers (doors, windows): the phenotypic elements of a house.<sup>48</sup> Only at a progressive

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<sup>47</sup> See also my discussion of an example in van Wyk (2013a:151–152).

<sup>48</sup> See my discussion of the house analogy in Claassens (2012/1:107–110) and van Wyk (2013b:417–418).

level will we extend this to include in such a structure decorations and added structures, complying with our need for comfort, shelter and covering beyond that of essential survival. In the adding of decorations and structures one house will be different from another house but still they are both houses.

Like the house, the division agreement also has essential building structures or phenotypic elements. These are the presence of family members, a deceased family estate owner, inherited estate assets and the conclusion of a mutual agreement, with the main intention of the family members as contractual parties to discontinue their co-ownership of the shared-inheritance.

Similar to the house's decorations and added structures are the division's legal conventions and the scribal school practices which will go through the evolutionary algorithm of variation, selection and retention. These conventions and practices will then either succeed or fail in transmission in finally forming the agreed division agreement in its oral and then written form. The choices are influenced by external and environmental factors, architectural and agricultural challenges, as well as personal circumstances (Claassens 2012/1:377–379; van Wyk 2013c:315).

In the next section, I identify the co-adapted memes of the two meme complexes: the legal conventions and scribal school practices.

### **The memes of the legal conventions**

Each legal convention-meme is in a co-adaption to each other, strengthening each other as part of the meme complex: the legal conventions of the division of a family inheritance in OB Sippar. The standardised legal conventions, for the sake of certainty, show how the parties obtain sole ownership of certain portions of the inheritance. These legal conventions were recorded in a straightforward and legible manner.<sup>49</sup>

As a rule in OB Sippar<sup>50</sup> the standardised legal conventions in a recording are the

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<sup>49</sup> See outline of Claassens' (2012/1:305–317, 343–347) analysis of the legal conventions of twenty-six OB Sippar division agreements.

<sup>50</sup> Other options of legal practices, excluded in the Sippar texts but included in family division agreements from OB Larsa and Nippur, are the adoption, first-born share and "equal



formalities, implementation and enforcement of the division namely the “no claim”, “oath” and “witnesses” clauses (Claassens 2012/1:380). The claim clause stipulated that brothers would not claim against one another or raise a claim against one another, or speak a word against one another (Claassens 2012/1:129–130, 182–183). The oath clause holds the assumption that supernatural control was not necessary over all “actions of men”. When used, it was for providing an “added assurance” in the conditions of agreement (Magnetti 1979:28).<sup>51</sup> The family members in a division agreement swore an oath to the gods and/or king. In some OB Sippar division texts, the parties may also have sworn to the city-state of Sippar.<sup>52</sup> Witnesses, together with the parties, testified to the details of the agreement (Veenhof 2003:147). Their appearance and names were for the sake of certainty, because if a dispute occurred, these witnesses would testify to the details (Claassens 2012/1:131; Greengus 1995:475).<sup>53</sup>

Then, in general, the scribes record in a standardised formula the once symbolic communication of legal acts performed during the conclusion of the agreement (Claassens 2012/1:379). These symbolic formula are “the heart is satisfied”; “completely divided” or “the division is finished”; and “from straw to gold” clauses. The symbolic term “heart is satisfied” demonstrates that the parties confirm they are content with the agreed provisions (Claassens 2012/1:346) while the term “from the straw up to the gold” demonstrates that the parties agree to divide all of the inheritance property from the smallest value to the highest value. The symbolic term “completely divided” reflects the family members’ mutual agreement that they have completely divided all of the inheritance (Claassens 2012/1:360, Westbrook 1991:223). These

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shares” conventions (van Wyk 2014a:206).

<sup>51</sup> Oath references are found in many of the named law collections such as Laws of Ur-Nammu, Laws of Ešnunna, Laws of Lipit-Ištar, Laws of Hammurabi and Middle Assyrian Laws (Magnetti 1979:2).

<sup>52</sup> Some of Sippar’s division agreements reflected an “oath in a temple” clause. It seems that the oath consisted of ceremonial rituals, and confirmed the registration of the provisions of the agreement in a kind of “land register” (Claassens 2012/1:365).

<sup>53</sup> In the witnesses-clause, the Akkadian variant of *maḥrum* placed in front of the name refers to “first, former, earlier” and *qudmu* to “front (side)”, meaning that witnesses appear in the presence of the contractual parties to witness the proceedings (Greengus 1995:475).

legal conventions were used in the majority of the Sippar divisions (Claassens 2012/1:306–317).

In the instances involving a priestess sister, a *sui generis* “usufruct” clause shows that the brothers in the division agreed to a lifelong commitment to maintain their priestess sister, placing a lifelong duty on themselves (Claassens 2012/1:384–385). The only advantage was that with the death of their sister they obtain the once-burdened property, free from the restraints of the “usufruct” (van Wyk 2014a:206, 2013c:315).

For purposes of standardisation and also legibility the scribe would by means of specific terms reflect the mechanisms of the division practice, i.e., the bringing-in and division by lots clauses. These were practical mechanisms and provisions to devolve the inheritance equally and fairly. With the bringing-in clause, the parties equalised the values of the divided portions. In the division by lots procedure, the parties first segmented the different assets into portions, lots were drawn and the portions allocated. The drawing of lots had the advantage that in the decision-making all participants would, with good intent, agree to the proper appropriation of portions, since any of the parties could end up with any portion (Claassens 2012/1:362–363).

### **The memes of the scribal school practices**

To a certain extent, the information and structure of written agreements varied, depending on the scribal practices of different scribal schools in city-states. Still the memes in this meme-complex show a pattern for standardisation, certainty and legibility. Each city-state had a distinct collective scribal school meme complex that was dependent on time and the individual scribal school (Van Wyk 2013c:163ff.).

Generally, the following scribal school memes were included in the written division:<sup>54</sup>

- Names of the parties and the relationship between them by a statement of their own standing within their family

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<sup>54</sup> See outline of the Sippar scribal practices in twenty-six elective texts in Claassens (2012/1:317–344).

- Name and standing of the deceased estate owner
- Description of property awarded to each contractual party
- Witnesses present and, in most instances, their names as well as status and sometimes also their professions, together with the witnesses' seals<sup>55</sup>
- Name of the scribe, sometimes including his seal
- Sometimes the "date" of the attestation of the oral agreement in a date formula
- Oath clause: mostly indicative of the time and place of the agreement and usually by the name of the reigning king, god or gods of the city, or personal god
- Usually parties stated that they would not make further claims

The memes present in a written record depended on the imitation ability of the scribe or rather the imitation ability of the memes of a particular scribal school meme complex, e.g., the meme complex from OB Sippar.<sup>56</sup> In the Sippar division recordings, the scribes may have notated emotional/symbolic expression to show the passionate intent and symbolic communication of legal acts (Claassens 2012/1:379). The property is in a standardised formula described only for the legibility purposes of identification and it is only the full descriptions which tend to differ in a distinct formula. Apart from the standardised witnesses, oath and no-claim clause, an additional ceremonial and symbolic oath is notated in certain Sippar texts and entails a ceremonial cleansing in the temple (Claassens 2012/1:383).

### **Hierarchy of different interactors**

In the evolutionary algorithm of the division agreement's memes, the interactors (vehicle)<sup>57</sup> in a hierarchic co-adaptation carry and protect the agreement's memes and

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<sup>55</sup> The parties and witnesses sealed the document by stamping their seals on the surface: see Greengus (1995:475).

<sup>56</sup> See Moore's (2001:417–436) general reflection of scribes and the imitation of scribal memes.

<sup>57</sup> For the purpose of this article and the study of the division agreement, I prefer the term interactor rather than vehicle. The interactors of the division agreement carry the division's memes and meme complexes in interaction with each other. This entails the interactors being in a symbiotic relationship, holding for each other the advantages of securing survival for themselves and subsequently the survival and protection of the memes of the division agreement they are carrying.

meme complexes. The interactors in hierarchic order from high to low are: 1) the multi-sensory communication tools and symbolic expressions; 2) the family as a unit and family members as contractual parties to the agreement; 3) state and temple institutions; 4) scribal schools, the scribe, witnesses and seal engraver; and 5) the clay tablet as a fossil record of the oral agreement. Overall, the bonded hierarchy of co-adapted interactors promotes the memes and meme complexes of the division's chance to ensure successful storing and transmission.

In the hierarchy of all of these interactors, the multi-sensory communication tools hold the higher position in transmission. Also high in the interactors' hierarchy is the symbolic expressions that we sometimes detect in the written medium, notated by the scribe. The written medium as the fossil record of the agreement is the lowest in the hierarchy of transmission.

During the multi-sensory/symbolic communication acts, the memes in the division agreement spread horizontally among the family members, the scribe and seal engraver, as well as vertically in the state, temple and scribal school interactors to other interactors.

The family or patrilineal lineages act as the traditional and earliest social group with their membership based on kinship relationships (Stone 1982:52). The family acts as a unit and by imitation transmits family values and traditions to its members. Also in the scribal school, as an interactor, the schoolmasters by imitation transmit skills to the scribes in training. Both institutions hold the lineages of authority figures — parents and schoolmasters — transmitting the division's memes and meme complexes through imitations.<sup>58</sup> Other institutions acting as interactors are the state and temple that carry and protect the imitations of the division's memes between the institutions, city-state inhabitants and religious followers. For instance, in the temple, a priestess-group called the *nadītu* — based on kinship and institutional relationships — played an intrinsic role in some divisions (Stone 1982:52).

These interactors were influenced by environmental and external factors such as

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<sup>58</sup> The lineages are the memetic equivalent of genetic ancestor or descendant lines; see Dawkins' (1998:306) analogy of master lineages.

social, political, economic and geographical factors. Mesopotamia's harsh environment and the Mesopotamians' growing need for survival created different social and political institutions (Stone 1987:13). For though Mesopotamia was seen as a "hydraulic society" (Ellickson & Thorland 1995:329) and the "breadbasket of the East" (Stone 1987:13), its water supply was uncertain due to flooding, drought and the ongoing danger of salinization (Stone 1987:14). Then there were also the threats of invasion of "rival walled city-states" (Ellickson & Thorland 1995:330). Thus, the influences of social and economic conditions and ecological factors were "interdependent and interacting" with each other (Renger 1995:269), which gave rise to different forms of ownership in the managing of property and challenges for survival (Renger 1995:269–270).

### **1) Multi-sensory communication tools and symbolic expressions**

Our perception of the OB division agreement is what we gleaned from its written fossil record. However, the written medium carries far less weight in a predominantly preliterate society such as OB, than in our literate society (Hibbits 1992, Malul 1980, Claassens 2012/1:39–41).

Before the division agreement was recorded, the contractual parties were involved in lengthy oral negotiations. Then, with the conclusion,<sup>59</sup> the OB contractual parties and witnesses to the agreement applied all of their sensory senses<sup>60</sup> in an overall performance of visual, aural, tactile and savoury communication acts (Hibbits 1992:955, Claassens 2012/1:24–27, 59).

Visual expressions as a communication tool were non-textual as well as three-dimensional and kinetic, rather than our visual expression which is two-dimensional and static. The most common type were the gesture-expressive movements of the

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<sup>59</sup> See Hibbits (1992:873–960, esp. 874), Malul (1980:449–450), Greengus (1995:469–484) and van Wyk (2013a: 160–163).

<sup>60</sup> See Dawkins' (2004:243–244) publication of the Canadian neurologist Wilder Penfield's picture of the human brain, indicating the proportions extended in the different parts of the body. See Penfield's (2004: 244) brain-map with the different sensory perceptions of the brain and Penfield's Homunculus plate 13 (2004:after 270). Prominence is given to the hand and face regarding chewing and speaking movements, the ears, eyeballs and eyelids.

whole body, head, limbs or hand. Although the gestures seem natural or conventional, they communicate many emotions and experiences. For instance, stretching out one's arms could express welcome, kneeling could express submission and offering a gift might express friendship (Hibbits 1992:907–912). Thus, the parties performed the division agreement's conclusions and negotiations, transmitting visual messages with physical acts and other objects such as clothes. These acts and other mediums confirmed the beginning or ending of legal relationships and agreements.<sup>61</sup>

The Old Babylonians, by means of their multi-sensory communication, established a sensible way of preserving information: they used this communication medium as a "hook from which the thread of memory [could] hang". So perhaps one Old Babylonian might not remember hearing something, but could remember something, seeing and/or feeling and/or smelling and/or tasting it (Hibbits 1992:951). Overall symbolism, together with the multi-sensory communication acts, are holistically physical communication mediums, strengthening and maintaining the division agreement's legal conventions.

## **2) The family, family traditions and the contractual family parties**

OB society holds social categories in a set society differently from our context of understanding of social hierarchies and its content. However, we have our own assumptions and we need to uncover and re-examine them (Roth 1998:175).<sup>62</sup>

OB society was socially orientated and the adherence to the interests of the group as a whole was a dominant factor in their society. The family was an integral part of OB society, and the family head represented the family.<sup>63</sup> In society and in the family,

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<sup>61</sup> See Malul (1980) and Hibbits (1992:915–916).

<sup>62</sup> Roth (1998) gives an extensive explanation in her examination of social categories and provides reasons for the interpretational problems in legal texts and other documents regarding social factors and categories. Also important are the rituals and ceremonies that provided a clear indication of a person's social roles and the expectations of him/her in a society (Roth 1998:717).

<sup>63</sup> See (Matthews 2003:169). Leemans (1986) adopts different emphases, considering the role of the individual within the kinship relationship from an economic perspective. Forster (1995) opines that northern and southern Mesopotamia differ in social kinship relationships, albeit a family orientation or focus on individual rights of co-ownership.

each person had a particular juridical relationship position and the members focused on the maintaining and managing of kinship relationships.<sup>64</sup>

In most of the Sippar texts, the brothers were contractual parties. There were, however, also a few sisters, in their status as different types of priestesses, mentioned as contractual parties (Claassens 2012/1:290). There was a pattern: the brothers, for some unknown reason, kept the land for a period and did not immediately divide the inheritance, but “maintained corporate ownership of the productive land” (Frymer-Kensky 1981:210–211). Before this could occur, however, the brothers provided for the payment of dowries of unmarried sisters and a bridal payment for younger brothers: all this happened while they still held communal ownership and before a division of the property had occurred (Frymer-Kensky 1981:211–214, Postgate 1992:97).

### 3) The state and temple institutions

In OB Sippar the main institutions, namely the city administration, military, judicial and temple organisations, represented the king of Babylon,<sup>65</sup> but each city-state held its own main god/s and temple/s, specific culture and life (Harris 1975:38–39).

The OB Sippar temple held great prestige, for the god Šamaš was the sun god and lord of justice and righteousness, and Sippar the so-called “eternal city” of Babylonia (van de Mieroop 2007:80). A certain priestess-group, the *nadītu*,<sup>66</sup> associated with the temple institution, provided the opportunity for the family to advance their position in society, both socially and economically (Harris 1975:307, 315–316; Stone 1982:62). In Sippar, the cloistered *nadītu* received property via inheritance from her father or other *nadiātu*, sometimes obtaining and leasing property without representation

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Fleishman (2001) regards kinship relations as sometimes extending further than just a biological connection, thus including an adoptive status.

<sup>64</sup> Frymer-Kensky (1981:241) considers the terms “first-born, brother, sister, father” to have a “particular juridical relationship” which occurred by contract or by birth, since people adopt others as brothers, brothers adopt each other as sons, and brothers adopt women as sisters. Thus, the designation of an individual as “first-born” can be a matter of choice.

<sup>65</sup> See outline of the OB economic sectors in Godderis (2007:204–208).

<sup>66</sup> However, present-day scholars differ in their interpretations of ancient texts regarding the function and role of the *nadiātu*-priestess groups in OB society (van Wyk 2013c).

(Harris 1975:310–312; Stone 1982:69; van Wyk 2013c, 2014a, 2014b).

#### **4) The scribal school, scribe, seal engraver, witnesses and 5) The clay tablet**

The existence of scribal schools<sup>67</sup> in ancient Mesopotamia has been studied from different angles as organised centres of learning. Some scholars consider certain aspects to be similar to our education system and share the opinion that scribal schools directly influenced the literate world of ancient Mesopotamia, which today is generally thought to be a predominantly preliterate society.<sup>68</sup>

The medium of written communication was Sumerian, which co-existed with Akkadian and guaranteed the preservation and continuance of legal conventions through scribal school traditions (Michalowski 2000:177–202).

Today we have the textual evidence that contractual parties obtained the services of a scribe to capture on a clay tablet certain terms and details of the agreement. Still, the OB written division agreements were protocols and recordings of the scribe's idiosyncratic style in the scribe's imitation of condensed phraseology and technical words. The agreement was performed in front of the witnesses who witnessed the terms and conditions, together with the scribe who testified to the terms and conditions of the agreement, especially those not included in the written record. The seal engraver could play an active role in that the prosperous OB Sipparians would commission a seal engraver to make a seal for the occasion of the conclusion of the division. The details of the seal impressions would be those details the party chose to transmit as a fossil recording.

In summary, the hierarchy of interactors in their interactive role-playing had one goal: the preservation of the legal conventions and scribal traditions of a division agreement. If the interactors ceased to exist, the meme complexes would also perish. The dynamics of the interactors thus lies in their interaction and co-adaptation with each other. This strengthened their survival and that of the meme-complexes they carried. Still, the filters of the meme's structures within these meme complexes

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<sup>67</sup> See outline in Claassens (2012/1:79–104) and Robson (2001:39–66) regarding the scholars' different focuses.

<sup>68</sup> See Pearce (1995:2265–2278) and Keister (1963:371–376).



promoted the meme's survival fitness in the evolutionary algorithm of variation, selection and retention.

## CONCLUSIONS

In a predominantly oral community, the Old Babylonians burdened themselves with a financial expense in acquiring the services of a scribe. On face value, it seems understandable that the recording of the division of the inheritance was for the sake of standardisation, legibility and simplification (Yoffee 1991). However, there is more to this, and in this paper, I have presented Dawkins' (1975) cultural analogy of the gene — the meme theory. Applying this theory, I held that the Old Babylonians were imitators of the division's meme complexes, i.e., the division's memes of legal conventions and scribal school practices.

For these memes to succeed in the selection, variation and retention process, the structures of the filters of such memes — driven by simplicity — are certainty, standardisation and legibility. The filters prohibit or promote any other rival memes or meme complexes.

The fossil record or recorded division agreement is our evidence of the oral division agreement. But it is only a fossil artefact of the scribal school; the scribes were the interactors carrying the meme complex of the scribal school traditions. In essence, the trained scribe imitated the scribal practices onto a clay tablet and as such protected and carried the division's scribal school practices and, to a lesser degree, the oral division's legal conventions.

Other interactors in the hieratic order interplayed in their interactive role. High in the hieratic order were the multisensory communication and symbolic acts. These acts strengthened the meme complexes. In addition, the family as a unit played an interactive role as an interactor in the transmission of traditions. The state institutions, especially the temple institution such as the *nadiātu* priestesses, ensured the continuation of the patronage estate through the application of the division agreement.

In essence the recording of the oral division agreement is only a fossil record

geared for the protection and carrying of the division's scribal school practices and, to a lesser degree, its legal conventions.

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