MANUSCRIPT AND TEXT CULTURES

A scribal device in oral clothing: functions of formulaic language in early Chinese divinatory texts

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Abstract: This paper aims at broadening the scope of what the term 'formula' encompasses by studying a written context of formulaic applications and their complex connections to ritual performance. More specifically, it examines the interplay between the oral and the written in the language of the late Shang 商 (*ca.* 1230–1046 BC) oracle bone inscriptions (OBI). Drawing on the study on 'formulaicity' by Wray and Perkins, I propose a definition of formulae based on the OBI evidence and identify the structure-based formulaic types as found in the divinatory records. I then discuss the functions that formulae perform in the divinatory record. I suggest that formulae should be considered a *scribal device*, a set of stock phrases and technical words used by the scribes to record divination results. They formed a toolkit which was meant to facilitate the composition of *written* records on hard media. The writing act occurred *after* (and separately from) the oral divinatory act. Therefore, the oral and written coexisted but were independent from each other within the context of divinatory performance.

Keywords: Chinese divination, oracle bones, bamboo manuscripts, formulaicity, orality

This paper reconsiders the traditional stronghold of oralism—the formula—and examines the interplay between the oral and the written in the language of late Shang 商 (*ca.* 1230–1046 BC) oracle bone inscriptions (henceforth OBI). Texts from later periods, namely Western Zhou (1045–771 BC) and Warring States (453–221 BC), shall also be briefly discussed; however, the Shang evidence is by far the largest (roughly 130000 inscriptions) and most diverse, thus allowing for a more accurate analysis.[1] The formal aspects of formulaic lan-

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[1] Venture (2021: 494) states that the 'oracle bone inscriptions clearly constitute the most important written source

guage in divinatory texts have been studied extensively (Keightley 1978; Li Ling 1990; Guo 2008), but what is the *function* of formulae and what is their relationship with orality? Most importantly, how does the *written* text reflect the *orality* of a ritual which it is supposed to record (von Falkenhausen 2012)? In what follows, I use the evidence from the Shang OBI to reconstruct the different stages of the divinatory and writing acts; these were two separate 'artifacts', to use Djamouri's words (1999), and the production of written records, in most cases, occurred subsequently to, and independently from, the divinatory act. Next, I review the debate on formulaic language and orality in early China. Drawing on the study on 'formulaicity' by Wray and Perkins (2000), I propose a definition of formulae based on Old Chinese evidence and identify the structure-based formulaic types as found in the divinatory records under consideration. I then discuss the different functions of each type of formula in the divinatory record. Most of the early Chinese documents written on hard media are composed in terse, formulaic language. However, they perform different functions depending on the material carrier in which the text is embedded, e.g., bronze or turtle shell.[2] In the context of the present discussion, I propose that formulae should be seen as a *scribal device*, namely a set of stock phrases and technical words used by scribes to record divination results. They formed a toolkit which was meant to facilitate the composition of *written* records on hard media. Furthermore, I suggest that writing was a bureaucratic act aimed at showcasing the political power of members of the ruling elite. Lastly, I discuss the evidence from the *shuzi gua* 數字卦 ('numerical cypher' or simply 'numerical *gua*') corpus focussing on two case studies which date to the final stage of the Shang dynasty. The data from this corpus is used to show that the separation between the divinatory act and the writing act (Djamouri 1999, esp. 16–19) is even more pronounced than in the rest of the Shang OBI. Finally, I draw conclusions about the nature and function of formulaicity in the examined contexts. But first, a few methodological remarks are in order.

A note on literacy, divination charges, and the problem of anachronism

Discussing the issue of orality during the late Shang dynasty inevitably raises the question of literacy. Determining the degree of literacy in periods for which the written sources are limited is indeed a daunting task. Nevertheless, many scholars over the last decades have proposed different hypotheses which fall under the rubrics of 'maximal' and 'minimal' (Smith 2011). Maximal refers to a population of fully literate people (Bagley 2004), while the minimal one 'imagines a literate population of less than a dozen individuals, all

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from the late Shang period'. See also Keightley (1978: 154) on the representative value of late Shang OBI.

2   For different discussions on the formulaic structure of Zhou bronze inscriptions, see Shaughnessy (1991); von Falkenhausen (1993); Cook and Goldin (2020).

in the immediate entourage of the Shang king and his family, … preoccupied with documenting divination, scheduling sacrifices, and occasionally labeling ritual implements and expensive gifts' (Smith 2011: 173–4; Venture 2002b: 51). Supporters of the maximal hypothesis suggest that perishable material like bamboo and wood were widely used to (1) acquire literacy (Bagley 2004; H. Wang 2014) and (2) write different genres of texts other than divinatory records such as administrative documents (Postgate, Wang, and Wilkinson 1995). While I agree with most scholars that writing on perishable material must have taken place as early as the late Shang dynasty, I believe that its use was most likely limited to the context of divination record-keeping (Smith 2008: 156). Accordingly, in this paper I align with the minimal hypothesis.

It has long been thought that the inscriptions were questions addressed to the spirits of the royal ancestors.[3] However, linguistic studies carried out from the 1960s have plausibly suggested another interpretation of the so-called 'charges' (*ming* 命), which introduce the topic of the divination. I refer to the long debated 'question' question, that is whether the Shang OBI should be read as questions or statements. For the purposes of the present work, I follow the now widely accepted interpretation which considers most of the charges as intrinsically non-interrogative (Nivison 1989; Shaughnessy 2022: 120–6). Linguistically, this means that they will be transcribed in affirmative form. Regarding the broader methodological implications, I also concur that divination, as seen from most (though not *all*) late Shang evidence onward, served a specific purpose. While the primary goal of the practice was most likely not seeking answers to questions through the diviner's mediation, it predominantly involved the validation of decisions made *a priori* regarding a particular concern (Nivison 1989: 136–7; Shaughnessy 2022: 75–9), with exceptions identified in some instances.[4]

The third and last point deserves a longer treatment as it pertains to the two case studies belonging to the *shuzi gua* corpus, which are analyzed in the last section of this paper. According to some scholars, this corpus dates from the Longshan Culture (*ca.* 3000–1900 BC) to the late Warring States period. The issue of dating is far from being solved. In my work, I do not consider the single item from the Neolithic period as it does not represent solid, concrete evidence of the existence of *shuzi gua* at that early time. The term *shuzi gua* itself refers to a sequence of specific numbers—1, 4, 5, 6, 7, 8, and 9—whose graphic representation is typically expressed in what can be defined as the 'divinatory form', that is a form that is simplified graphically to avoid confusion amongst the different numbers (Schwartz 2021: 1034 n. 7). The frequency distribution of these numbers varies through the centuries, with

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[3] For a rebuttal of the hypothesis that writing was used for the communication with the spirits, see Venture (2002a: 221).

[4] Adam Schwartz (2022) argues for a differentiation of 'test divinations', which were meant to validate a definite result, and 'non-test divinations' which could 'probe', 'guess'.

certain numbers (1, 6, and 7) recurring more frequently. Different combinations of these numbers are stacked one on top of the other in groups of three (*sanyao gua* 三爻卦), four (*siyao gua* 四爻卦), six (*liuyao gua* 六爻卦), or in pairs of six (*lianglie liuyao gua* 兩列六爻卦). Other combinations can be found but are rare. Jia Lianxiang 賈連翔 distinguishes between the *shizhan shuzi gua* 實占數字卦 (actual divination result) and the *guahua tuxing* 卦畫圖 形 (trigram/hexagram pictures) (Jia Lianxiang 2020: 2). Roughly one hundred instances of *shuzi gua* have been found on various types of unearthed objects, including ox scapulae, turtle plastrons, bronzes, pottery handles, and bamboo strips. These cyphers are written (engraved or brushed) on the material support in many different directions—vertical, horizontal, and diagonal—resulting in a diverse structural and visual *mise-en-page*. The *shuzi gua* were produced in the context of a sortilege technique which most likely involved the manipulation of different objects such as stalks, dice, and rods (Bréard and Cook 2020). Although to date the retrieved *shuzi gua* include a significant number of examples, there is no trace of such a divinatory method in the traditional literature. Crucially, most instances comprise numerical strings devoid of any attached text; when the text is present, it is often brief or fragmentary. The latter two aspects in particular contributed to the emergence of an interpretation bias. Since the early 1980s scholars have problematically assumed, albeit implicitly, a direct link between the oldest representatives of the *shuzi gua* corpus and the later divinatory tradition of the *Zhouyi* 周易 (Zhou changes), more commonly known as the *Yijing* 易經 (Classic of changes).[5] The conception of the text most likely began in the last quarter of the ninth century BC,[6] but it became a Confucian classic only during the Han 漢 dynasty (206 BC–AD 220) (Adler 2022: 15). Despite some clear structural and visual similarities, the heterogeneous nature of the newly recovered documents calls for a more nuanced approach to their historical relation to previously known texts. Indeed, the extant evidence shows quite clearly that establishing a seamless connection between these different divinatory traditions is highly questionable (Wang Huaping 王華平 and Zhou Yan 周燕 2015; Jia Lianxiang 2020; Cook and Bréard 2021; Pischedda 2023). To prevent the pitfall of anachronism, I shall treat the *shuzi gua* material in the most neutral way possible, in order to avoid biased interpretations and terminology.[7] Having made these important premises,

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[5] The first scholar who explicitly and systematically linked the Yi tradition to the *shuzi gua* was Zhang Zhenglang 張政 烺 (1912–2005). His 1980 article marked a turning point in the study of the *shuzi gua* and may therefore be regarded as a ground-breaking study. Since then, especially in the last twenty years, the literature on *shuzi gua* has thrived. The acquisition of an increasing number of palaeographical sources has been a key factor in this development: Zhang Zhenglang 張政烺 (1980); Zhang Yachu 張亞初 and Liu Yu 劉雨 (1981); Zhang Jinping 張金平 (2015); Wang Huaping 王華平 and Zhou Yan 周燕 2015; Jia Lianxiang 賈連翔 (2020); Pischedda (2023).

[6] Since the beginning of the twentieth century, many scholars in mainland China and the US started to question the traditional narrative regarding the dating of the *Zhouyi*, which goes back to the formative stage of Chinese civilization. Linguistic comparison with the *Shijing* and the bronze inscriptions proved that the text must have been composed between 825 and 800 BC, but it most likely acquired its final form at least two centuries later. On the dating of the *Zhouyi*, see Gao Heng 高亨 (1947); Li Jingchi 李鏡池 (1978); more recently, Jia Lianxiang (2020: 12); Shaughnessy (2022: 22–37).

[7] It is worth treating the term *yao* 爻 here briefly. In the Yi tradition, *yao* is usually translated as 'line', as it refers to the

I shall now turn to a discussion of the Shang divinatory and writing acts.

Divination and the production of written records in Bronze age China

According to both the palaeographical and the received textual evidence, divination appears to have played an important role in various parts of the territory of what is today mainland China. By the time of the first imperial dynasty (third century BC), it may even have been performed daily by people of all walks of life. Even though there were many different techniques, two are by far the most widely attested: turtle-shell and sortilege. I have already provided some basic information about sortilege divination based on numerical notations. I now focus on turtle-shell divination.

Turtle-shell divination is a form of pyromancy (from Greek *pyr* πῦρ, 'fire': 'divination by means of fire'; in Chinese: *bu* 卜).[8] Evidence of a post-sacrificial pyro-osteomancy has been found in the Longshan (Henan 河南, Hebei 河北, Shandong 山东) and Qijia 齊家 (2400–1900 BC, Gansu 甘肃) sites (Fracasso 2013). Scholars assume that, during this early period, the diviner would read the cracks caused by the heating of mammals' shoulder blades, mainly deer, sheep, pigs, and cattle. By the time of the Shang dynasty, turtle-shell divination had developed into the more elaborate pre-sacrificial pyro-plastromancy. During the Erligang 二里岡, or 'early Shang period' (1510–1460 BC), a new animal was included in the pyromantic ritual: the turtle. During the Anyang 安陽, or 'late Shang period' (1230–1050 BC), diviners started to create strings of hollows, or depressions, into the bone or shell: the act of producing cracks was no longer random and became structured. Evidence for such pretreatment of the animals has been found in various sites dating to this period (Venture 2002a: 202-209). The greatest innovation, which made early Chinese pyromancy unique in the world, occurred during the reigns of the last nine Shang kings. I refer to the so-called divinatory inscriptions, or as they are most commonly known, oracle bone inscriptions. Almost nothing is known about the production of the OBI and the divinatory ritual. The accounts we possess date to a much later period and are therefore not reliable. Nonetheless, they cannot be dismissed entirely. For this reason, we can only make conjectures about the divinatory ritual performed by the king and the members of the royal family in the earlier

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segments comprising the trigrams and hexagrams. However, since for methodological reasons I refrain from using any Yi-related terminology when describing the *shuzi gua* corpus, I translate *yao* as 'position'. This is a less loaded term which describes the location of each integer within the *shuzi gua*. As for the term 'line', I use it solely when referring to any Yi text.

[8]   The standard manual on Shang OBI in English remains Keightley (1978). See in particular chapters 2 (pp. 28–55), 3 (pp. 57–75), and 4 (pp. 91–132) for an introduction to the structure, language, and dating criteria. See also Djamouri (1999); Venture (2002a); Smith (2008); Eno (2009); Schwartz (2019); Cook (2022).

period. The procedure of Shang pyromancy, which with some modifications was also employed by the Zhou, can be reconstructed in the following way. First came the preparation of the material, mostly cattle scapulae and turtle shells—the latter are divided into carapace and plastron. Next, the material was prepared for divination, that is sawn, scraped, and polished. Only after this, hollows of different shapes were chiselled on the back of the bone or shell. A heat source was then placed on the hollows, which would form on the obverse the typical *bu* 卜 - shape crack, whence the name *bu*-divination derives. The hollows supposedly made it easier to crack the hard surface by making it thinner, thus determining the crack's shape, direction, and location, and made the entire procedure more structured (Keightley 1978: 18).

Let me now turn to the production of the inscriptions. I follow the majority opinion which holds that the OBI were produced *after* the divination act took place (Chen Mengjia 陳夢家 1956; Keightley 1978; Djamouri 1999; Venture 2002a; Bagley 2004). The supporting evidence for this argument lies primarily in the so-called *fan zhao* 犯兆 (graph straddling a crack),[9] of which there are only few examples (Keightley 1978: 45 n. 87 reports less than ten). As Keightley remarks, 'had the cracks not been formed until after the engravers had carved the graphs, we would expect many more cases of *fan-chao [fan zhao]*; it would have been extremely tedious, if not impossible, for the carver to keep turning the bone or shell over to estimate on the basis of the hollow locations on the back the places on the front where he should not write for fear that cracks would later bisect the graph' (Keightley 1978: 45 n. 87). In addition, the large number of materials cracked but not inscribed suggest that, in some cases, divination must have taken place independently of the act of writing (Keightley 1978: 166). Indeed, the existence of non-inscribed bones and shells prove that the act of 'communicating with the spirits' was deemed efficacious by the members of the royal family even when it was not recorded. Moreover, the oral nature of the act is made explicit in the formula *wang zhan yue* 王占曰 (the king prognosticated and *said*), where the word *zhan* is supposed to refer to the act of reading the crack that appeared in the bone (that is the king, and not the professional diviner, oversaw the prognostication). By contrast, there is no explicit reference to the act of writing in the OBI (Venture 2002b: 36; Keightley 2006: 195). Finally, as shown by Adam Schwartz in his study on the language of the Huayuanzhuang East OBI corpus 花園莊東地甲骨, the scribes employed different strategies to carve the inscriptions, which include arranging the text in symmetrically and numerically balanced proportion or based on either grammatical parts or formal units (Schwartz 2020). It would have been impossible to account for all these elements had the scribe already carved the inscription when the divination was being performed. While I appreciate that this latter aspect is relevant for discussing the issue of scribal literacy during the late Shang period, I

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9   Keightley (1978: 37). See also Fracasso (1988: 14), 'when this happened, the corresponding crack number ... was usually erased and engraved elsewhere.'

believe that, if added to the evidence provided above, it can support the claim that turtle-shell divination, since approximately 1230 BC, routinely involved *both* oral and written elements. First came the divinatory (ritual) act, the oral formulation of the charges addressed to the departed ancestors and other extra-human beings, the bone cracking, which was followed by (oral) prognostication, performed by the king or by other members of the royal family. It is uncertain how far the diviner was involved in this oral step. The formula *ganzhi bu X zhen* 干支卜 X 鼎 ('on an Y Day, diviner X cracked the bone and determined') clearly refers to the act of bone cracking, but whether the diviner also contributed to the formulation of the charge is, to date, impossible to establish. The second step was the creation of the written records (the 'writing act'). Whether or not the writing act was part of the divinatory ritual proper is hard to establish. Very often the OBI were carved days, if not months after the divination took place. In short, they 'would have been "old news" by the time they "went to print"'' (Keightley 2006: 192).

Two models have been proposed for the writing act so far and are conveniently summarized by Schwartz (2020: 43):

> One model posits that inscriptions on the bones and shells were copies transcribed from the notes of diviners. In this model, the workers responsible for writing the content onto the bone and shell surfaces were engravers who mechanically reproduced materials given to them. A second model proposes the presence of scribes during actual bouts of divination and either through reliance on their own memory or with the aid of the diviner(s) reconstituted written records of the original spoken utterances sometime thereafter.

The first model was proposed by Keightley (2001a, 2006). According to him, the diviners kept an initial record written on perishable material, which he calls the 'diviner's notebook' (that is the 'minutes' of a divinatory ritual). The scribes, who must be distinguished from the diviners,[10] recorded on the bones and shells a shortened, simplified version of what was written in these 'diviners' notebooks' (cf. Keightley 2006: 183, where he clarifies that these primary documents might not have been used *all* the time). Whether or not one agrees with this model, it can be argued with a certain degree of confidence that the act of communication with the extra-human realm was distinct from the act of record keeping. Furthermore, it is not completely unreasonable to assume that the oral performance of the divinatory act was the crucial element, and the production of written record was of minor importance. For instance, there are cases in which, on the same bone or shell, we find a real transcription of the divinatory act carved by a professional scribe, immediately followed

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[10] There is no one-to-one correlation between diviners and scribes as records of divination performed by the same diviners were written by different hands.

by a copy of the very same inscriptions by incompetent hands (most likely produced by trainee scribes). As argued by Adam Smith (2011: 203), bones and shells were an everyday writing surface in Anyang, the last capital of the Shang dynasty. They were produced on a daily basis and their uninscribed portions were recycled for scribal training within the divination workshops. This also supports the idea that the OBI had no archival value, nor were they meant to be written messages addressed to the spirits (Venture 2002a: 225–31). So why were the divinatory acts written down if the oral act was independent from the production of written records (and most likely these records were not even deemed important by the ruling class)? Venture (2002a: 245–46) argues that these written records were produced 'to make the act permanent'. Keightley (2006: 194–95) suggested that the OBI were 'a form of conspicuous cultural capital, in which the Shang elites invested considerable labour resources to produce artefacts whose overwhelming value was ritual'. Kern (2005) also supported the hypothesis that the OBI, especially the so-called 'display inscriptions', were created for ritual purposes. Display inscriptions are mainly characterized by a bold calligraphy and by the fact that prognostication and verification were produced on a single unit (Keightley 1978: 46). Indeed, texts written on a non-perishable material represented the 'sheer power' of the ruling class (Kern 2005: xi): the king and other members of the royal family were the only ones who could afford the resources, human capital, and the technology requested to perform such a 'labour intensive' activity (Keightley 2006: 186; see also Flad 2008). In the light of these observations, I argue that the act of writing can be interpreted as a reflection of the *bureaucracy* of divination, that is a self-serving machine which was functional to showcase the power of the ruling class. Once this act of showcasing was over, bones and shells could serve as ordinary stationery in scribal training.

Having established that the OBI simply served the dynamics of divination bureaucracy and do not present any component of extra-human communication (which was exhausted in the oral performance), we could say that their *content* was secondary too. Indeed, both Venture (2002a: 270–71) and Keightley (2006: 189) suggest that what really mattered was the existence of the inscription, not their content. Again Keightley, among other scholars, has argued that the OBI were not intended to be read; he suggests that this level of literacy during the late Shang and Western Zhou periods was probably limited to the scribes (2006: 189–95). However, this aspect is particularly hard to prove, and it goes beyond the scope of the present study.[11] It is against this background that we should situate the function of the formulaic language.

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[11] On writing and literacy in early China, see Li Feng and Branner (2011), which includes some excellent discussions on this subject.

The function of formulaic language in the OBI

Before discussing the formulaic language in the context of late Shang OBI, I shall briefly review the application of the Oral-formulaic theory, or more simply the Parry-Lord theory, to early Chinese texts. Milman Parry, in his pioneering work on Homeric language, argued that 'in the diction of bardic poetry, the formula can be defined as an expression regularly used, under the same metrical conditions, to express an essential idea' (Parry 1971: 13). Later, his student Albert Lord expanded on Parry's work, concluding that 'what is important is not the oral performance but rather the composition *during* oral performance' (Lord 1960: 5). This theory has been applied 'in a rather mechanical fashion' (Shaughnessy 2015) by Wang Ching-hsien in his PhD dissertation *Shih ching*: formulaic language and mode of creation, later published as *The bell and the drum:* Shih ching *as formulaic poetry in an oral tradition* (C.H. Wang 1974). Although it was criticized, this important work marked the beginning of what would become a polarized debate over the oral versus the written nature of the poetry collection *Shijing*,[12] with Martin Kern and Edward L. Shaughnessy as the main proponents of the former and the latter positions respectively. Richard Kunst, who further applied the Parry-Lord theory to the *Zhouyi* in his PhD thesis, proposes that the Yi and the Shi grew out of the same 'oral culture', as shown by the use of similar formulae (1985: 62–81). By contrast, Shaughnessy (2022: 28–37) has stressed the more or less conscious composition of one or more editors at the Zhou court starting with the reign of King Xuan 宣王 (r. 827/825–782 BC). To be sure, some parts of the text—especially the hexagram statements and line statements—must have had an oral substratum, but it is also possible that other parts have been deliberately composed by several different authors in a written form since the beginning. To date, we are still not in a position to establish *how* and *in which form* (oral or written) this important oracular text has seen the light of day.

Turning to the Shang and Western Zhou OBI, I believe that the Parry-Lord definition is not applicable because the OBI do not reflect 'composition in performance'. The recent study on 'formulaicity' by Wray and Perkins fits the divinatory texts better. According to the two linguists (Wray and Perkins 2000: 1), a formula is

> a sequence, continuous or discontinuous, of words or other meaning elements, which is, or appears to be, prefabricated: that is, stored and retrieved whole from memory at the time of use, rather than being subject to generation or analysis by the language grammar

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[12] A recent study on the *Anda shi* 安大詩 (Anhui University *Songs*) by Meyer and Schwartz (2022) takes a different position. While they acknowledge that 'there were clearly also written songs' circulating in the fourth century BC, the different communities 'may equally have been guided by oral primacy' (Meyer and Schwartz 2022: 20 n. 51). Performance was thus supported by writing. This notion was first developed in reference to the Shu traditions in Meyer (2021).

Keeping in mind the notion of *prefabricated* sequences of words, I use the following terminology throughout the paper, which specifically refers to the language of divinatory records:

1. **Divination template**: a more or less fixed structure of a whole inscription which can include specific sections, but not necessarily *all* of them. E.g., Charge (topic of the divination), Response (crack or *shuzi gua*), Prognostication.

2. **Formula**: a sequence of at least two graphs combining what I call 'variable' and 'invariable' components. E.g., *ganzhi bu X zhen* 干支卜 X 貞 'crack-making on the Y day, diviner X determined'.

3. **Invariable component**: one word used in a standard, recurring function, which might help identify the sections of the divination template. E.g., *yue* 曰 'to say, says'.

As I said earlier, I suggest that formulae should be considered a scribal strategy which was meant to facilitate the written composition of divinatory records. That formulae can be a time-buying strategy is no news. Wray and Perkins identify two main functions of formulae: shortcuts for processing and socio-interactional. These two functions are 'two sides of the same coin'. The former minimizes 'the effects of a mismatch between our potential linguistic capabilities and our short-term memory' (Wray and Perkins 2000: 14–15). The latter ensures that the speaker is understood (and therefore accepted) by the community to which they belong. Both functions, *mutatis mutandis*, can be applied to late Shang and Western Zhou OBI. In this context, prefabricated strings of words represented a time-saving device for the *literate* scribe (see Smith 2011 on scribal training and literacy). The need for efficiency can be explained by the fact that (1) divination was performed daily, and that (2) the divinatory records were inscribed on hard media since the reign of king Wuding 武丁 (*ca.* 1230–1190 BC). Indeed, Qiu Xigui 裘锡圭, in his seminal *Chinese writing*, highlights the difficulty of working with bones and shells. The scribes drastically simplified the forms of the characters, from rounded to square, from solid to outlines, from thick to fine strokes. Moreover, oracle bone script (*jiaguwen* 甲骨文) represented a kind of 'popular script' which was 'used daily for *simplicity* and *convenience*' (emphasis added), while bronze script (*jinwen* 金文) was the more refined one (Qiu Xigui 2000: 63). It is therefore reasonable to assume that not only the writing style but also the *language* was simplified for the sake of efficiency and convenience. The simplification of the language is seen in the repetitive use of simple formulae like the *buxun* 卜旬 (determining for the next ten-day week), which can be found on numerous bones and shells. Space constraints could also be a reason for writing in a simplified manner. Evidence discussed by Schwartz shows not only that the scribes employed different strategies to minimize the effort, without neglecting clarity, but also the importance of the visual aspect of the inscriptions. Lastly, stroke order was a further component which affected the activities of the scribes (Schwartz 2020: 55–85). Once again,

because writing on such hard media was not an easy task, the scribes reduced the number of strokes comprising a single graph and would first carve all the horizontal and the vertical strokes, and then the more complex ones. In this way they would not need to rotate the writing surface each time (Smith 2011: 186–7).

If we accept that formulae bought time for *literate* scribes, we may posit the following procedure for the production of the OBI, drawing on Keightley's proposal of the diviner's handbook. Formulae appearing in a fixed, established structure were used as a 'divination template'. This template comprises different sections: charge, response, prognostication, etc. (see Keightley 1978: 28–45). The scribes first learned to engrave the basic components which appear in a high number of inscriptions, for instance, the above-mentioned *buxun* formula. During the divinatory act, this kind of simple formula did not need to be written down in the diviner's notebook posited by Keightley, as they could easily be retrieved from memory, especially if a scribe had already trained on this formula for many times (Smith 2011: 187–8). Following Wray and Perkins, formulae like the *buxun* thus appear to be *prefabricated.* What I am suggesting here is that, at least for the production of simple inscriptions, the scribe(s) assisting the diviner only needed to note down what I call the *variable components* of an inscriptions, i.e. date, diviner's name, charge, and outcome. All these variable components were introduced by the *invariable components*, i.e. the formulae, which made up most of the inscriptions. Consider for instance the following examples where I print the only variable component in bold. The examples are quoted according to *Jiaguwen heji* 甲骨文合集 (Guo Moruo 郭沫若 and Hu Houxuan 胡厚宣 1982), which I refer to as *Heji*.

Example 1: *Heji* 11482

癸卯貞旬無憂

[Crack-making] on a **guimao** day, [the diviner/king] determined: in the [next] ten-day week there will be no worry.

The only variable component is the day, while the rest is part of the *buxun* formula, which is comprised of the same four high-frequency graphs. There are several similar examples in the OBI corpora where the inscription only includes one variable component (i.e., the day) and the repetition of the *buxun* formula on the same bone or shell fragment for even more than four times (e.g., *Heji* 11485, 11545, 11546).

Aside from the *buxun* formulae, there are many short, standardized formulae which were used as often. See, for instance, the following example from a bone fragment belonging to the Xing 行 diviner group (period II, kings Zu Geng 祖庚 and Zu Jia 祖甲) concerning the king who is about to undertake a journey.

Example 2: *Heji* 23728.3

壬申卜 **行**貞王出無憂

Crack-making on a *renshen* day, diviner **Xing** determined: The king, in setting out, will not encounter any worry.

The next example belongs to the He 何 diviner group (period III, kings Li Xin 廩辛 and Kang Ding 康丁) and is about hunting.

Example 3: *Heji* 28440.3

乙酉卜 **何**貞王其田無災

Crack-making on a *yiyou* day, diviner **He** determined: The king shall hunt; there will be no disaster.

Sometimes, divination concerning hunting required knowledge of the weather. In these cases, the formulaic word '*tian* 田' was followed by the formula '*bu yu* 不雨' (it will not rain), which is one of the most frequently used in all kinds of inscriptions.[13] This example also belongs to the He diviner group.

Example 4: *Heji* 28550

戊子卜 貞王其田**不雨**　吉

Crack-making on a *wuzi* day, [the diviner] determined: The king shall hunt; **it will not rain**. (crack notation) Auspicious.

The next example belongs to the Huang 黃 diviner Group (Period V; King Di Yi 帝乙) and concerns the Shang's four lands receiving abundant harvest.

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[13] Divination about rain is among the most frequent in all Shang OBI. The word *yu* 雨 appears 6584 times, more than the word *xun* 旬 (ten-day week; 6286 times), *xi* 夕 (night; 3459 times) and *ri* 日 (day; 3778 times). The most frequent formulae which contain the word *yu* are *bu yu* 不雨 (it will not rain; 1240 times) and *qi yu* 其雨 (it will rain; 1458 times). These figures are taken from the Academia Sinica database (https://inscription.asdc.sinica.edu.tw/c_index.php, last accessed 4 December 2023).

Example 5: *Heji* 36975

己巳王卜 貞歲商受年王占曰吉

東土受年

南土受年吉

西土受年吉

北土受年吉

Crack-making on a *jisi* day, the King determined: [This] year the Shang shall receive [abundant] harvest. The King prognosticated and said: Auspicious.

The **Eastern Land** would receive abundant harvest.

The **Southern Land** would receive abundant harvest. Auspicious.

The **Western Land** would receive abundant harvest. Auspicious.

The **Northern Land** would receive abundant harvest. Auspicious.[14]

The next example is a turtle plastron which belongs to the Dian 典-Bin 賓 diviner group (Period I, King Wu Ding). The *recto* side of the plastron presents two inscriptions in the typical *duizhen* 對貞 (paired charges) style, which consists of one positive and one negative charge, once again about receiving abundant harvest. The *verso* side is a record of the prognostication uttered by King Wu Ding.

Example 6: *Heji* 09950

recto

丙辰卜 **㱿**貞我受黍年

丙辰卜 **㱿**貞我弗其受黍年

verso

王占曰吉受有年

recto

Crack-making on a *bingchen* day, **Que** determined: The Shang shall receive the millet harvest.

Crack-making on a *bingchen* day, **Que** determined: The Shang shall not receive the millet harvest.

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[14] Translated and commented on in Chen, Song, et al. (2020). The translation is slightly modified for consistency with the other examples.

verso

The King prognosticated and said: Auspicious. We shall receive abundant harvest.

Our last example, also belonging to the Dian-Bin group, is about the King's toothache. This divination is discussed in Keightley (2001b).

Example 7a: *Heji* 6483r:8

[貞] 祝以之疾齒鼎鼏

疾齒鼏

不其鼏

[Determined: if] we pray by means of these [offerings], the sick tooth will certainly be cured.

The sick tooth will be cured.

[The sick tooth] will not be cured (tr. Keightley 2001b: 153, modified).

On the *verso* side of the five plastrons in the set, we find a series of what Keightley (2001b: 153) calls diagnostic 'subcharges'. They are all introduced by *wei/bu wei* 隹/不隹, while the rest is omitted as it can be inferred from the context, that is the preceding inscriptions on the king's toothache (see Schwartz 2020: 47 on the scribal habit to economize by omitting words).

Example 7b: *Heji* 6483v

隹父甲

不隹父甲

隹父庚

不隹父庚

隹父辛

不隹父辛

隹父乙

不隹父乙

[The toothache] is due to **Father Jia**.

[The toothache] is not due to **Father Jia**.

[The toothache] is due to **Father Geng**.

[The toothache] is not due to **Father Geng**.

[The toothache] is due to **Father Xin**.

[The toothache] is not due to **Father Xin**.

[The toothache] is due to **Father Yi**.

[The toothache] is not due to **Father Yi**.

The consistent use of the kinds of formulae surveyed above supports the hypothesis that formulaic language in this context was a time-buying strategy used by the scribes which possessed at least functional literacy (in this case, functional to the recording of the divinatory act). Based on the hypothesis proposed here, the invariable components might have been retrieved from memory, as they were simple, short, and frequently used, while the variable components must have been noted down during the divinatory act to then 'fill the gaps', as it were, of the divinatory template.

To be sure, this model cannot be applied to the longer, more complex inscriptions. Consider the following example which includes a detailed verification:

Example 8: *Heji* 21021

癸亥卜貞旬一月昃雨自東九日辛未大采各雲自北雷延大風自西劃雲率雨毋䵑日☒

Crack-making on a *guihai* day 60, [the diviner] determined: In the [next] ten days (there will be no disasters). First moon. In the afternoon it rained from the East. On the ninth day, *xinwei* (day 8), at *dacai* (ca. 8am) there were large clouds from the North, thunder was prolonged, there was a great wind from the West. It dispersed the two clouds, led off (?) the rain, and the sun really [cleared?] (tr. Keightley 2001b: 149, modified).

Aside from the fact that the '*xun wang huo/wu huo*' formula is simplified to *xun* as it was often used (Keightley 2001b: 149), it is hard to believe that the rest of the verification was wholly retrieved from memory. Recording this part of the text on a perishable material *during* the act might explain the composition of this kind of OBI. Indeed, it is possible that different strategies were employed for different kinds of written records, or even that different groups of diviners developed their own idiosyncratic ways to write down the bouts of divination, as shown by Adam Schwartz in his study of the Huayuanzhuang corpus (2020: 55–84). Another possible interpretation of the use of simplified language is that it served as written support for oral *performances* during the divinatory practice. However, I would

suggest that, in this case, performance was *not* script-based, or at least not OBI-based. It is more likely that a divination manual (which I distinguish from the 'diviner notebook') was written on perishable material, which the diviner would then read out loud. Texts written on bamboo or wood would be a much more convenient support for the oral performance during the divinatory act.

Retrieving traces of oral performance in the *shuzi gua* corpus

We have seen in the previous sections that turtle-shell divination at Anyang involved the production of written records in most cases. These records were not meant to be read or handed down to posterity; rather, their significance lay in their very existence. However, this did not apply to all the techniques. The two case studies which I am about to evaluate testify to a different practice in which the oral divinatory act was further detached from the writing act. Before moving to the analysis, I should point out that turtle-shell divination and sortilege divination with *shuzi gua* were *jointly* performed since at least the eleventh century BC. Based on the extant evidence, the divinatory act involved the creation of symbols made up of a set of numbers (sortilege), often recorded on the *same* bone or turtle plastron which was presumably used in the pyromantic practice (turtle-shell divination). This is supported by the fact that the *shuzi gua* are engraved in correspondence with the cracks and that the materials show signs of burning. However, we do not possess any information about the way they calculated the numerical symbols and what they used to do it. For the moment, we may speculate that the diviners calculated what we now conventionally call *shuzi gua*. Sortilege divination is usually referred to by most scholars as milfoil or (yarrow) stalk divination. However, I prefer the more general term sortilege as the creation of *shuzi gua* most likely involved the use of objects other than yarrow stalks. Indeed, the statistical studies carried out by Andrea Bréard (Bréard and Cook 2020) show that dice were most likely involved too.

Case 1: Anyang turtle plastron

The first case study is a turtle plastron collected from the warehouse of the archaeological team at Xiaotun Locus South at the end of October 1980 (Xiao Nan 肖楠 1989: 66). Three-quarters of the plastron is complete, and its measurements are 21.6cm in width and 22.5cm in length. The plastron pieces were re-joined, and the plastron was almost fully restored when the archaeological team arrived in Beijing. Since the plastron was collected but not excavated scientifically, determining its stratigraphic dating has proved challenging. Therefore, Xiao Nan guessed the dating based on three criteria: the preparation of the

plastron, the shape of the hollows, and the scribal features (Xiao Nan 1989: 68–70; but see also Cao Dingyun 曹定雲 1993: 20).

The plastron has been polished and prepared for divination by Zhou specialists, differing remarkably from the Shang style. Only the front- and rear-pointed parts of the bridge are sawn. On the back, the whole plastron surface is crowded with squared hollows, totalling 93, varying in size and position (Xiao Nan 1989: 68). Scholars noted that the shape is similar to that of the Western Zhou oracle bones (Xiao Nan 1989: 70; 1993: 18–20; Li Xueqin 2006: 207). The inscription also seems to be written by Zhou scribes. Many elements support this claim: the graph for *zhen* 貞 is written in the Zhou style, that is with the *bu* 卜 on top of the phonetic *ding* 鼎. The graphs are written in a small size, which is also a Zhou characteristic. The direction of the graphs is different from that of the Shang, the latter usually being top-to-bottom. The inscription reads as follows:

1: 七七六一六六/**貞吉**

2: 六七八九六八

3: ╞六╞[九]

4: 六七一六七九

5: 11 11 11 11 11 友

1: 776166. **Determined: Auspicious.**

2: 678968

3: ╞6╞[9]

4: 671679

5: 11 11 11 11 11 You[15]

Xiao Nan noticed that the *gua* appear to have been written by three different hands. The '6' is written in the typical Shang style, different from the divinatory form. The *shuzi gua* are carved in proximity to the crack. Based on all these observations, Xiao Nan suggests that the plastron should date to the transition period between the end of the Shang and the beginning of Western Zhou (Xiao Nan 1989: 66). Moreover, Cao Dingyun argues that this is an artifact 'created by a Zhou hand' (Cao Dingyun 1993: 20). Importantly, since the turtle species is local to Anyang, it means that the delegation of Zhou diviners and scribes was 'invited' to the Shang court, perhaps to showcase their own divination style to the then-ruling people (cf. Li Xueqin 2006: 208), who would be replaced by the Zhou soon after this divination took place.

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[15] It is not clear what the meaning of You is here. It might be the name of the diviner.

The text is particularly concise and relatively easy to translate. However, two points are worth mentioning. First, the basic section of a typical late Shang OBI—the charge—is here surprisingly absent. Thus the formulation of the charge, that is the topic addressed to the spirits, which is a pivotal moment of any divination act (and the most extensively attested in the other OBI), in this instance remained within the oral realm. For some reason, the scribe deliberately chose to omit it from the inscription. This might seem irrelevant if it were an isolated case. But all the *shuzi gua* found on oracle bones consistently lack the charges, with the sole exception of the Western Zhou scapula unearthed at Qijia (see Shaughnessy 2022: 99–100). This consistent absence of charges in the *shuzi gua* OBI should therefore be regarded as a distinctive feature of the scribal habits associated with this specific technique.

The second point is concerned with the formula *zhenji* 貞吉 (determined: auspicious), here used as a prognostication to the three *shuzi gua*, which never appears in the Shang OBI (the sense in the only meaningful example, *Heji* 8329.4, is different). However, it does appear in the late fourth-century bamboo manuscripts found at Baoshan 包山,[16] Tianxingguan 天星觀,[17] and Xincai 新蔡[18] as a prognostication to the *shuzi gua*. Even though roughly seven centuries separate this plastron from the bamboo divination records, these elements could attest to a continuity in the formal and scribal conventions. Finally, we cannot retrieve the criteria by which this exact *shuzi gua* combination was deemed auspicious; however, we can assume that the diviner either had a manual at their disposal or that they composed the interpretation by recurring to a set of stock phrases, once again retrieved from memory. These two scenarios are both equally possible, even though they can only be conceived of in hypothetical terms.

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[16] Unearthed in 1987 when the Jingsha Railway Archaeological Team in Hubei Province excavated Tomb No. 2 in Baoshan 包山, Jingmen 荊門. A total of 448 strips have been recovered, 278 of which are inscribed, for a total of 12472 characters. The editors divided the strips into three groups according to their content: administrative and legal documents (1–196), divination and sacrifice (197–250), and inventories (251–78). The second group includes 54 strips (Hubei sheng Jingsha tielu kaogudui 1991).

[17] These bamboo strips were obtained during the rescue excavation of Tomb no. 1 in Tianxingguan 天星观, Jiangling 江陵, Hubei 湖北 by the Jingzhou Regional Museum from January 8 to March 28, 1978. There are about 70 strips, with a total of *ca.* 4500 characters, of which 50 (*ca.* 2700 characters) are complete and include divination records. Wang Mingqin 王明欽 made the first interpretation and examination of the bamboo strips in his master's thesis (1989). See also Yan Changgui 晏昌貴 (2005) for a revised interpretation of the strips.

[18] Unearthed in the Chu tomb no. 1 at Geling 葛陵, Liqiao 李桥, 26 km northwest of Xincai 新蔡, in 1994. The tomb was robbed on several occasions in ancient and modern times, during which the bamboo strips were misplaced and seriously damaged. The sorting team divided them into two bundles, A and B. Bundle A is divided into three groups, A1–A3, for a total of 523 strips. Bundle B includes 153 bamboo strips, which are relatively well preserved. They are divided into four groups, B1–B4, including two main categories: tomb inventory 薄書 and divination and prayer 卜筮祭禱. In addition, 749 fragmentary pieces were assigned a temporary number. All the strips together include a total of about 8000 characters (Henan sheng wenwu kaogu yanjiusuo 2003).

Case 2: animal scapula from Xiaotun locus South

The second case study is an upper part of a right ox scapula fragment, measuring 6.5cm in width and 14.8cm in length. The scapula was excavated from pit SP11 (enclosed in pit SP4) at the western division of Sipanmo 四盘磨 (Anyang) by the Institute of Archaeology of the Chinese Academy of Sciences 中國科學院考古研究所, led by Guo Baojun 郭寶鈞, in the spring of 1950. Identifying the exact date of this oracle bone has not been easy; Cao Dingyun, just like Xiao Nan for the plastron analyzed above, relied on the physical and scribal features (Cao Dingyun 1993: 639–40). He concludes that the bone should probably date to the reigns of kings Kang Ding 康定 or Wu Yi 武乙.

Cao Dingyun noticed that the bone was pretreated in the fashion of Shang turtle-shell divination, insofar as 'the length of the resected acetabular angle is equal to the length of the remainder after the back of the acetabular angle is sawn away' (1993: 638). On the verso side, there are ten hollows in total, eight of which are arc-shaped (length: 2–2.3cm; width: 1.1–1.4cm) and are located on the channels which were chiselled on the left and right of the blade. The remaining two rectangular hollows are located on the blade-edge and are damaged. All ten hollows exhibit signs of burning, which means that the bone must have been used for divination. In addition, Zhang Yachu 張亞初 and Liu Yu 劉雨 (1981: 157) noticed that the graphs contain vermillion pigments. Therefore, Guo Baojun's hypothesis regarding the idea of 'practice inscriptions' should be discarded.

In this case too, the inscription is very short and consists of just three *shuzi gua* and three graphs which are repeated after the first and the third ones.

> 1: 七五七六六六 (*shuzi gua*) 曰思孚 (three graphs)
> 2: 八六六五八七
> 3: 七八七六七六 (*shuzi gua*) 曰思孚 (three graphs)

Before providing the translation, I will spend a few words about how the texts following the two *shuzi gua* has been interpreted by other scholars. They proposed to read the texts as a *guaming* 卦名 (hexagram name) or as *guaci* 卦辭 (hexagram statement, that is the explanation of a certain hexagram) of the *Zhouyi* (see Field 2000, with further references). However, as I stated right at the beginning, projecting an anachronistic interpretation onto the *shuzi gua* materials, using the biased lens of the Yi tradition, should be avoided, even more so for the earlier material which often provides little or no context at all. Cook and Bréard (2021: 29) proposed to read the inscription as '*yue gui* 曰鬼' (called Ghost), thus following the older transcription which identified only two graphs (Field 2000: 3–8). However, a recent paper by Wu Xuefei 吳雪飛 (2019) sheds new light on how to read this short inscription. He reads

the graph following *si* 思 as *fu* 孚, which in the context of divinatory language should be considered as a judgment on the divination result, meaning 'to come true' (Wu Xuefei 2019: 481). Thus, the formula '*si fu*' should be read as a prognostication. This is further corroborated by the fact that (1) the three graphs appear after the *shuzi gua*, and (2) the formulaic word 'yue 曰' usually introduces a prognostication. Cook and Bréard (2021: 29) also write that 'the term "to call," *yue* 曰, can also refer to words that the diviner spoke as part of a divinatory act'. Based on these observations, I suggest the following translation:

> 1: 757666. [The diviner] said: [The results of the divination enquiry] will be fulfilled
>
> 2: 866587.
>
> 3: 787676. [The diviner] said: [The results of the divination enquiry] will be fulfilled

As in the previous case study, the charge was omitted by the scribe. The word *yue* 曰 (says) is used to introduce the prognostication uttered orally by the diviner. Moreover, this bone was excavated in Anyang, which means that here too we are witnessing either someone from Zhou who divined for the Shang, or simply that the material was prepared by a Shang specialist, but the divination was carried out by a Zhou diviner and then carved by a Zhou scribe. Therefore, continuity between these two OBI should be posited based on the material and scribal features. Remarkably, a similar pattern can be found in late Warring States bamboo divination records where the *shuzi gua* was deemed auspicious, but further actions were required (sacrifices to ancestors and other extra-human entities). This once again might suggest a continuity among divination records that present *gua* notations. However, the Warring States records consistently present two *shuzi gua* made up of six numbers in parallel; this is never the case in the earlier evidence. Furthermore, even though examples of *shuzi gua* have been found on Western Zhou OBI too, the habit of engraving inscriptions on oracle bones ceased after the tenth century BC (Venture 2021: 502). Whether divinatory and scribal conventions were transmitted orally or through the written records like diviners' notebooks or divination manuals remains uncertain. While we lack solid evidence to confirm or reject these hypotheses, both are reasonable. To conclude, examining material features reveals a certain degree of continuity among divinatory traditions in early China. Although I acknowledge a relationship between the Yi and *shuzi gua* traditions, delving deeper into this analysis is certainly more efficacious.

Conclusions

Although significant effort was put into the creation of written records, the world of the late Shang period was still one largely dominated by orality. The archaeological evidence retrieved in the last century bears witness to a strictly organized society, in which turtle-shell divination was performed on a daily basis by the king and his closest entourage. Written records were produced after the divinatory act and were independent from it. The formulaic language used in the inscriptions should be understood as a time-buying device which would contribute to by-passing the linguistic generative process (Wray and Perkins 2000: 18). Field (2000: 14) argued that the OBI's 'very orality or brevity demanded interpretation, which may have reached the level of metaphysical speculation'. Leaving aside the metaphysical speculation, I believe that the notion of a human mediator in the case of the OBI is slightly inaccurate. During any divinatory act, a human mediator should be posited not because the *text* required interpretation, but rather the *signs*. Over time, formulae contributed to the creation of a technical language shared by different communities within the Shang and Zhou states. Meaningful examples can be the *shuzi gua* examples discussed above and the Warring States bamboo divinatory records. These texts belong to different periods and cultural backgrounds, and they present idiosyncratic features. For instance, the bamboo records show a specific layout of the *shuzi gua*, routinely written in pairs. Nevertheless, they attest to a certain degree of continuity in their use of divinatory and scribal conventions. To conclude, formulaic language in late Shang and Western Zhou can be considered as a tool to be used by the scribes when they had to engrave the text on hard media. Therefore, formulaic language, in this context, was *a device to facilitate the written composition after the oral performance.* In this sense, the OBI are an excellent example of writing orality, with formulaic language being a scribal strategy used to record what happened during the—essentially oral—divinatory ritual.

In addition, the two *shuzi gua* examples discussed above show that the *separation* between the oral performance and the production of written records on hard media was even more prominent than in the rest of the OBI. Assuming that a divination act always includes at least the charge and the prognostication, then in *shuzi gua* divination these sections occurred *only* orally in most cases. Moreover, they seem to be *deliberately* left out of the written records. In fact, there were usually no space constraints. So, if scribes wanted to add text, they could. Also, as we have seen in the previous section, they had the technical tools, that is, formulaic language. This might suggest that, when using this specific method, the oral performance was more important than the creation of written record.

Acknowledgements

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