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## Chapter 4: An areal-based, interferential model as basis for a theory of long-distance transmission

The present chapter exposes the theoretical concepts as proposed for the investigation of the long-distance transmission of the Hattuša lexical lists within the historical-geographical context that is set by the parallel corpora. After giving a summary of the basic research questions, the available sources, and the methodological problems (sect. 1.), it proposes an interferential and areal-based model of textual transmission borrowed from historical linguistics / dialectology as the adequate basis for further description and analysis (sect. 2.). The chapter concludes with a modification of the basic research questions as arising from a new perspective of the areal-based model and with the proposition of a number of guidelines for the further investigation (sect. 3).

A number of theoretical concepts that the model builds on have already been outlined in the preceding chapter, which is concerned with the short-distance transmission of the lists.

**1.1.** [Presets – long-distance transmission and a first set of research questions] As exposed in the preceding chapter, *long-distance transmission* denotes the transmission of text between spatially-distant archives; it involves the processes necessary by which a textual storage – be it a written source of a human memory – covers the distance between two archives in order to enable its transmission. In contrast to *short-distance transmission*, which denotes the transmission of text within a fixed, spatially-constant archival environment, the concept of long-distance transmission thus inheres a strong geographical dimension. Consequently and unlike its spatially-constant counterpart, it is not only the *modes* of transmission which form the main point of interest and investigation, but it is also the *routes* which the transmission followed within a concrete historical-geographical setting that are significant. Regarding the modes of transmission, the focus thereby is rather on the modes of *storage*, and not so much on the modes of *mediation* (see chapter 2, sect 3.2.).

The basic historical-geographic framework including the relevant sites in the western periphery has been outlined in chapter 1, sect. 2. It has to be added that, as will be argued in sect. 2.2., the basic origin of the texts must have been Babylonia. Although it can be demonstrated that western peripheral scribes also contributed to the tradition in the shape of smaller additions and other changes, the amount of these contributions is marginal as compared to the original effort. Reconstructing the *routes of transmission* of the textual sources thus implies tracing back this general east-west textual stream as well as the sub-streams among the individual western-peripheral traditions in terms of the given historical-geographical framework.

Reconstructing the *modes of transmission*, in turn, implies tracing back how the specific historical-geographical distance was covered. One can distinguish three basic modes in this respect: Texts

may have been passed (1) in the shape of tablets brought by a (non-literate) courier, (2) by traveling scribes who had the text memorized, or (3) via tablets brought by traveling scribes who simultaneously knew the texts by heart.

**1.2.** [Presets – the sources and methodological difficulties] As will be seen at various points within the study, to approach these questions on the basis of the present-corpus textual materials is theoretically and practically problematic, if not impossible: As is the case for the reconstruction of the short-distance transmission of the present-corpus texts, the investigation of the long-distance transmission can hardly build on secondary textual sources; i.e., historical documents such as letters in which scribes mention or describe the transfer of tablets or texts, are practically absent, and it is factually impossible to trace the movements of the historical persons who transported the texts (in their memories or on physical tablets).

Attempting a reconstruction of the routes of transmission the observer has to draw data exclusively from the primary sources. The main instrument thereby is the comparison of the different versions of texts preserved from the individual spatially-distinct archival contexts, i.e., in textual-critical terms, their *collatio*: The routes of *textual transmission* of the lists are to be reconstructed from their *textual tradition*. The genre of lexical lists and the kind of texts investigated show some important advantages facilitating this kind of reconstruction: (1) The lists are organized in a well-standardized curriculum, so that the local traditions of lexical lists compared consist of practically the same (types of) compositions. (2) Since the lists are more or less abstract collections of words, differences between individual versions of the same composition are more easily describable – in a certain perspective they are even quantifiable (see chapter 1, sect. 4.3.) – more so than would be the case for literary texts, which in turn may display highly complex syntactical and textual structures. (3) Like other textual genres of the pre-canonical period, lexical lists of the LBA periphery still undergo a process of continuous extension. The observer can easily distinguish earlier versions from later versions by comparing their grade of extensiveness.

Reconstructing the modes of transmission, the observer has to take into account that the manuscripts which form the sources of the present study are presumably the direct products of one or another mode of short-distance transmission. Normally, the texts have already been reproduced several times within the respective archives; the extant manuscripts do not – or do not necessarily – represent the states of the texts as shortly after their (long-distance) transmission to the archive – and if this was the case it would be hard to prove. This forms a strong handicap, since extracting direct evidence about the long-distance transmission of the sources thus means distilling the original states of the texts before they were reproduced within the local reproductional cycles. In the majority of cases, this turns out to be an impossible procedure.

**1.3.** [Presets – the linear model of textual tradition and its limitations] The reconstruction of the long-distance transmission of the texts being bound to the reconstruction of their textual tradition means that the specific model of textual tradition employed is most significant.

In classical, medieval, or modern European philology since the 19<sup>th</sup> century, the standard means of displaying the relationship between a number of manuscripts as the result of their collation, has been the *stemma*. Stemmata coordinate manuscripts in a linear, pedigree-like fashion as though they were linked through genetic ties. The stemma as a linear model of textual tradition shapes and simultaneously is shaped by a corresponding linear model of textual transmission: Manuscripts are conceived of as the copies of earlier manuscripts, including all of the possible cases of change that may affect the text during this process (additions, omissions, corruptions, etc.). The concept of text underlying this model is a hermetic one, proposing an ‘archetype’ as the virtual source which represents the original, primary version of the text, and describing the later ‘versions’ in terms of their deviations from this archetype.

The stemmatological model, yet, inheres a number of shortcomings, which, partly practical, partly conceptual in nature, make its application difficult – if not impossible – in many research situations. Medievalists and philologists of the New Testament have exhausted discussion on these shortcomings, mostly through the course of and as a result of the ‘new-philology debate’.<sup>1</sup> Note the following points: (1) As for many compositions, the number of manuscripts available is simply too low, and the variance-caused distance among them too wide. Constructing linear relationships would simplify the original transmissional processes behind the textual tradition to an invalid degree. (2) With regard to other compositions, e.g., the New Testament, the number of manuscripts available in contrast is unmanageably high, and establishing the relationship among all individual manuscripts is practically impossible. (3) Linear concepts do not provide for cases of non-linear, non-unidirectional transmission, e.g., when a manuscript draws on two or more sources, a case that is depreciated as ‘contamination’ in classic stemmatology. (4) Conceiving of the textual tradition of a composition as a linear series of copies does not account for the kind of transformations a textual tradition may undergo in oral or memory-based transmission.

Reconstructing the textual tradition of cuneiform lexical lists in a linear fashion faces a combination of all of those problems: Manuscripts are on the one hand too numerous to cope with. On the other hand, their chronological and geographical dispersion is too imbalanced; within parts, centuries of the textual history and wide areas of the historical map are undocumented. And, non-linear modes of transmission such as memory-based or oral modes certainly played a considerable role in the transmission of the lists.

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1 Cf. the contributions in Nichols 1990 as well as Gleßgen / Lebsanft 1997.

**2.1.** [The general theory – non-linear models of textual tradition] By modifying the linear pedigree models, such as practiced in medieval philology,<sup>2</sup> or by replacing the linear model through a typology-based model, such as in the philology of the New Testament,<sup>3</sup> researchers have attempted to provide solutions for the difficulties outlined. A field of research in which pedigree-like genetic models have also been – if not totally questioned – supplemented by alternative conceptions, is the field of historical linguistics. In today's historical linguistic and dialectology, the relations between languages are not only conceived of in terms of their genetic relatedness, but also in terms of their areal convergence and interference.<sup>4</sup>

In the following, an areal-based and interferential model will be introduced and developed in close analogy to the areal-linguistic prototype as the theoretical framework for the reconstruction of the long-distance transmission of the lexical lists. Providing an alternative perspective on the spread of textual traditions, hence slightly moving the researcher's focus, it attempts to resolve at least part of the difficulties involved in the reconstruction of the routes and modes of long-distance transmission of the lists. In the same way that the areal-linguistic prototype treats languages and language varieties, it alters the focus from the recovering of presumed genetic relationships between manuscripts and corpora to the contrasting of manuscripts and corpora according to the degrees of innovations they display; it concentrates on the spread of the texts rather than on its origins.

The concept of textual transmission underlying the model thereby is a non-linear one. It regards texts and textual traditions as basically permeable structures and their transmission as a kind of diffusion, which often follows wave-like patterns. Needless to say, the conceptual analogy between languages and texts and between language varieties and textual varieties, as pursued in the following, remains a conceptual analogy, excluding any unscrutinized material transfer between both parts.

**2.2.** [The general theory – wave-like diffusion] As noted in sect. 1.1., the textual materials – i.e., the texts, not the manuscripts – of the corpora investigated could not have originated in the LBA western peripheral sites where they were unearthed. Despite the broad lack of contemporaneous sources from Babylonia, the origin of the tradition of lexical lists as well as of the great part of textual innovations coming after the initial transfer, must be sought in Babylonia: (1) Sumerian

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2 Cf. the contributions in the volumes Plachta / van Vliet 2002 and van Reenen / van Mulken 1996, particularly Bein 2002, Wattel / van Mulken 1996, and van Reenen 1996.

3 Cf. Metzger 1992 and the contributions in Ehrmann / Holmes 1995.

4 As for a helpful and up-to-date overview of modern areal linguistics, cf. Muysken 2008, Matras / McMahon / Vincent 2006, and Thomason 2001. Similar to medieval textual editors (see note 2), historical linguists also attempt to overcome the conceptual problems of pedigree models by modifying them into net-like models; as for a summarizing perspective, see McMahon / McMahon 2006: 60-73.

and (Babylonian) Akkadian are the main languages of the lists and were spoken or formerly spoken, in Babylonia. (2) Lexical lists do not occur before the 2<sup>nd</sup> half of the 2<sup>nd</sup> millennium BCE in the western periphery, while their precursors can be found in Babylonia since the OB period (1<sup>st</sup> half of the 2<sup>nd</sup> millennium). (3) The extensions and elaborations the lists received during the MB period could only have been achieved by Babylonian scribes as only Babylonian scribes had direct access to the traditions of Sumerian literature which enabled them to deduce new, innovative lexical equations. Assyria, the uprising power of the time, forms a possible intermediary between Babylonia and the West.

From the varying grades of extensiveness and elaboration that the individual LBA peripheral traditions show – sometimes varying within one and the same archive – it is clearly impossible that the transmission of the textual materials from Babylonia to the west was a singular act. Rather, the western traditions, once established, must have received continuous updates as a result of their repeated contact with Babylonian traditions and of the ongoing elaboration of the compositions in the Babylonian schools. There must have been multiple and continuous impulses of transmission emanating from Babylonia in *wave-like diffusion* to the west.

In this respect, the spread of texts reminds one of the wave-like areal diffusions of innovations among natural languages (among dialects of the same natural language, but also among genetically unrelated languages, for e.g., within a *sprachbund*). This analogy fits well in that the individual ‘textual waves’ that must have moved from Babylonia to the western periphery did not – or did so only in minute quantity – transport entirely new textual materials. The waves merely consisted of new, innovative versions of basically the same textual compositions that had already been settled in the west as the result of earlier transmission.

**2.3.** [The general theory – the concept of textual communities] As remarked in sect. 1.2., secondary textual sources which identify the scribes as the carriers of the texts or which describe their work and methods when transmitting the texts are virtually absent. Nonetheless, the role that the scribes assumed within the transmission process cannot be underestimated.

Analogous to the linguistic model, it is presumed in the following that the successful and reliable transmission of the lists, as a more or less consistent group of texts, must have been settled within a more or less homogeneous community of scribes. The concept of such *textual communities* actually is a medievalist creation;<sup>5</sup> in contrast to the medievalist focus, yet, the present study conceives of textual communities not so much as social or political entities, but mostly as institutions which

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5 Developed by B. Stock (1983: 88-92), introduced to Assyriology by J. Cooper (1993) and W. van Egmont (forthc.). Stock originally applied this concept to small groups of heretics who concentrated on a specific interpretation of the Bible.

guaranteed the stability of the textual tradition(s) around which they are specifically settled. In case of the lexical lists, the stability of the tradition is of particular relevance, since the lists supposedly were the essential tools for the writing and reading of ‘academic’ cuneiform. The respective textual communities are assumed not only to have maintained the traditions on which they depend by handing them down to new generations of scribes, but also to have supervised their *correct* maintenance – just as a speakers’ community watches (mostly unconsciously) over the correct use and preservation of its idiom as the basic tool for its internal communication. As noted by W. van Egmont (forthc.), such rituals of supervision may be conceived of as, for e.g., joint recitation of the memorized texts, as it is known from (Ancient) Indian Vedic oral traditions.<sup>6</sup>

In the case of oral and memory-based modes of storage and transmission, the presence of textual communities appears to be an inevitable conceptual prerequisite if the textual traditions are to be preserved with accuracy and reliability. It seems very unlikely that the stability of textual traditions could be achieved and maintained in such a context by single, more or less isolated persons without some external, controlling ‘pressure’ exerted by (a group of) other professionals. Even if the lists were preserved by writing-based modes of storage and transmission, i.e., even if their preservation was externalized and – theoretically – independent from human memory at the core textual level (as for the individual textual levels identified, cf. chapter 3, sect. 4.1.), the techniques of textual interpretation (meta-textual level) and the basic linguistic and orthographic skills necessary for the interpretation (con-textual level) were still being transmitted orally; at least, no textual sources which demonstrate the opposite have as yet been found. Their preservation and tradition must have relied on textual communities to a considerable degree.

Although the textual communities behind the present-corpora texts seem to be practically identical with the local schools, textual communities must be conceived of as not necessarily bound to a single archive. Textual traditions preserved by one and the same textual community may turn up in several distinct, even geographically distant archival contexts.

**2.4.** [The general theory – aspects of center and periphery] Analogous to the areal-linguistic model, the specific relations between the individual known textual communities can be evaluated in terms of *centrality* vs. *peripherality*, indicating the textual communities’ relative access to new, innovative textual (re-)resources.<sup>7</sup> The most central communities in this respect have to be sought in Babylonia, as the specific communities which generated the bulk of new textual material. The individual communities

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6 As for which, see Staal 1986.

7 The center-periphery pattern (or: core-periphery pattern) is a very popular concept not only in linguistics, but also in cultural studies. In the present study, it is used as a primarily descriptive category, devoid of the critical dimension it, for e.g., achieves in post-colonial studies.

of the LBA west relate to this center in varying degrees of textual peripherality, themselves being inter-related among each other as well in terms of peripherality and – then secondarily – centrality.

The relative textual peripherality/centrality assessed can be compared to the relative spatial peripherality of the respective archive, i.e., of the textual community's geographical base. According to the three commonly-defined dimensions of spatiality (Britain 2003: 604), the relative spatial peripherality is conditioned by (1) the geographical-infrastructure accessibility of the respective site (geographical, Euclidean space/distance), (2) the political-economical influence concentrated on it (social space/distance), and (3) the cultural prestige which it represents (perceived space/distance).

An important related concept in this respect concerns the distinction between *spread zones* and *residual zones* (following Nichols 1992: 13-24), i.e., areas in which innovations spread quickly (typically, areas consisting of large, densely-populated plains with high cultural and social homogeneity) as against areas which tend to obstruct such spreads of innovation (typically, mountainous, sparsely-populated areas with high cultural and social diversity). Typical examples for historical-geographic spread zones within the ANE are the Babylonian alluvial plain, the Syrian river course of the Euphrates within the North Syrian plain, or, in more narrow geographic borders, Palestine. Needless to say, textual traditions located in residual zones are not necessarily more peripheral than traditions found in spread zones.

**2.5.** [The general theory – modes of contact] As a consequence of the preceding, the wave-like diffusion of innovations within the tradition of lexical lists must be conceived of as based on the contact between adjoining textual communities, just as the spread of linguistic innovations is bound to the contact among speaker communities. Three important categories that specify the modes of contact are *symmetry*, *frequency/duration*, and *intensity*.<sup>8</sup>

Contacts may be symmetrical or asymmetrical. Completely asymmetrical contacts expose one of the textual communities in the role of the provider of the innovations and the other in the role of receiver; the contact eventually leads to the complete leveling out of the receiving community's version. Asymmetrical contact presumably – but not necessarily – results from a strong decline in the relative centrality/peripherality that respectively marks the two communities in contact. Symmetrical contact, in contrast, is assumed to take place among communities with relatively equal grades of centrality/peripherality. It results in the temporarily mutual convergence of the two communities' textual traditions (unless one of the two traditions again picks up new innovations from a third community).

The frequency/duration of the contact presumably is a direct result of the relative spatial distance between the two textual communities in contact – which is not necessarily identical with the

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<sup>8</sup> As for an overview of the possible contact scenarios recorded in areal linguistics, cf. Muysken 2008: 9-11 and Thomason 2001: 129-156.

geographical distance between them (see previous section). And, contact within spread zones presumably is frequent and/or permanent, whereas contact within residual zones presumably is less frequent and/or punctual.

Frequency/duration, in turn, does not necessarily lead to an increase of the amounts of material passed among the communities in contact; the intensity of a contact is not dependent on its frequency or on its duration. Also punctual – or even a singular – contact can involve the passing of high amounts of textual materials. The latter appears to be a particularly possible scenario in case literate techniques of storage and mediation are involved in the transmission, since large amounts of material can be exchanged at once by issuing, passing, or copying a single tablet. In contrast, oral and memory-based modes of transmission and storage presumably require a higher frequency or a longer duration of the contact in order to be successful.

**2.6.** [The general theory – modes and sources of innovation] Textual innovations taking place in an individual textual tradition may assume two basic shapes. They may appear as *quantitative* innovations or as *qualitative* innovations. Qualitative innovations involve the reformation of extant textual contents or structures. Quantitative innovations may involve the *addition* of new material or the *omission* of extant material. Omissions can, according to the initial presumption that the lexical compositions stood in a continuous process of elaborate extension, be regarded as exceptional cases. Innovations can moreover be qualified according to whether they concern *linguistic* features (i.e., phonetic or grammatical ones), *structural* features, or features of *content*.

The possible sources of innovation are twofold: Innovations are borrowed from outside, i.e., from another textual community which possesses a more innovative version (*external* innovations), or they arise and spread within the same tradition/community without any external contact (*internal* innovations). With Babylonia providing the main source of new textual material, most of the innovations found in the LBA peripheral versions must be considered external innovations unless it is impossible to prove the opposite. Since the Babylonian contemporaneous textual versions are almost completely lost and/or untouched by archaeological excavations, internal innovations can only be verified – if at all – when they have been conditioned by local LBA peripheral linguistic features or features of the local LBA peripheral writing system(s).

If a given LBA peripheral textual tradition can be shown to have integrated internal innovations to a certain extent, and if these innovations can be shown to be *intended* rather than *accidental*,<sup>9</sup> this may be interpreted as pointing to a certain degree of (secondary) centrality, i.e., to a certain degree

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9 In a normative conception of grammar and inner-textual logic, the distinction between intended and accidental corresponds to the distinction between correct and erroneous, a distinction however insignificant for the actual reconstruction of textual traditions.

of independence achieved by opposing the ‘pressure’ of the textual communities of Babylonia, the primary center.

**2.7.** [The general theory – differentiation and standardization processes] A textual community’s confrontation with innovative textual material through contact with other textual communities – either personally or through the exchange of written sources – leads to the *differentiation* of its existing, original textual tradition. Via the newly introduced, innovative material, the community then has a second (or a third/fourth/etc.) version of the original textual version(s) available.

Depending on whether or not the respective textual community accepts the coexistence of concurring textual versions, this initial differentiation process must pass into a corresponding process of *leveling*, in which the concurring versions either by mutual replacement (*substitution*) or interference (*transformation*; see following section) end up in a single new and up-to-date version. To what degree a textual community accepts or supports the coexistence of concurring textual versions, yet, is hard to anticipate. One may adduce the following factors as relevant in this respect:

(1) The degree of distinctness between the two (or more) concurring versions: Two textual versions with great differences presumably are more unlikely to merge into one version than two textual versions with a high degree of similarity.

(2) The authority of the less innovative textual tradition: A textual version deemed very authoritative (perhaps because of its distinguished origin, its great age, or its supposed first-hand transmission) is less likely to interfere with or to be replaced by a more innovative version than a textual version deemed marginal in authority.

(3) The extent of oral/memory-based techniques of transmission used within the textual community: A textual community strongly relying on oral/memory based techniques of transmission is more unlikely to accept coexisting concurring textual versions than a textual community which prefers writing-based transmission. Oral/memory-based communities are presumed to exclude (or level out) all possible sources of textual ambiguity, i.e., to reduce textual variation to a minimum, manageable level.

Generally, differentiation within a textual tradition presupposes the general availability of different textual versions, so a high degree of differentiation within a given textual tradition may be taken as an indirect indication of its location within a spread zone.

**2.8.** [The general theory – transformation vs. substitution] A final point concerns the question of how innovations eventually establish themselves within a textual tradition, i.e., how the actual leveling process (see previous section) works: New textual versions may simply replace the extant,

older versions after their introduction, or the new material introduced is worked into the existing versions. Innovation may imply (full) *substitution* or (partial) *transformation*. Only the latter case, i.e., the (partial) transformation of a textual source through the contact with a concurring source, may be described as actual *interference*.

There are some non-textual phenomena of interference which show that elements received from outside were integrated into the existing scribal tradition and did not simply replace it; foremost are the phenomena of mixed paleography, mixed orthography, or the pidgeonization of the Akkadian language in the peripheral West. As for the interference of two textual versions, one may consider the following factors as relevant:

(1) The gap between the two versions: If the textual version received shows considerable differences from the established, earlier version, particularly if these differences do not concern elaborations of content but of structure, it appears more economical to replace the earlier version completely and not just to work on the updates.

(2) The modes of contact between the respective textual communities: Interference between two versions (in contrast to their mutual replacement) appears more likely if the contact between the carrying textual communities is symmetrical and frequent/permanent (spread-zone characteristics) than if it is asymmetrical and infrequent/punctual (residual-zone characteristics).

(3) The degree of oral/memory-based techniques involved in the transmission: In case texts were stored in memory, completely or to a substantial degree, it is unlikely that an earlier version was replaced by a new one. It actually appears to be impossible. A scribe who memorized the text could absolutely not clear his memory in a way that one can clear or discard a tablet. Working the innovations into the personally-memorized version seems to be not only the more economical, but really the only possible procedure. It is important to keep in mind that if oral and memory-based techniques played an important role in the transfer, textual interference inevitably played a considerable role as well.

**3.1.** [Guide lines of research – modifying the research questions] As has already been noted in sect. 1., the basic research questions concerning the long-distance transmission of the texts, i.e., the questions of the routes and the modes of textual transmission, are in many respects unsuitable to the present-study textual material – at least as far as they are conceived of as linear relations. The non-linear, areal-based model of textual transmission as proposed in sect. 2. can be used to reshape the research questions in a fashion more adequate to this textual basis.

Basic parameters used thereby are the alignments between centrality vs. peripherality (sect. 3.3.1.) as well as between spread-zone location vs. residual-zone location (sect. 3.3.2.). Instead of tracing back possible origins and routes of transmission, the present study seeks to assess the

relationship among the individual textual traditions in terms of those alignments. In a further step, it will have to compare this ‘textual position’ of a tradition with the geographic, political-economical, and cultural position of the historical site where the respective textual community had its basis. The centrality/peripherality and/or spread-zone location/residual-zone location of an individual textual tradition may also be compared with the respective position of other, non-textual features of the manuscripts it includes, such as the paleography, the syllabary used, the physical characteristics of the tablets, or curricular aspects (cf. chapter 3, sect. 4.2.). By comparing those factors, it may turn out to be possible also to isolate the specific modes of contact between the individual communities.

Aspects of orality and literacy are accessible by the proposed areal-based model as well, however in a fashion rather indirect and – likewise as with regard to the short-distance transmission – through negative evidence only.

**3.2.** [Guidelines of research – providing the philological basis] Irrespective of the textual-traditional model used – be it linear or areal-based – the comparison of the textual sources, i.e., their collation, is the philological basis of all treatment of long-distance transmissional problems. As already noted in chapter 1, sect. 4.3., due to the serial, non-narrative, and quantifiable structure of the lexical lists, the collation of sources is not necessarily a purely qualitative procedure; it may also include a good deal of quantitative comparison. With regard to the characteristics of the areal-based model proposed, the following comparative features are of primary relevance:

(1) Location and date of activity of the textual communities and allocation of the respective textual versions: As noted in sect. 2.3., the textual communities are practically identical with the local schools. They can be identified according to the following criteria: (a) a specific archive, (b) specific scribes, (c) a specific paleography, (d) a specific tablet layout.

(2) The relative length of the extant textual versions of a given composition, which is practically identical with their relative degree of innovation/quantitative elaboration: The incomplete preservation of predominant sources thereby calls for specific methods of statistical extrapolation, geared to the structure of the lexical composition under investigation (in this respect further see chapter 11, sect. 5). The relative length of the textual versions compared to their relative chronological position results in a degree of their relative textual peripherality.

(3) The qualitative intersection set between textual versions with a contrasting grade of innovation, particularly with versions with different dates of productions but identical archival provenance: If the intersection set is nearly identical with the less innovative version, i.e., if the more innovative version almost wholly integrates the less innovative one, this points to transformation rather than substitution as the mode of interference between the two versions. In case of mutually

exclusive material, the relative qualitative agreement allows for assessing the degree of differentiation/ standardization among two or more textual versions and/or within a specific textual community.

(4) The amounts of internal innovations. As noted in sect. 2.6., the general origin of the textual innovations taken up in the LBA peripheral traditions must be assumed to be of Babylonian origin. Textual innovations that were demonstrably added by local western peripheral scribes form notable cases of scribal and textual autonomy.

**3.3.1.** [Guidelines of research – parameters of interpretation – peripherality and secondary centrality] The relative degree of peripherality of a given textual community can be directly anticipated by the relative degree of innovation of its textual versions. The more innovative the textual versions appear, the closer must have been the community's access to external innovations. As a consequence, if two contemporaneous textual communities with contrasting degrees of peripherality can be verified to have stood in contact, these contacts very probably were asymmetrical.

As noted in sects. 2.6. and 2.4., actually-peripheral textual communities can under certain circumstances assume a center-like status. The degree of this secondary centrality can be deduced from the amount of internal innovations found in the respective textual traditions, i.e., innovations that were not imported from outside.

**3.3.2.** [Guidelines of research – parameters of interpretation – spread-zone and residual-zone location] A high grade of textual differentiation within a given textual tradition, manifest as a high number of contemporaneous contrasting textual versions inherent to this tradition, can principally be regarded as indication for a spread-zone location of this tradition. Textual communities that are located in spread zones are expected to come into contact with innovative material in higher frequency and with innovative material of a higher diversity than textual communities with residual-zone locations. Vice versa, textual traditions updated frequently and updated from multiple origins expectedly show a higher degree of differentiation. The contact between textual communities that are located in the same spread zone, consequently, can be assumed to have been frequent and intense.

Yet, the observer has to keep in mind that a high degree of textual differentiation can also be explained by alternative factors: As noted in sects. 2.7., the uniformity of a textual tradition strongly depends on the corrective pressure within the respective textual community. A high grade of differentiation may also be the result of (a) a (gradual) substitution of oral/memory-based techniques through writing-based techniques, which makes a community-based corrective a less essential factor, (b) the (physical) instability of the textual community, caused e.g., by a loss of members or important teachers and accompanied by a general deterioration of the tradition, and/or (c) the

(gradual) independence of the textual community from its authoritative source, i.e., its secondary-central status, which makes the community achieve a center-like status and permits it to produce and maintain its own creative modifications of the tradition.

In turn, a relatively high degree of standardization (i.e., of homogeneity), found within a given textual tradition is not necessarily due to a residual-zone location, but may also be due to (a) predominantly oral/memory-based techniques of transmission, (b) the relative vitality of the community, and/or (c) to its relative dependence on an authoritative source.

**3.3.3.** [Guide lines of research – parameters of interpretation – aspects of orality and literacy] As noted in sect. 3.1., the modes of transmission in terms of orality and literacy, can only be grasped indirectly through the present model.

As further noted in sect. 2.4., a successful application of oral and/or memory-based techniques of transmission and storage presupposes the preservative effort of an intact textual community. The internal pressure that an intact textual community exerts over its members is reflected at the textual level in a low degree of differentiation, i.e., in a high degree of uniformity among the individual versions preserved in a given composition. In order to guarantee the stability of an oral textual tradition the respective community has to suppress the coexistence of concurring textual versions. Vice versa, textual traditions that exhibit a relatively high degree of differentiation, with some likelihood also rely on writing-based techniques of textual storage. Yet, as has been argued in the previous section, a high or low degree of differentiation within textual traditions may be rooted in various alternative origins. It is not an absolute indication of the use of writing-based or oral/memory-based techniques, but is indicative only in combination with further kinds of evidence (see chapter 3, sect. 6.).<sup>10</sup>

As argued in sect. 2.8., a similar prerequisite for oral/memory-based transmission is the integration of external innovations through transformation (as against substitution) of the extant textual versions. Both the degree of differentiation as well as traces evidencing the practice of transformative addition can be derived from the qualitative intersection set as established between two or more concurring textual versions; see sect. 3.2.).

Textual communities that share innovations primarily through oral/memory-based transmission are further expected to tend to frequent and/or permanent contacts in order to guarantee the persistence of the transmitted.

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10 Paradoxically, variance must be regarded as an indicator of oral/memory-based techniques of storage and transmission if it concerns the contents and structure of *one* textual version, i.e., if it appears within a given textual version. And it must be regarded as an indicator against oral/memory-based techniques of storage and transmission if there is evidence of variance among *multiple* concurring textual versions.

