# Linguistic Slips: A Window to Ancient Methods of Bookmaking

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#### 1. Introduction

All humans, regardless of race, color, culture, country are making linguistic errors. Scholars have classified the errors to be on no less than five different areas: *slips of the eye*,<sup>1</sup> *slips of the hand*,<sup>2</sup> *slips of the tongue*,<sup>3</sup> *slips of the ear*<sup>4</sup> and *slips of the* 

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Slips of the eye will originate when a person on a particular day do not want to read but has to read. Slips of the eye means the reader's eye "leaps", skip over or miss words when they read. They guess a word on the basis of the first letter or the shape of the word in general. Marjorie Perlman Lorch and Renata Whurr, "A Cross-linguistic Study of Vocal Pathology: Perceptual features of spasmodic Dysphonia in French-speaking Subjects", Journal of Multilingual Communication Disorders 1:1 (2003), 35-52, indicated that "phonetic properties of a specific language may affect the manifestation of pathology in neurogenic voice disorders." Each language will have their own peculiarities. We mention this, since

memory.5) Some linguistic errors are acoustic, others articulatory, still others are

- 2) V. Fromkin, *Errors in Linguistic Performance: Slips of the Tongue, Ear, Pen, and Hand* (San Francisco: Academic Press, 1980). Although she died in 2000, her website was still online and research on these aspects were still alive until 2007. Some noted that she collected over 12,000 *slips of the tongue*. She is criticized for her bag of subjectivity that she brings to the linguistic experiments, a situation, although improved, can never be eliminated. The orthographical shape of the letter, especially if it was scribbled in high speed during a dictation process and later deciphered, can lead to *slips of the hand* but also *slips of the eye*. Much of what is mentioned here, is more complex than just one category, since it involves also cognitive linguistic aspects of understanding and memory. The ability to segment and blend letters and words will affect the kinds of *slips of the eye* and *slips of the tongue*, if dictating. *Slips of the memory* will also be involved if the scribe must remember what was dictated. Also Jean Aitchison, "Slips of the Tongue and Slips of the Pen" (with P. Todd) in *Language and Cognitive Styles: Patterns of Neurolinguistic and Psycholinguistic Development* ed. by R. N. St. Clair and W. von Raffler-Engel (Lisse: Swets and Zweitlinger, 1982) 180-194.
- 3) Jean Aitchison, "Slips of Tongue and Slips of the Pen", 180-194.
- 4) Zinni S. Bond, *Slips of the Ear: Errors in the Perception of Casual Conversation* (Athens: Ohio University, 1999).
- 5) Our study deals with the effects of language perception and comprehension as well, since the Ancient scribe had to listen to someone dictating and these linguistic aspects were involved in this process and is one of the undercurrents of any linguistic slips that we look at here. Bresnan and Ford has illustrated that all people predict in linguistic perception and comprehension. "For example, while listening to sentences unfold, people make anticipatory eye-movements to predicted semantic referents (Altmann & Kamide 1999, Kamide et al. 2003a, Kamide et al. 2003b). Event-related brain potential (ERP) changes show graded preactivation of the word forms a or an as a function of their probability of occurrence in the context of reading a sentence (DeLong et al. 2005). Words that are less discourse-predictable evoke a greater positive deflection in the ERP waveform, and this effect diminishes when the predictive discourse context is eliminated; convergently, prediction-inconsistent adjectives slow readers down in a self-paced reading task (van Berkum et al. 2005). People use language production predictively at all levels during comprehension (see Pickering & Garrod 2005 for a review). Language production is so intimately involved with language perception that listeners' auditory perception of words can be changed by robotic manipulation of their jaws and facial skin during pronunciation (Ito et al. 2009, Nasir & Ostry 2009). Predictive models can also explain many frequency effects in language acquisition, use, and historical change (see Diessel 2007 for a review). The logic common to many of

*dictation* was a method of copying books in ancient times, and the process may have been influenced by this very aspect mentioned here. In a symposium on reading disabilities, a number of problems were listed that are relevant for the ancients as well: a) Speaking a non-standard dialect they will have problems of mapping their own phonological system onto the phoneme-grapheme correspondences being taught. b) Delayed or disordered language development. The reader's personal phonological, lexical and grammatical knowledge and when it is shaky, still developing, and poorly consolidated it will be difficult to engage in metalinguistic tasks such as performing phoneme segmentation, learning sound-symbol correspondences or writing. c) Hearing impairments by a culture or dialect that is in essence a gesture-based system as opposed to English that is in essence an aural-oral mode of expression. d) Developmental delays or disorders physically with mental retardation, emotional problems, attention deficits (Catherine E. Snow and John Strucker, "Lessons from Preventing Reading Difficulties in Young Children for Adult Learning and Literacy", NCSALL *The Annual Review of Adult Learning and Literacy*, vol. 1 (San Francisco: Jossey-Bass, 2000): pages 15-16 of the online NCSALL report.

physical (in the sense of body parts used for language communication) and also cognitive ones. Optical error is also a factor that should not be ruled out.

Various networks are collecting errors on one of these slips for their data bank, so that they can streamline their descriptions of the linguistic phenomena. The *Slips of the Tongue* research Group at SUNY Buffalo is steadily accumulating corpora of slips in other languages.<sup>6</sup>)

At the moment, large collections of errors exist in: Dutch, English, French, German, Italian, Japanese, Mandarin, Spanish. There are smaller collections in Arabic, Finnish, Hindi, Hungarian, Korean, Portuguese, Thai, and Turkish.

# 2. Background

One of the first modern-period famous linguistic studies on errors, was done in German in 1895 by Meringer and Meyer.<sup>7</sup>)

these studies is that if people use language production to make predictions during comprehension, then probabilistic differences in production should be detectable in experiments on perception and comprehension, even with higher-level grammatical structures (syntax)" (Joan Bresnan, Marilyn Ford, "Predicting Syntax: Processing Dative constructions in American and Australian Varieties of English", *Language*, 86:1 [2010], 168-213).

<sup>6)</sup> http://www.bgsu.edu/departments/english/linguistics/slips/slipfags#fag20 There is also the publication of Jaeger which concludes about slips of the tongue with kids: "The study of speech errors, or "slips of the tongue," is a time-honored research window into language production and probably the most reliable source of data for building theories of production phenomena" (Jeri J. Jaeger, Kid's Slips: Using Children's Slips of the Tongue to Understand Language Development [Lawrence Erlbaum Associates Inc, 2004]). Our article title wish to see it as a window of book production in Ancient Times. There is also the study of Qi Zheng, "Slips of the Tongue in Second Language Production". Sino-US English Teaching 3:7 (Serial No.31) (July 2006), 71. She mentioned the metaphor of Jean Aitchison (2000) who said that "speech was like an ordinary household electrical system, which was composed of several relatively independent circuits. We could hardly discover about these circuits when all the lamps and sockets were working perfectly. But if a mouse gnawed through a cable in the kitchen, and fused one circuit, then we could immediately discover which lamps and sockets were linked together under normal working conditions. In the same way, it might be possible for us to find how people produce speech by studying speech errors." There is also the article by Zenzi M. Griffen, "The Eyes are Right When the Mouth Is Wrong", Pscyhological Science, 15:12 (2004), 814-821. Then there is the study of Motley, M. T., Camden, C. T., & Baars, B. J., "Covert Formulation and Editing of Anomalies in Speech Production: Evidence from Experimentally Elicited Slips of the Tongue", Journal of Verbal Learning and Verbal Behavior 21 (1982), 578-594.

<sup>7)</sup> The interest in errors or slips in linguistics is as old as human speech and human writing. Writing started after the Noahic Flood, dated to 2523 BCE with clear evidence of slips that early from the cuneiform sciences of Sumerology and Akkadian Linguistics. Economic texts for example had to be duplicated and

The modern study of errors can be traced to Victoria Fromkin, who in the 1960s and 1970s published numerous articles on the topic.<sup>8</sup>)

Our focus here is to investigate the linguistic phenomena of slips in Ancient Times in the art of "bookmaking".<sup>9</sup>)

## 2.1. Considering 'Slip'

A *slip* means in essence an error or deviation from a conventional or chosen norm. The norm for Ancient Times, is the standard text widely recognized, canonized, also characterized as stable. Stability of the text-form is very important, since one cannot effectively analyze linguistic phenomena when the text is very fluid when compared to

- http://www.bgsu.edu/departments/english/linguistics/slips/slipfaqs#faq20. Victoria Fromkin, "Grammatical aspects of speech errors") in *Linguistics: Cambridge Survey*, vol. 2 edited by F. Newmeyer (Cambridge: Cambridge University Press 1988): 117-138.
- 9) We use the word *book*, since an example of a "book" was found at Nimrud with the name of Sargon II on it (721-705 BCE) (Seton Lloyd, *The Archaeology of Mesopotamia* (London: Thames and Hudson, 1984, reprint 1987), 214 where there is a sketch and description of this almost oriental ivory boards connected with golden hinges on which they wrote with wax. It folds like the Korean artistic boards from the Chosan and earlier periods and still made today. There are 15 or more ivory boards 33.8 cm x 15.6 cm and the text was written on wax and folded and opened to read to the king. This one was kept in the king's palace. This is revolutionary information since our concept of this period is usually that they wrote on clay-tablets only.

then an envelope was made over one and the text was recopied on the outside. The customer receives this with the goods purchased and could then count the goats on the outside of the envelope and compare it with the inside receipt. It should match. Comparing the duplicates sometimes provide evidence of slips of all kinds. In the Book of Judges 12:5-6 there are Shiboleth and siboleth dialectical differences and although not errors, nevertheless is a record of linguistic differences (see the article of Núria Sebastián-Gallés "Cross-Language Speech Perception", David B. Pisoni and Robert E. Remez, eds., The Handbook of Speech Perception (2005): 546-566, which makes reference of this issue. Dialects are not errors. It is different than the standard but not deviant. A long list can follow of cases of interests in variants of speech whether writing or oral differences. B. de Rossi took interest in listing the differences in spelling of Hebrew Manuscripts of the Middle Ages. S. Frensdorff wrote the book Ochla we Ochla in 1864 in which he listed all the different phenomena of differences in the Old Testament Hebrew corpus. If one selects doublets in the Old Testament, many variants can be seen. But, they are not errors. They are cases for dialectology and geomorphology in linguistics. Frensdorff's book is not relevant for errors and slips but the book of De Rossi is. One of the best books for Continental error research in the Victorian period is the work of Conradi which is his thesis online (E. Conradii, Psychology and Pathology of Speech in Pedagogical Seminary, vol. XI [September 1904], 327-380). It was his doctoral dissertation but contains very valuable data and also good bibliographies. Conradi listed between 1865-1902 no less than 63 items (books or articles) on aspects of speech pathology or defective speech or what we listed here are slips of the tongue, including problems like stuttering or stammering (Conradi 1904: 52-54; also Rudolf. Meringer and Carl Mayer, Versprechen und Verlesen (Stuttgart, 1894). They also collected slips of the tongue.

the same content in other texts earlier or later.<sup>10</sup>) This means that inter-manuscript comparison will be the method to see where there are variants and since there is a norm or standard text, it is then possible to see the deviation as a *slip* of one of the abovementioned.

#### 2.2. Ancient Bookmaking

There were no xerox facilities in Ancient Times, so reproduction of a book was done by copying the manuscripts by hand or hands.<sup>11</sup>) The process could range between

<sup>10)</sup> In the science of Textual Criticism of the Hebrew Text of the Old Testament of the Bible, it is the Hebrew text of Codex Aleppo 1008 CE that is the standard text. All other translations in other languages, Aramaic, Syriac, Armenian, Greek, Latin, Coptic, Ethiopian, Arabic are all secondary attempts to be as close as possible to the original Hebrew. For that matter this Codex (1008 CE) is the standard. It is stable since one fragment from Cave 4 on Daniel, 4QDan<sup>a</sup>, proves that over a millennium, the error-margin was less than 1% for that fragment. Other biblical book manuscripts do exist with wider differences of more than 25% at times, but the existence of one fragment with such accuracy, proves stability. Although this writer has met E. Tov on a number of occasions and his book cited here is a gift signed by him personally, the view about the form of the text as not stable, differs. Toy's theory of a Multiplicity of Texts for the Second Temple Period (Tov 1992, 174 at note 1) is in need of a major overall. His criticism of using the Masoretic Text as Standard Text (Tov 1992: 11) is also not shared. Deviances between Masoretic Text editions are far less than deviances between Greek Manuscripts of a particular Old Testament book. Tov is unaware that the text of the Old Testament in Greek, experienced the same tragedies, as the Greek Classics at the Library of Alexandria. With Homer texts there were great instability in the days of Antiochus of Ascelon (87/6-69 BCE) in which eclecticism could be seen (Frazer 1972: Endnote 143). Good copies were also unavailable for the *Iliad* of Homer "The inaccessibility of the earlier editions to Didymus may be inferred from the fact that he refers to copies of Zenodotus etc., and also uses phrases indicating uncertainty and indirect access when referring to these earlier editions" (Frazer I 1972: 472 and 476; see especially Frazer II 1972: 684-685 note 238). When we use the word stability of the text we are not saying that there are no dialectical differences between parts of duplicates, or that geomorphological differences are not embedded into the earlier original text. They are and have become canonized in a fixed form and this form then transmitted through the ages by hands that served as ancient xerox, created the variants (a different form later than the earlier form) that we can investigate under the umbrella of slips.

<sup>11)</sup> G. Frost in 1998 indicated that "reading required two separate scans: an oral sounding out of continuous string of syllables that revealed words which, in turn enabled an oral recitation of the text. In writing formal works an author's oral dictation was 'transcribed by trained stenographers; their shorthand transcripts were then converted into full-text exemplars by copyists who could decipher stenographic notes; and from these exemplars female scribes produced fair copies' " (G. Frost, "Adoption of the Codex Book: Parable of a New Reading Mode", *The Book and Paper Group Annual*, vol. 17 [1998], at footnote 21). Five stages can be identified: 1. Dictation or reading from the reader's cryptic notebook; 2. Oral sounding of the continuous string of syllables; 3. Transcription on a wax tablet by a stenographer of what he heard; 4. Transference of a papyrus in a full text form; 5. Female scribes then produced carefully written copies.

various levels of complexity. *Direct consultation* was a method of copying where one person was reading the text in front of him.<sup>12</sup>) *Indirect copying*, would be a method of copying where the person was relying on dictation.<sup>13</sup>) Someone else was reading to the scribe the standard text and the person was copying. Acoustic misperceptions played a key role here and it can be picked up in the end-product.

A third kind of error resulted when someone had access to, say a Roman public library, but could not take out the manuscript but was permitted to read it. The scribe walked out after *memorizing* long paragraphs and then duplicating the book by this process. Errors are on a cognitive level here. Memory loss, physical exhaustion, age, IQ are all disturbances that can interfere and create a major barrier here. The normal way the brain will try to renovate this mishap is to rephrase sensibly in harmony with an assumed thought resulting in an assimilated paraphrase of text but not an absolute exact copy.

Another kind of error resulted due to the *bad handwriting* of the scribe and this we classify under *slips of the hand*. It is possible that a scribe wrote letters in such a bad shape that ambiguity causes the reader who is dictating, to misread (*slip of the eye*) and the listener scribe writes correctly what he heard. This is a case where the error is not *acoustic* or *articulatory* but two consonants are interchanged although they do not phonologically belong together or are not related in any way, except by form.

#### 2.3. 'Notebook Manuscript'

A notebook manuscript will be a manuscript that was the personal copy of a famous teacher or writer and was not meant to be reproduced as is. Thus, the notebook may contain corrections supralinear or explanatory phrases or sentences on the sides. The handwriting could be in a very bad shape. If someone centuries later wants to copy the notebook accurately, many errors can originate when the later scribe does not understand the notebook in the same way the owner or teacher did. The teacher for

<sup>12)</sup> For the Ancient times some scholars suggest only a "direct consultation" theory (e.g. K. Ohly, "So ist damit der positive Beweis erbracht, dass im griechisch römischen Altertum die Herstellung der Bücher ausschliesslich auf dem Wege der Abschrift erfolgt ist" [op. cit. Skeat 1956: 188]).

<sup>13)</sup> Skeat listed the earliest theorists of dictation as method of copying: J. F. Eckhardt (1777); F. A. Ebert (1820); A. Schmidt (1847) (op. cit. Skeat 1956: 179). Dictation and collation as separate actions were suggested by Karl Dziatzko (1892) (Skeat 1956: 181). Other dictation theorists were: G. H. Putnam (1894); T. Birt (1907); A. Volten (1937); J. Černý (1952) for errors in Egyptian texts that can only be explained as arising from dictation (Skeat 1956: 183).

example knows what is a mistake and what is a correction and unless the copyist knows that too, the copyist may enter two supralinear words into the text thinking they were left out by mistake by the teacher when he copied it when in fact the teacher just wanted to explain the meaning of the word. There are ways to identify these kind of errors as well. This kind of error is outside the scope of our writing.

#### 2.4. Slips of the Eye and Letter Shapes

There is a strong connection between *slips of the eye* and letter shapes because many letters had a shape that was almost identical to one another.<sup>14</sup>) Various languages have letters that could be misread in this way. The key aspect here is the form of the letter that is confused with another letter of similar form.<sup>15</sup>) Many errors are linguistically ideosyncratic. They do not occur in other languages. In Ancient Semitic texts that were translated into another Semitic language (from Hebrew into Syriac) or from Hebrew into Greek and then into Latin followed by English translations of nearly all periods, will not produce the slips at the same zones. Even if one reads an English translation and sees a word form, it is possible to go through the chain of language carriers (Latin, Greek, Aramaic, Hebrew) to identify the language in which the *slip of the eye* occurred most likely.

#### 2.5. Slips of the Hand

<sup>14)</sup> A Slip of the eye is in an Ashurbanipal cuneiform text (650 BCE) see Samuel Smith page 94. http://www.etana.org/sites/default/files/coretexts/20400.pdf. A slip of the eye can be seen in the Codex Sinaiticus as is indicated in a volume published by Skeat and Herbert Milne, Scribes and Correctors of the Codex Sinaiticus, in the chapter dealing with "Orthography and dictation theory," where there is the wrong reading in early Byzantine times of απαται instead of αγιασαι. In those days capital letters were used and the similarity caused a slip of the eye: AΠΑΤΑΙ was copied as AΓΙΑΣΑΙ (Skeat 1956: 192). Another example is ειππον = ΕΙΠΠΟΝ mis-divided by slip of the eye as επι ιππον = ΕΙΠ ΙΠΠΟΝ (Skeat 1956: 193).

<sup>15)</sup> In 1988 Akio Tsukimoto of Rikkyo University, published 7 texts from Emar (Akio Tsukimoto, "Sieben spätbronzezeitliche Urkunden aus Syrien", *Acta Sumerologica* 10 [July 1988], 153-189). Direct copying: Slip of the eye: In Tsukimoto's Emar Text A line 6 the scribe was copying ut-te-er but since the signs for še and te looked the same except for one vertical nail at the end for te, the scribe wrote še instead of te. A scribal error as Tsukimoto (1988, 155 at line 6) indicated with comparison of the correct form ut-te-er in RPAE 30,25.27 and 77,16'. This is in the 13th-12th century BCE. An example listed in B. de Rossi's *Variae Lectiones* which is a list of variants in the Middle Age Hebrew Manuscripts of the *Book of Judges* indicates *slips of the eye* in Judges 1:35 and 2:9 where some manuscripts read the *samek* = o for a *mem* = D.

Slips of the hand occur when the copyist hand is not stable due to high age, or due to alcohol consumption or tiredness or due to copying with difficult visibility. Such a difficult reading then leads to educated guesses which are the beginning of a variant. At times one is not sure whether it is a *slip of the eye* or a *slip of the hand*. Unless one has a very old manuscript with actual illegibility at the particular letter, such a *slip of the hand* would not be easy to identify.

#### 2.6. Slips of the Ear

In Ancient Bookmaking practices this is one of the most common errors.<sup>16</sup>) The

<sup>16)</sup> Acoustic misperception: Slip of the ear. In Tsukimoto's Emar Text C line 8' the scribe copied the expression "year of famine" as MUKALA.GA (= šatti dannati) but in another Emar Text RPAE 139.42 it was copied as MU.KAL.LA.GI. The reader to the copyist probably read correctly but the scribe thought he heard a double /l/ and thus separated the signs. It is a case of an acoustic misperception. It also means that the copyist of this text did not see the original. The more common expression in the Emar texts is MU KALA.GA as one finds in Emar Texts 138,24; 158,14; 149,38; 162,10; 111,36; RPAE 86,7 and HCCT-E 28,2-3. A clear example of an acoustic misperception in the Middle Ages Hebrew Manuscripts of the Book of Judges is in Judges 3:17 where  $aleph = \aleph$  is read instead of the standard avin = y, thus a guttural confusion (see B. de Rossi). In E. A. Wallis Budge, Cuneiform Texts from Cappadocian Tablets in the British Museum Part I (London: Oxford University Press, 1921), 6, he commented on scribal errors in these texts: "No. 113482, 24 reads Man-ištar = Man-A-šir, No. 113554, 3. The last two are remarkable differences and difficult to explain. Is it possible that the tablets were written from dictation and that these differences are due to mishearing?" It is a case of a slip of the ear or acoustic misperception in the process of dictation as method of book making in ancient times. A similar example of an acoustic misperception is in the Pesher Habakkuk Scroll from Cave 1 at Qumran, 1QpHab column 2 line 11 where אכשראים is read instead of the standard הכשראים. Although it is a functional text, a commentary, it still cites the formal extracts of the standard to comment on. In the commentary section, one does not expect absolute adherence to the form, for functional reasons, but in the extract there should be strict reproduction of the standard text. It is easier to identify the *slip* in the extract. An example of *slip* of the ear in the Old Latin translation of the Book of Judges by Lucifer of Cagliari can be seen in the copy mechanics of Codex Lugdunensis in Judges 6:4 where the copyist did not assimilate the N before the R in conrumpebant instead of corrumpebant. There are some surprising spellings: Dalila is spelled as Danila in Judges 16:4 and 6. Betheleem in Judges 12:8 is spelled Bechlem in Judges 17:7 and Bechlem in Judges 17:8 and Bethlem in Judges 19:1 and Bethle in Judges 19:2. It is possible that the person who was copying here by a process of dictation was not religious and could not foresee or in retrospect notice the simple errors in spelling. It supports Zinni Bond's statement: "On occasion, however, listener's strategies for dealing with speech lead them into an erroneous perception of the intended message – a misperception, or a slip of the ear" (Bond 1999: 1). She also noted "In everyday conversation, speakers employ various reductions and simplifications of their utterances, so that what they say departs in significant ways from the clarity norms found in formal speech or laboratory recordings" in Z. S. Bond, "Slips of the Ear" in The Handbook of Speech Perception. Edited by: David B. Pisoni and Robert E. Remez (2005), 290-310.

reason is that they had to rely on *dictation* as a form of duplicating to speed up the process. That is what Emperor Constantine ordered the copyists to do when he ordered 50 copies of the Scriptures to be copied in high speed in 331 CE.<sup>17</sup>) It is very likely that codices Vaticanus, Sinaiticus, Alexandrinus are all remnants of this copying process. Variant analysis of the Codex Sinaiticus was made by Skeat and many of the errors point to acoustic misperception.<sup>18</sup>) Acoustic misperception can occur due to many reasons: distraction, emotional condition, physical handicaps, alcohol intake, age, unstable focus.<sup>19</sup>)

Z. Bond indicated that in many cases, listeners knew "they needed a word in a particular part of the utterance and simply reported a word that occurred to them. These examples, above all, demonstrate listeners compliance. Because there was often some

<sup>17)</sup> See the Letter of Constantine to Eusebius of Caesarea, as recorded in *De Vita Constantine* iv. 36-37 which reads: "I have thought it expedient to instruct your Intelligence that you should command to be written fifty volumes on prepared vellum, easy to read and conveniently portable, by professional scribes with an exact understanding of their craft-volumes, that is to say, of the Holy Scriptures…and it will be your care to ensure that they are prepared **as quickly as possible**" (our emphasis). There are blunders in the Codex Sinaiticus where there is a *spelling error* of  $\nu\omega\rho$  for  $\nu\delta\omega\rho$  and a *metathesis* of  $\pi\lambda\circ\lambda\omega$  for  $\pi\circ\lambda\lambda\omega$ . There is also the *slip of the ear* in Codex Alexandrinus in the Book of Judges 6:8 where the scribe heard in a case of a *slip of the ear* sk  $\gamma\eta$  sa  $\epsilon\xi$ .

<sup>18)</sup> Evidence from the Greek Codex Sinaiticus of acoustic misperception will be: In the case of YΔΩP given as YΩP the omission of /d/ probably happened because by acoustic misperception the presence of vowels with the final glide or rolled dental may have created this *slip of the ear*. The listener did not pick up the medial /d/ (Skeat 1956: 192). A similar case is cited in modern times by Z. Bond of a loss of a medial /d/ where Trudy was read as tree (Bond 1999: 41). The obstruent /d/ is lost in medial position due to an *acoustic misperception*.

<sup>19)</sup> Evidence of Slips of the ear in Books 11-16 of the Iliad can be seen in the Pierpont Morgan Library Iliad Codex. It was published in 1912 and the publishers Wilamowitz and Plaumann claimed it was written from dictation (Skeat 1956: 197). A slip of the ear example presented by Z. Bond is when Krackle is acoustically misperceived as cracker (Bond 1999: 34). Examples in the Pierpoint Morgan Iliad Codex are similarly  $\varepsilon \rho v$  for  $\varepsilon \lambda \eta$  and  $\pi o \lambda$  for  $\pi \varepsilon \rho$  (Skeat 1956: 198). Z. Bond also indicated that substitution of errors for plosives as fricatives, affricates and nasals are *slips of the ear* (Bond 1999: 31). In the *Iliad Codex* there is the lack of distinction between  $\sigma$  and  $\zeta$  produced:  $\rho\iota\sigma\alpha\nu$  for  $\rho\iota\zeta\alpha\nu$  (Skeat 1956: 198). If one looks at the Coptic texts from the British Library Add. 17183 or K<sup>b</sup> and British Library OR. 3579 A or K<sup>h</sup> on Judges 12:7-15 one notices a number of problems: K<sup>b</sup> has **PNEGACEM** at folio 183a lines 45-46 but together with K<sup>h</sup> at folio XI col. 1 lines 26-27, K<sup>b</sup> also read gNBHOXEEM (see folio 92b lines 12-13). This is a case of a slip of the ear by K<sup>b</sup>. Other inconsistencies are also noticed: an orthographical slip of the eye by the scribe of K<sup>b</sup> in reading NULLARAN (folio 92b line 28) but in both K<sup>b</sup> and K<sup>h</sup> it was read as אישאנאנא (K<sup>b</sup> at line 41 and K<sup>h</sup> at folio XI col. 2 line 12). A case of a slip of the ear is also to be seen in K<sup>h</sup> who has **μυελωμ** at folio XI col. 1 lines 4-5, but correctly **μυλλιβ** elsewhere at lines 30-31. Some errors of K<sup>b</sup> are listed by the editor of that manuscript H. Thompson in 1911 e.g. part of a verse is omitted in Esther 2:4; cooyc is written for cxooyc in Joshua 3:3; we is written for when in Judges 2:8.

phonological similarity between the target and the substitute, it is difficult to say which examples are products of pure guesswork and which make the best use of limited phonological information."<sup>20</sup>

# 2.7. Slips of the Tongue

The person dictating to the copyist may have articulatory problems to pronounce words clearly due to a whole list of factors: physical handicaps, emotional aptitude, the speed of reading, alcohol intake, tiredness, disinterest, and distraction.<sup>21)</sup> J. Poulisse (1999: 103-114) listed a number slips one can find: conceptual slips; lexical slips; *malapropism* (viz. the substitution of a word by a phonological related one); phonological slips; morphological slips; syntactical slips; substitution; exchange; shift; blend; deletion; addition; and haplology. Four extra phenomena are mentioned by her, namely, accommodation; reparation; ambigious cases and double slips.

<sup>20)</sup> Z. Bond (1992), 145. A case in Middle Ages Hebrew Manuscripts of the Book of Judges by B. de Rossi in Variae Lectiones is in Judges 1:22 where בני "house" is written as בית "sons". The orthography is too remote to account for a misreading by direct consultation. It cannot be a slip of the eye. This may be the role of cognitive functions of the mental lexicon in which the person substitute a word that appears elsewhere to be used interchangeably, namely, "sons of" functioning in the "place of house of".

<sup>21)</sup> Slips of the tongue can be seen in Variae Lectiones of B. de Rossi on the book of Judges where he listed scribal errors in the transmission of many Hebrew manuscripts over centuries in the Middle Ages: the interchange אליו instead of אליו for the book of Judges at 3:7. This is an example of a guttural interchange and also occurred at Judges 6:39: 6:40: 20:36 where the preposition של was read as אל The phonological formation of these two gutturals in Semitic Languages is a source of confusion that can be found in Aramaic, Syriac, and Akkadian of all periods and connected languages or dialects. Martin 1958, 662 1QpHab column 2 line 11 listed אכשראים instead of הכשראים which is the reading of the standard text of the Masoretic Tradition or Codex Aleppo of 1008 CE. Penna 1957, 381ff. listed for Isaiah 5:5 in Cave One from Qumran, 1QIsa<sup>a</sup> the *aleph* and *he* interchanged in הסד instead of אסיר. The Latin Vulgate, the Aramaic Targum and the Syriac Peshitta all followed this error here in their translations, showing their dependency upon an errorful Vorlage that was identical or very similar to the degenerative copy at Qumran Cave 1 of Isaiah. We must keep in mind that a slip of the tongue of the dictating scribe results in a slip of the ear of the copying scribe. Since both *aleph* and *he* is in the final position here, and acoustic misperception is experienced that leads to a reduction of the consonants (cf. Sabatino Moscati, An Introduction to the Comparative Grammar of the Semitic Languages: Phonology and Morphology [Wiesbaden: Otto Harrassowitz, 1969 2nd edition], 42 at 8.56). A handicap of an articulatory nature, like stuttering can be seen by examples provided by H. Thompson in his edition of the Coptic Manuscript K<sup>b</sup> in 1911. There is a possibility that the one who was dictating the letters one by one to the scribe of  $K^{b}$ was stuttering, since he duplicates letters sometimes: doubles the plural definite article e.g. **XXAPXWX** for xxpyox in Joshua 14:1; Judges 1:35; 2:21; 3:18; 6:3. Some letters are duplicated at the beginning of the word like MHIXA in Judges 18:22; TITYTOC in Judges 9:51. In one case the articulatory handicap of the one dictating caused K<sup>b</sup> to write **moooy** in Judges 6:37 (Thompson 1911: viii-ix).

#### 2.8. Slips of the Memory

When we come to this category, we have to place the origin of the error squarely in the cognition zone. Short term memory and long term memory may be involved here. Humans are suffering from barriers or interceptors to memory and a very long list of factors can be cited for their origin: age, alcohol intake, physical condition, mental condition, emotional condition, intellectual capacity, motivation, interest, level of exhaustion, extent of space and time through which the content has to move by transmission relying on memory as the carrier before it is copied in written form.

What does it mean? The Romans had libraries in Ancient Times in which they kept the originals or copies of the originals stolen or copied from other nations and someone who wished to copy them had to read in the Roman Library, walk out with memory and then somewhere nearby copying what he read in the public library.<sup>22</sup>) The result of memory lapses is that the end form is paraphrastic if compared to the original. The memory uses some tools to renovate the crisis like harmonization, substitution, shortening of words, addition of words to help the syntax and meaning to be more fluid, cancelling ambiguity and relying on interpretation, or relying on meaning rather than form as the basic rule of copying.<sup>23</sup> Some examples can be given.<sup>24</sup>)

<sup>22)</sup> Various scholars are very helpful on this theme of libraries in the Ancient Times: Forbes (1936); Parsons (1952); Fraser (1972); Johnson and Harris (1976); Clement (1995); Frost (1998); Macleod (2000); Hannam (2001 and 2002). Inaccessibility of originals, censorship, degeneration of the quality of copies, *additions* and *omissions* to texts, library destructions, robberies of libraries, library building, changing trends in the lifestyle of people are all factors that contribute to the origin of errors in the texts or the preservation of the five categories of slips mentioned in this article. Bookburning is mentioned by Tactitus *Annals* 35 as cited by Cramer 1945, 196. Censorship and hiding of books are thus applicable in this context. In the reign of Eumenes II of Pergamon, the Ancient world was ransacked for manuscripts, and copies were made for libraries (Parsons 1952, 24-25).

<sup>23)</sup> Ashurbanipal (668-627 BCE) took pride in having collected his texts from all parts of the world. On his official seal he mentioned: "I have collected these tablets, I have had them copied, I have marked them with my name, and I have deposited them in my palace." One of his scribes reported "I shall place in it [text] whatever is agreeable to the king; what is not agreeable to the king, I shall remove from it" (Johnson and Harris 1976: 21). We should not miss the license to be paraphrastic here, to add or to remove. The biblical manuscripts were not copied paraphrastically when they functioned as standard but so when they were not standard text but school copies or texts books or hymnals etc. These texts, and there are many at Qumran, became *para-biblical* texts (by function) and not *biblical* texts (by form) any longer.

<sup>24)</sup> The Syriac translation of Judges seems to have been made from a Hebrew manuscript that shows resemblances to Qumran Cave 4 for Judges. It seems as if the text was memorized first and then dictated to a copyist. This would explain the inversion of words, interchange of letters and omissions of words or phrases that appear for the scribe to be similar. There is a transposition of letters in Judges 6:3 in the

# 3. Conclusion

An understanding of the art of bookmaking is a prerequisite for a proper understanding of the condition of texts in the Ancient Near East. The Bible is one of these books and the same human imperfection that one can see with the copyists of these texts, explains also to us in the process of textual analysis (not textual criticism), the origin of the variants as slips from a standard original. Understanding the slips in these texts also assists one in understanding better the slips in the doublets of the exilic period book of Chronicles as compared to the Solomonic period book of Samuel. Articles on the slips in the *doublets* of Samuel and Chronicles are currently prepared by this writer.

<주요어>(Keywords)

slips of the tongue, slips of the ear, slips of the hand, slips of the memory, slips of the eye.

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Syriac, namely, instead of reading  $\Box_{p}$  the Syriac scribe ended with  $\Box_{p}$  in Syriac which means the /q/ and the letter /d/ is transposed but also the similarity of the shape of/d/ with /r/ caused the writer to use /r/ instead of /d/. In Judges 6:4 there is a partial agreement of 4QJudg<sup>a</sup> from Qumran Cave 4 with the Syriac in the omission of a *copulative waw* in the first word is this list contrary to the Standard embodied in the consonantal text of the Hebrew Masoretic Text which reads a *copulative waw* in all three nouns. However, only partial agreement, since the word order of the first two in the list is inverted in the Syriac which has the reading:  $\Box_{p}$ . This is another example of a *slip of the memory*. The Leiden edition of the Peshitta is the standard text for the Syriac here. The text of 4QJudg<sup>a</sup> was published by Trebolle-Barrera.

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Diagram to illustrate the complicated path of transfer of linguistic elements in the art of Ancient Book-making. From the Standard Text (sometimes no longer available), to the transmitted copy, errors crept in as slips of the eye, hand, tongue, ear and memory.

<Abstract>

# 언어학적 오류: 고대의 서적 제작 방법을 살필 수 있는 창

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근대 이후 시각, 청각, 손, 혀, 기억의 오류로 구성되는 언어학적 오류가 연구되고 있다. 이러한 오류에 대한 관심은 일찍이 G. 데 로시(1748-88)와 E. 콘라디(1904)의 연구에도 나타났으나, 본격적으로 추진되기 시작한 것은 V. 프롬킨(1973ff), J. 에치슨(1982), M. T. 모트리, C. T. 캄덴, B. J. 바스(1982) 등의 연구를 통해서이다. Z. S. 본드(1999)와 N. M. 폴리세(1999)는 더욱 전문적인 관심을 표명하였으며, J. 재거(2004), Z. M. 그리펜(2004), O. 쟁(2006) 등에 의하여 한층 발전된 논의가 진행되었다. 본 논문은 고대의 언어학적 오류를 살펴보고, 과거의 언어학적 실수들은 범주화될 수 있고 동시에 그러한 실수를 야기해 온 언어적 현상 속에서 어떤 일들이 일어났는지를 관찰할 수 있는 창을 우리들에게 제공하고 있음을 밝히고자 하다. 이러한 언어학적 사례들은 아카디아어, 이집트어, 콤트어, 시리아어, 히브리어, 고대 라틴어와 헬라어에서 발견된다. 궁극적으로, 우리는 언어 학적 오류를 관찰하여 고대의 서적 제작 과정을 더 잘 이해할 수 있게 된다. 또한 이러한 언어적 분석은 원문의 분석 방법으로서 이해되는 원문 비평에 있어서 다양한 비판적 질문을 제공하고 있다. 더불어 언어학의 변형 요소들의 기원과 관련 있는 몇몇 인지적 양상 또한 이러한 분석으로 설명이 가능해진다.