A Linguistic, Analogical, and Computational Analysis of the Syriac D-stem in Psalms I–XXX According to the *Peshiṭta* Version

BY

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Table of Contents

Abstract

The function of the Semitic *Doppelungsstamm*, or D-stem, has proven one of the most vexing problems in Semitic linguistics. While grammarians regularly associate the D-stem with some manner of plurality, the precise contours of this relationship have remained obscure. By deductively testing the way in which a sample corpus from the *Peshiṭta* Psalms employs the D-stem in translation of various linguistic items in its Hebrew *Vorlage*, the present study seeks to ascertain the nature and type of plurality that the Syriac translators may have intended by their use of the form. The hope is that by clarifying the enigmatic plural function of the D-stem in one member of the Semitic family of languages it might be possible to contribute to its understanding in others.

To accomplish this, a sample corpus from the *Peshiṭta* Psalms was subjected to a computational machine learning analysis whose statistical results were used to determine which occurrences of the D-stem should be subjected to analysis as well as those that have the greatest potential to yield meaningful results. Then, the various ways in which the form has been associated with plurality by both ancient and modern grammarians was explored and honed in light of general linguistic theory. This was done to provide the deductive basis by which the Syriac D-stem forms in the sample corpus could be evaluated for plurality and to allow the contributions of a discipline that has seldom been brought to bear on the topic inform the analysis.

The results of the study revealed a function of the Syriac D-stem consistent with the marking of plural events as originally intimated by ancient Semitic grammarians and later termed "event-internal pluractionality" in the linguistics literature, while also revealing additional insights into Syriac's event construal vis-à-vis Hebrew and the prospect of D-stem lexicalization.

Abbreviations

BDB	F. Brown, S. R. Driver, and C. A. Briggs. *A Hebrew and English Lexicon of the Old Testamen*t. Oxford: Clarendon Press, 1907, reprint 1974.
BDAG	Bauer, W. *A Greek-English Lexicon of the New Testament and Other Early Christian Literature*. Revised and edited by F. W. Danker. 3rd ed. Chicago: University of Chicago Press, 2000.
BrDAG	F. Montanari. *The Brill Dictionary of Ancient Greek*. M. Goh and C. Schroeder, eds. Leiden: Brill, 2015. (https://dictionaries-brillonline-com.ezproxy-prd.bodleian.ox.ac.uk)
CAL	*Comprehensive Aramaic Lexicon Project* (http://cal1.cn.huc.edu).
CSD	J. Payne Smith. *A Compendious Syriac Dictionary*. Oxford: The Clarendon Press, 1903.
DRB	*Douay-Rheims Bible*, Translated from the Latin Vulgate. The Old Testament first published by the English College at Douay A.D. 1609 & 1610. The New Testament first Published by the English College at Rheims A.D. 1582, the whole revised and diligently compared with the Latin Vulgate by Bishop Richard Challoner A.D. 1749-1752.
ESV	*The Holy Bible, English Standard Version. Containing the Old and New Testaments*, J. I. Packer, ed. Wheaton, IL: Crossway Bibles, 2001.
GNB	*Good News Bible: The Bible in Today's English Version.* New York: American Bible Society, 1976.
GKC	W. Gesenius, *Gesenius' Hebrew Grammar as Edited and Enlarged by the Late E. Kautzsch*, 2nd English ed., A. E. Cowley, trans. Oxford: The Clarendon Press, 1910.
HALOT	L. Koehler, W. Baumgartner, and J. J. Stamm. *The Hebrew and Aramaic Lexicon of the Old Testament*. M. E. J. Richardson, 5 Vols. Leiden: Brill, 1994–2000.
HCSB	*Holy Bible: Holman Christian Standard Version.* Nashville: Holman Bible Publishers, 2009.
Joüon-Muraoka	P. J. Joüon, *A Grammar of Biblical Hebrew*, T. Muraoka, translated and revised, 2 vols. Rome: Editrice Pontificio Instituto Biblico, 2000.
IBHS	B. K. Waltke and M. O'Connor. *An Introduction to Biblical Hebrew Syntax.* Winona Lake, IN: Eisenbrauns, 1990.
KJV	*The Holy Bible faithfully translated into English, out of the authentical Latin, diligently conferred with the Hebrew, Greek, and other editions in divers languages. With arguments of the books and chapters, annotations, tables, and other helps for better understanding of the text, for discovery of corruptions in some late translations, and for clearing controveries in religion*. Doway: Laurence Kellam, 1609.
LSJ	Henry George Liddell and Roger Scott, *A Greek-English Lexicon, revised and augmented throughout by Sir Henry Stuart Jones and Robert McKenzie*. Oxford: The Clarendon Press, 1843; revised with supplement, 1996.
NASB	*Holy Bible: New American Standard Bible*. La Habra: The Lockman Foundation, 1995, 2020.
NET	*The Holy Bible: The Net Bible* (*New English Translation*), W. Hall Harris, ed. Dallas: Biblical Studies Press, 2001.

NIV *Holy Bible: New International Version*. Grand Rapids: Zondervan Publishing House, 1984.

NKJV *Holy Bible: The New King James Version: Containing the Old and New Testaments*, Arthur Farstad, ed. Nashville: Thomas Nelson, 1982.

NLT *Holy Bible: New Living Translation*. Wheaton, IL: Tyndale House Publishers, 2004.

NRSV *The Holy Bible: New Revised Standard Version*. Nashville: Thomas Nelson Publishers, 1989.

PESHOT M. Abegg and J. Lund, "PESHOT-T, Version 6.1" Accordance Bible Software. Altamonte Springs, FL: OakTree Software, Inc., 2018.

RSV *Holy Bible: The New King James Version: Containing the Old and New Testaments*, Arthur Farstad, ed. Nashville: Thomas Nelson, 1982.

Sokoloff M. Sokoloff. *A Syriac Lexicon: A Translation from the Latin, Correction, Expansion, and Update of C. Brockelmann's* Lexicon Syriacum. Winona Lake, IN: Eisenbrauns & Piscataway, NJ: Gorgias Press, 2009.

TLOT *Theological Lexicon of the Old Testament*, E. Jenni and C. Westermann, eds. Peabody, MA: Hendrickson, 1997.

TWOT *Theological Wordbook of the Old Testament,* Vol. 1 & 2.. R. Laird Harris, G. L. Archer, Jr., and B. K. Waltke, eds. Chicago: Moody Press, 1980.

List of Tables and Charts

CHAPTER 1

INTRODUCTION

1.1 Introduction and Purpose

The present work seeks to continue the comparative method that has represented the core of linguistic science since its inception, to endeavor "to discover how human languages are alike and how they differ, and to propose and test theories that explain the similarities and differences."[1] The languages whose comparison is at the heart of the present thesis are Tiberian Hebrew[2] and Classical Syriac.[3] In particular, this thesis will set out to come to a better understanding of a particular function of the D-stem in Classical Syriac through an analysis of its use in a sample corpus from the *Peshiṭta* translation of the Old Testament. The Semitic D-stem has often been closely associated with "plurality of action, subjects, or objects,"[4] but the precise contours of such notions of plurality have remained opaque and divorced from the contributions of general linguistics. By carefully observing the linguistic motivations relevant to plurality that may have led the Syriac translators of the *Peshiṭta* to render a linguistic item in their Hebrew source text with a

1. J. Bybee, R. Perkins and W. Pagliuca, *The Evolution of Grammar: Tense, Aspect, and Modality in the Languages of the World* (Chicago: University of Chicago Press, 1994), 1.

2. This appellation, rather than its nearly synonymous term, "Biblical Hebrew," is used throughout the current project in recognition of the fact that the language being adduced here arises out of a particular reading tradition of the Hebrew Bible that was inherited by the Masoretes and subsequently captured by means of their systems of accents and vocalization. For a particularly clear articulations of the issues involved see G. Khan, "Biblical Hebrew: Linguistic Background of Masoretic Text" in *Encyclopedia of Hebrew Language and Linguistics*, G. Khan, ed. (Brill Online, 2013); and *Idem*., *A Short Introduction to the Tiberian Masoretic Bible and Its Reading Tradition*, 2nd ed. (Piscataway, NJ: Gorgias Press, 2013).

3. "Classical Syriac" is meant to invoke the phase of the language occurring between Old Syriac, the language exhibited by pre-Christian Edessene inscriptions dating from 6 until 240 BC, and the advent of the neo-Aramaic dialects after the rise of Islam in 7th Century (for the former see Beyer's discussion on "*Altsyrischen*," in V. K. Beyer, "Der Reichsaramäische Einschlag in der ältesten syrischen Literatur," *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 116 [1966]: 242, 243; H. J. W. Drijvers, *Old-Syriac* [*Edessean*] *Inscriptions* [Leiden: Brill], 1972; and L. Van Rompay, "Some Preliminary Remarks on the Origins of Classical Syriac as a Standard Language: The Syriac Version of Eusebius of Caesarea's Ecclesiastical History," in *Semitic and Cushitic Studies*, G. Goldenberg and S. Raz, eds. [Wiesbaden: Harrassowitz Verlag, 1994]); and J. F. Healey, "Syriac," in *The Semitic Languages: An International Handbook,* S. Weninger, J. C. E. Watson, M. P. Streck, and G. Khan, eds. [Berlin: De Gruyter, 2011], 644).

4. S. E. Fassberg, "Is Pael an Intensive/Plural Form of Peal in Syriac?" *Journal Asiatique* 287.2 (1999): 396.

D-stem verb in their own language, it is hoped that the present work can contribute to a better understanding of a Semitic linguistic feature that goes beyond one particular language.

The impetus for the current project arose out of what began as a much broader attempt to describe the language and text of a sample of the *Peshiṭta* Psalms. This involved the important task of ascertaining whether the departures of the *Peshiṭta* translation from its putative Hebrew *Vorlage* were more likely owed to linguistic or textual motivations. In the course of collecting data to this end, the variety with which the *Peshiṭta* translators rendered the Hebrew verbal stems in their own text compared to the overall fidelity with which they attended the Hebrew conjugations was striking. Further inquiry revealed that a notable feature was that many Hebrew G-stem verbal forms were rendered by Syriac D-stem verbs. The attempt to explain this phenomenon required extensive interaction with secondary literature in both the field of general linguistics as well as that of Semitic studies, an undertaking that became so extensive as to constitute an independent study in its own right.

1.2 Statement of Problem

Any foray into the morphology of the Semitic languages is immediately met with the paradoxical situation that the most conspicuous and distinctive feature of this family of languages is at once one of its most intractable. Here I refer to the derivational morphology of the verbal systems of the Semitic languages which consist of a "root-and-pattern"[5] structure where every verbal lexeme is comprised of a consonantal root interdigitized within one of a closed set[6] of language specific vowel melodies that are variously also augmented via consonantal affix or partial reduplication. The nomenclature for these "patterns" of vowels and augments possessed of every Semitic verb has varied widely in the literature ranging from "conjugations," "themes," or the term of the ancient Hebrew grammarians, *binyanim* (בנינים), but more recently something of a consensus has

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5. For the first use this term see Z. S. Harris, "Linguistic Structure of Hebrew," *Journal of the American Oriental Society* 61.3 (1941): 152.

6. Seven is the number assigned to the *binyamin* by most modern Hebrew grammars (e.g., GKC, §39*e*,*f*, 116) and assumes that the two internal passive *binyanim*, i.e., the Hp- and Dp-stems be regarded as independent of their active counterparts, which was not the case for the Medieval grammarians (to this end, see the relevant discussion in W. Chomsky, *David Ḳimḥi's Hebrew Grammar* (*Mikhlol*) [New York: Bloch, 1952], 79, n.104).

Most Syriac grammars put the number of the stems at six, while several nevertheless count the two vestigial causative derivatives, the *Shap'el* and the *Eshtaph'el*, as independent stems in their own right (representative grammars of the latter are A. G. Hoffman, *The Principles of Syriac Grammar*, B. H. Cowper, trans. [London: Williams and Northgate, 1858], §79; G. Phillips, *A Syriac Grammar* [Cambridge: Deighton, Bell & Co, 1866], §32; and E. Hutchinson, trans., *Uhlman's Syriac Grammar* [New York: D. Appleton & Co., 1875], §18).

coalesced around the now quasi-standardized, although still less than ideal, label "verbal stems."[7] Nevertheless, the ubiquity and centrality of the verbal stems in these languages stand in stark contrast to the inadequacy of their linguistic analysis. While the inflectional means by which Semitic verbs morphologically mark the linguistic features such as tense, aspect, and modality have enjoyed the scrutiny of generations of scholars who have produced a myriad of specialized studies in this area,[8] treatments of the "root-and-pattern" morphology in these languages are nowhere near as protracted, typically being restricted to doctoral theses, journal articles, and sections of grammars. When more extensive, monograph length studies do appear, they have been overwhelmingly concerned with the D-stem of three languages—the *Pi"el* of Tiberian Hebrew,[9] Stem II of Arabic,[10] and the *Doppelungsstamm* of Akkadian.[11] All of these concern the language-

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7. The potential confusion with the use of the term "verbal stem" is due to the fact that throughout the history of scholarship in the field of linguistics, the term "stem" has been employed to denote linguistic units that in Semitic studies are all given independent labels. Nevertheless, the use of the term "verbal stem" for the present project is well-founded for it most closely overlaps what was originally conceived of by the Medieval grammarians as the בנינים, or "buildings," of Semitic verbal morphology (see R. Isaac ha-Levi ben Eleazar's translation of Ḥayyuj into Hebrew, Bodlean MS Huntington 128; as well as J. W. Nutt, *Two Treatises on Verbs Containing Feeble and Double Letters by R. Juhuda Ḥayug of Fez translated into Hebrew by R. Moses Ḳiḳatilla of Cordova* [London and Berlin: Asher & Co., 1870], x; and Pick, "The Study of the Hebrew Language among the Jews and Christians," 468). "Verbal stems" is also the preferred term of Goshen-Gottstein who offers a lengthy defense of his own use of the label in M. H. Goshen-Gottstein, "The System of Verbal Stems in the Classical Semitic Languages," in *Proceedings of the International Conference on Semitic Languages Held in Jersusalem, 19–23 July 1965* (Jerusalem: The Israel Academy of Sciences and Humanities, 1969) 70n.1; as do Waltke and O'Connor in *IBHS,* 352.

8. Most of these concern Tiberian Hebrew and those treatments of the inflectional tense, aspect, modality of other Semitic languages typically appear as chapters in works of comparative Semitic. Some of the better known and most influential examples of the former include J. A. Cook, *Time and the Biblical Hebrew Verb: The Expression of Tense, Aspect, and Modality in Biblical Hebrew* (Winona Lake, IN: Eisenbrauns, 2012); *IBHS*, 455–612; L. McFall, *The Enigma of the Hebrew Verbal System* (Sheffield: The Almond Press, 1982); S. R. Driver, *A Treatise on the Use of the Tenses in Hebrew* (Oxford: Clarendon Press, 1892); and G. H. A. Ewald, *Syntax of the Hebrew Language of the Old Testament*, J. Kennedy, trans. (Edinburgh: T & T Clark, 1879).

9. See S. A. Ryder II, "The Semitic D-Stem in Western Semitic," PhD Dissertation, Yale University (1966); *Idem*., *The D-stem in Western Semitic* (The Hague: Mouton, 1974); E. Jenni, "Faktitiv und Kausativ von אבד 'Zugrunde Gehen,'" *Supplements to Vetus Testamentum* 16 (1967): 143–57; *Idem*., *Das Hebräische Pi'el: Syntaktisch-Semasiologische Untersuchung Einer Verbalform im Alten Testament* (Zürich, Evz-Verlag, 1968); S. A. Creason, "Semantic Classes of Hebrew Verbs: A Study of *Aktionsart* in the Hebrew Verbal System," PhD Dissertation, University of Chicago (1995); K. L. Harris, "An Examination of the Function of the Pi'el in Biblical Hebrew," PhD Thesis, University of Liverpool (2005); and J. C. Beckman, "The Biblical Hebrew Piel Stem," PhD Dissertation, Harvard University (2015).

10. See F. Leemhius, *The D and H stems in Koranic Arabic: A Comparative Study of the Function and Meaning of the fa"ala and 'af'ala Forms in Koranic Usage* (Leiden: Brill, 1977) and D. J. Henretty and M. B. Smith, "Force Augmentation, Polysemy, and the Semantics of Form II Verbs in Arabic," *9th Conference on Conceptual Structure, Discourse and Language* (2008): 1–9.

11. A. Goetze, "The So-Called Intensive of the Semitic Languages," *Journal of the American Oriental Society* 62

specific instantiation of an unaugmented stem with a doubled second radical, a pan-Semitic phenomenon that led to its designation as the "D-stem" in the parlance of comparative Semitic.[12] Despite its wide attestation, the function of the D-stem has proven especially difficult to account for, a situation that led Kaufman to call it "one of the most recalcitrant problems of Semitic linguistics,"[13] and speaking specifically of Hebrew, Joüon-Muraoka have remarked, "In terms of the identification of function, Piel is the most elusive of the Hebrew conjugations."[14] The "recalcitrant" nature of this problem is reflected in the literature devoted to the Hebrew *Pi"el* of which Greenberg says:

> It may be noted at the outside that most grammars of Semitic languages say very little, and some say nothing, about meanings of some or all of the derived forms of the verb, in particular, in regard to Piel. The reasons are not far to seek. Whether a particular verb has the form, its meaning in relation to the basic form, assuming that exists, and the meaning relation between the two are largely idiosyncratic. Moreover, in regard to Piel, as against, say, the causative Hiphil, the syntax does not differ in any principled way from that of Qal.[15]

(1962): 1–8; N. J. C. Kouwenberg, *Gemination in the Akkadian Verb* (Assen, the Netherlands: Van Gorcum, 1997); and *Idem*., *The Akkadian Verb and Its Semitic Background* (Winona Lake: Eisenbrauns, 2010).

12. It was Ungnad who, in his desire to establish a universal nomenclature for the verbal stems of Hebrew, Arabic, and Akkadian, first suggested the labels G (*Grundstamm*) for the basic stem (i.e., the *Qal* of Hebrew and *P'al* of Syriac), D (*Doppelungsstamm*) for those stems with gemination of the second root consonant (i.e., the *Pi"el* of Hebrew and *Pa"el* for Syriac), R (*Reziprokstamm*) for the reflexives, and variously H (*Hiphilstamm*, Hebrew) and Š/S (*Shafelstamm*, Akkadian) for the causatives (A. Ungnad, "Die Bezeichnung der Verbalstämme im Semitischen," in *Orientalistische Literatur-Zeitung* [Berlin: Wolf Peiser Verlag, Jan. 1909], col. 46). For the balance of the thesis Ungnad's nomenclature will be employed for the major pan-Semitic stems, while his "R-stem" designation will be specified by the more current convention of labeling the reflexive counterparts of the G-, D-, H-, and Š/S stems by means of the "t" infix, viz., the Gt-, Dt-, Ht-, and Št/St-stems. The internal passives of the major stems will be indicated by adding a "p" ("passive") to the major stem abbreviation, e.g., Gp, Dp, Hp, etc., following the convention of *The Semitic Languages: An International Handbook* (2001).

Hebrew and Syriac also attest what the grammars refer to as "rare" or "minor" stem formations that consist of variations to the stems just mentioned when applied to various weak roots. Nevertheless, the grammars are unanimous in seeing these "minor stems" as simply "morphemic variants of the major" stems (*IBHS*, 360). In particular, it is the D- and H-stems that the grammars of both languages connect with these minor stems, an assessment articulated by Gesenius for Hebrew who says, "Of the less common conjugations (…) some may be classed with *Pi*ʿ*ēl*, others with *Hiph*ʿ*îl*" (*GKC* §55, p.151, formatting original; see also Joüon, *Grammar of Biblical Hebrew*, §59, 1678). As a result, these so-called "minor" stems, along with their passive and reflexive counterparts, have been subsumed under their "major" stem counterparts throughout.

13. S. A. Kaufman, "Semitics: Directions and Re-Directions," in *The Study of the Ancient Near East in the Twenty-First Century: The William Foxwell Albright Centennial Conference*, J. S. Cooper and G. M. Schwartz, eds. (Winona Lake: Eisenbrauns, 1996), 280.

14. P. J. Joüon, *A Grammar of Biblical Hebrew*, T. Muraoka, translated and revised, 2 vols. (Rome: Editrice Pontificio Instituto Biblico, 2000), §52, 151.

15. J. H. Greenberg, "The Semitic 'Intensive' as Verbal Plurality," in *Semitic Studies in Honor of Wolf Leslau on the*

1.2.1 *The Syriac D-Stem: A Desideratum*

One Semitic language in particular whose D-stem has not received the same level of attention as the three mentioned above is Syriac,[16] and this despite being "the best documented of the Aramaic languages."[17] Aside from a single journal article by Fassberg,[18] which appeared over two decades ago, and a recent doctoral dissertation from Lupu,[19] functional treatments of the Syriac D-stem have been confined to small sub-sections of grammars ensconced within broader treatments of verbal morphology or to adjuncts alongside an investigation of the stem in another language.[20]

For the native Syriac grammarians, the paucity of analyses dedicated to the D-stem's function is owed to the fact that these grammarians writing in their own language did not in the main concern themselves with the semantics and/or function of any of the verbal stems, concentrating instead on the morpho-phonological shape of roots when declined according to the various stem patterns. When an interest in Syriac grammar did begin to flower in Europe, its apogee being the German systemizations of Nestle, Nöldeke, and Brockelmann, the morphological accidence of roots in the various stems again predominates and those functional observations that were offered were typically done by way of recourse to the Hebrew D-stem, amount to little more than lists of functions devoid of explanation and examples, or fail to give any functional description whatsoever. Indeed, the antipathy characteristic of the modern disposition toward the function of the Syriac stems can be captured by the words of Muraoka: "The meanings or functions of the different patterns in Syriac in relation to one another are just as fully or little known as in Hebrew."[21] Muraoka's overt appeal to Hebrew in seeking the functional parameters of

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Occasion of His Eighty-Fifth Birthday, A. S. Kaye, ed. (Wiesbaden: Harrassowitz, 1991), 579.

16. Rosenthal suggests that this lack of attention is true of Syriac generally and not just its stems, stating: "As long as I can remember, it has always been said that Syriac, the best-attested Aramaic dialect with its large literature and all the important topics it offers for study, is not being accorded the attention it deserves" (F. Rosenthal, "Aramaic Studies During the Past Thirty Years," *Journal of Near Eastern Studies* 237 [1978]: 82).

17. E. Lipiński, *Semitic Languages: Outline of a Comparative Grammar* (Leuven: Peeters, 1997), 66.

18. Fassberg, "Is Pael an Intensive/Plural Form of Peal in Syriac?" 395–431.

19. A. Lupu, "Semantic Patterns in the D Stem in the Syriac Bible," PhD Dissertation, Catholic University of America (2020). While the present work highlights points of contact with Lupu's work when applicable, it was already complete and close to the deadline for submission when Lupu's dissertation was made public and so it was not possible to offer a comprehensive comparison with her work. Ultimately, a full treatment of the agreements and disagreements between our independent analyses of the Syriac D-stem must be left to other linguists interested in the topic.

20. See the sections on Syriac in Ryder II, "The Semitic D-Stem in Western Semitic," (cf., n.8) which appeared largely unchanged as Ryder II, *The D-stem in Western Semitic* (The Hague: Mouton, 1974).

21. T. Muraoka, *Classical Syriac for Hebraists* (Wiesbaden: Otto Harrassowitz, 1987), 26.

the Syriac stems can be understood in a work entitled *Classical Syriac for Hebraists*, but his expanded *Classical Syriac* offers only the following in its place: "The semantic or functional opposition between these six patterns is still a matter of debate."[22]

Beyond lacking in detail, a further commonality of the bald lists of functions offered for the D-stem by the Syriac grammars is their homogeneity in offering "intensity" and "causativity" as the stem's primary functions. The description appearing in the grammar of Theodore Nöldeke, which, despite being one of the earliest systemizations of Syriac grammar to appear, remains a standard reference work to this day, is emblematic of virtually every other grammar of Syriac in saying: "den zunächst zur Bezeichnung der Intensität, dann auch des Causativs und sonst verwandten Stamm mit Verdopplung des mittleren Radicals."[23] Nevertheless, in addition to the "intensity" and "causativity" uniformly attributed to the Syriac D-stem, Duval is iconoclastic in his contention that the D-stem also "embrasse plusieurs choses,"[24] a function that Fassberg, in one of the only independent treatments of the Syriac D-stem to appear to date, claims to have confirmed.[25] While it is only Duval and Fassberg amongst the cadre of Syriac grammarians who explicitly relate the Syriac D-stem with the government of plural arguments, they are nevertheless well apiece with the conclusions of comparative Semitists working in languages other than Syriac. For example, in the early and highly influential comparative Semitic grammar *Grundriss der vergleichenden Grammatik der semitischen Sprachen*, Brockelmann states that "Die durch den stamm Intensität kann sich auf sehr verschiedene Seiten der Tätigkeit beziehn, auf ein besondere physische Kraftentfaltung…auf die Teilnahme vieler Subjekte, …wie oder auf viele Objekte,"[26] while

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22. Idem., *Classical Syriac* (Wiesbaden: Harrassowitz Verlag, 2005), 41.

23. Th. Nöldeke, *Kurzgefasste Syrische Grammatik* (Leipzig: T.O. Weigel, 1880), §159; see also its translation into English as Th. Nöldeke, *Compendious Syriac Grammar*, J. Crichton, trans. (London: William and Northgate, 1904), §159. Amongst the European grammarians of Syriac, only two predate Nöldeke, but both are similar in both their brevity and in the functions they ascribe to the Syriac D-stem. The earliest is the outline of Uhlemann, who simply states of the *Pa"el*: "Die Bedeutung des *Pa.* ist a) *causitiv*, z. B. ܕܰܚܶܠ *Furcht einflössen* v. ܕܚܶܠ *fürchten;* b) *intensiv*, z. B. ܛܰܒܰܥ, *versenken* v. ܛܒܰܥ *eindrücken* (F. G. Uhlemann*, Grammatik der Syrischen Sprache* [Berlin: Jonas Verlagsbuchhandlung, 1857], §22, 41). The next is the grammar of Hoffman, who says, "Stirpis pa'el vis primitiva est *intensiva* [*sic*], id quod ratione symbolica per geminationem mediae radicalis indicatur," which Cowper renders in his translation and abridgment of Hoffman: "when Pe. is transitive, Pa. either intensifies the meaning, or has a causative signification" (A. G. Hoffman, *The Principles of Syriac Grammar: Translated and Abridged*, B. H. Cowper, trans. [London: Williams and Northgate, 1858], §93, 44).

24. R. Duval, *Traité de Grammaire Syriaque* (Paris: F. Vieweg, Libraire-Éditeur, 1881, §192, 179.

25. Fassberg, Is Pael an Intensive/Plural Form of Peal in Syriac? 424.

26. C. Brockelmann, *Grundiss der Verleigchenden Grammatik der Semitischen Sprachen* (Berlin: Verlag von Reuther & Reichard, 1908), 508. In this regard, also see the bibliographic information *inter alia*, in Fassberg, *op. cit.,* 397. Furthermore, in his grammar on Akkadian, Poebel uses data Hebrew D-stem to come to a broader conclusion of the Semitic D-stem generally:

Since, however, there cannot obtain the slightest doubt that the function of the piʿel is to express not the idea

Greenberg says that the purpose of his seminal article on the D-stem is "to show that for North Arabic, Hebrew, Aramaic, and Akkadian that action on plural objects and action by plural intransitive subjects are attested."[27] Thus, even though the government of plural arguments is a function of the Syriac D-stem uniquely expressed in the work of Duval and Fassberg, it is one that has been alleged for many other Semitic languages and so deserves to be taken seriously.

1.2.2 *A Recourse to Ancient Translation: An Analogical Method*

The opacity of the ancient and modern grammars with respect to the Syriac stems generally, and the D-stem in particular, begs the question of how best to redress the inadequacy of this area of Syriac grammatical description. One source of data that commends itself for the delineation of the functionality of the Syriac D-stem, but is seldom exploited in such an effort, is the early Syriac translation literature, especially that produced from Hebrew. By carefully analyzing the relationship between the D-stem verbs attested in a translation of Classical Syriac and the source material they were meant to translate, it is possible to leverage the translators' expertise in their own language so as to ascertain whether any underlying plurality may have motivated their choice of the D-stem. When rendering a given linguistic unit in their source text with a verb-form in the D-stem, the Syriac translators are in effect granting some manner of functional and semantic congruency between the D-stem and the linguistic item(s) it was meant to translate.[28] Thus, if the form and function of the underlying material in a given *Urtext* that is brought into Syriac by means of the D-stem can be reliably ascertained, such information grants a privileged perspective as to what was felt to be an appropriate functional analogue for the stem on the part of the translators. Such an approach would serve to shift the onus of determining the function of a given attestation of a D-stem verb-form away from the researcher and onto the ancient translators for whom Classical Syriac was their first language. In this way, the elucidation of the functional profile of the Syriac D-stem can be sought not in the scant *a priori* treatments of the stem in the grammars and lexica, but rather in the choices of the ancient Syriac translators who established a functional equivalence between their D-stem and their source material.

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of intensity but that of plurality, the only logical conclusion is that what in the Semitic verb now appears as doubling or sharpening of the middle radical goes back to a more original principle which actually conveyed the idea of plurality in a quite natural manner. (A. Poebel, *Studies in Akkadian Grammar* [Chicago: University of Chicago Press, 1939], 66)

27. Greenberg, "The Semitic 'Intensive' as Verbal Plurality," 580.

28. There are of course other reasons why the translators may have utilized the Syriac D-stem to represent their *Vorlage* at a given place and these will be discussed more below.

From this orientation, it would be possible to construct a heuristic model for the elucidation of the plural function of the Syriac D-stem by way of an analogy that proceeds from the source text to the particular uses of the D-stem in the target text, given that "An *analogy* is a comparison between two objects, or systems of objects, that highlights respects in which they are thought to be similar."[29] While analogies are perhaps most familiar as literary devices, to many cognitive theorists, "They also govern our everyday functioning, down to the most mundane details," and "structure what we perceive, how we get around in the world, and how we relate to other people."[30] As a result, analogical reasoning and the argumentation constructed upon it have been the subject of extensive exploration in the philosophical and cognitive linguistics literature, which has in turn adopted technical terms for the two conceptual domains being compared in an analogical operation, viz., the "source" and "target" domains.[31] In this framework, "The conceptual domain from which we draw metaphorical expressions to understand another conceptual domain is called **source domain**, while the conceptual domain that is understood this way is the **target domain**."[32] Bartha has attempted to schematize this conceptual operation as the following, where *S* and *T* refer to the source and target domains, respectively:

> As a first effort, an analogical argument has the following form:
>
> (1) *S* is similar to *T* in certain (known) respects.
>
> (2) *S* has some further feature *Q*.
>
> (3) Therefore, *T* has the feature *Q*, or some feature *Q** similar to *Q*.
>
> Lines (1) and (2) are premises, while (3) is the conclusion of the argument. This argument form is inductive; the conclusion is not guaranteed to follow from the premises.[33]

In both the nomenclature employed in the cognitive literature as well as the schematization of Bartha above, it is not difficult to see the clear and tight parallels with the concepts and terminology widely employed in translation studies. In fact, in explaining the definitions of "source" and "target" domains in analogical argument structures, Knowles and Moon explicitly draw upon concepts related to the translational enterprise in order to explain the mechanics of an analogical operation: "Compare the use of the terms **source** and **target** with respect to translation, where the language of the original text is regarded as source, and the language into which it is

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29. P. Bartha, *By Parallel Reasoning: The Construction and Evaluation of Analogical Arguments* (Oxford: Oxford University Press, 2010), 1; original italics.

30. G. Lakoff and M. Johnson, *Metaphors We Live By* (Chicago: University of Chicago Press, 1980; reprint 2003), 3.

31. These terms originate in the original publication of G. Lakoff and M. Johnson, *Metaphors We Live By*.

32. Z. Kovecses and R. Benczes, *Metaphor: A Practical Introduction* (Oxford: Oxford University Press, 2010), 4; original emphasis.

33. Bartha, *By Parallel Reasoning,* 13.

translated as target: [in an analogical argument] we can compare the process of translation with the process of re-structuring or re-stating one concept in terms of another."[34]

Given the tight affinity between the theoretical foundations of analogical reasoning and those of translation studies, Bartha's schematization outlined above can be effectively put to the task of elucidating the plural function of the Syriac D-stem by similar analogical reasoning. Adjusting Bartha's notation somewhat, this function of the Syriac D-stem could be sought by means of an inductive argument whereby a relation *R* is taken for granted between a given linguistic item *S* in the source text and its D-stem translational equivalent T_D in a Syriac target text, but where the nature of that relation *R* is to be determined by way of linguistic analysis. For our purposes then, it might be said that *R* can be defined as a function that maps a relationship between the variables *S* and T_D such that $f(x, y) = R(S, T_D)$, where $f(x, y)$ is determined on the basis of the identity of *S* and T_D and where *R* obtains as a result of an analogy in the form of $S : T_D$.[35] To illustrate this process by way of an example from English, if one were to be confronted with an analogy in the form of *book* : *books* and then asked to produce the most likely functional relation between the pair, the answer would of course be linguistic in nature, viz., pluralization. While this illustrative example is not exact in that it does not involve a translation, the operation is just as apropos for a source and target domain culled from different languages as the overt homage to the nomenclature of the "source" and "target" texts within the parlance of translation studies suggests. Thus, the analogical linguistic method being brought to bear in the present study on the plural function of the Syriac D-stem is not only well-suited for the exploitation of the linguistic data contained in a translation of Classical Syriac, but also enjoys a rich precedent beyond the fields of linguistics and comparative Semitics.

While recourse to an analogical method is a well-worn procedure in various intellectual traditions, the success of its application to the elucidation of the function of the D-stem via translated Syriac requires controlling for an array of issues related to each of the variables in our analogical schema, *S,* T_D, and *R*, that may be simply raised here but taken up in greater detail in subsequent chapters. Regarding *S*, any functional inference about the D-stem arising from the

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34. M. Knowles and R. Moon, *Introducing Metaphor* (New York: Routledge, 2006), 33; original emphasis. For more on the conceptual parallel between the source and target domains in the parlance of conceptual analogy and translation studies see G. Massey and M. Ehrensberger-Dow, "Translating Conceptual Metaphor: The Process of Managing Interlingual Asymmetry," *Research in Language* 15.2 (2017): 173–89.

35. The variables introduced in this schematic will be utilized throughout the remainder of this work with the following definitions:

S = The linguistic item in the source text brought into Syriac by the D-stem.

T_D = A Syriac D-stem form in the target text employed in translation for *S*.

R = The functional relation joining *S* and T_D in translation.

relation between a linguistic item in a source text and its translation with a D-stem verb assumes not only the recoverability of the *Vorlage* of the translation in question, but also the ability to determine which linguistic units in that *Vorlage* were rendered into Syriac by means of the D-stem. As a result, it is critical that the choice of the Syriac translation to be subjected to analysis be one for which its *Vorlage* can be established with a high degree of confidence and furthermore, that the method for determining translational equivalences between it and its *Vorlage* be done accurately, objectively, and consistently.

There are also methodological issues facing T_D, the D-stem verb-forms in the Syriac translation to serve as the basis for analysis. In particular, when using an ancient Syriac translation to gain insight into the plural function of the D-stem, it will be important that the language encountered in the chosen translation will be sufficiently representative of the Classical Syriac norm. This is especially the case for ancient Syriac translations whose character can vary widely from free and expositional to slavishly literal depending on the era and prestige accorded to the language and text being translated. Thus, in the terms used by Brock to frame the issue, a Syriac translation that prizes the *significant* of the source text at the expense of its *signifié* will be far less valuable for deducing the function of the D-stem by means of an analogical method because it would have been the translators' desire to represent the form of the text before them as opposed to its "meaning" or critically, the function, of its linguistic units.[36] Therefore, the choice of translation to serve as the repository of T_D in the present study must be one that strikes the correct balance of not being so literal that its language fails to be representative of Classical Syriac, but also not so dynamic and free that is it impossible to establish translational equivalences between itself and its *Vorlage*. Consequently, a translation into Classical Syriac is required for the aims of the present project that exhibits both fidelity to its source text as well as a relative freedom to render its *Vorlage* into a form of genuine Classical Syriac not unduly influenced by the language of the source text.

Finally, the value of *R*, the relation obtaining between *S* and T_D, for elucidating the plural function of the Syriac D-stem via translation, is contingent upon the degree to which it can be shown to be at once linguistic in nature as well as consistent with the contributions of linguistics proper and comparative Semitics. Taking these two caveats in turn, the reason for the first is that there is a whole host of potential extra-linguistic definitions of *R* that may have been responsible for mapping *S* to T_D such as a misunderstanding of the *Vorlage* assumed for *S*, the purposeful

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[36.] On the varied character of Syriac translation technique corresponding to era and source language see S. P. Brock, "Aspects of Translation Technique in Antiquity," *Greek, Roman and Byzantine Studies* 20.1 (1979); and *Idem*., "Towards a History of Syriac Translation Technique," in *Studies in Syriac Christianity: History, Literature and Theology* (Aldershot: Variorum, 2001).

adjustment of the meaning of *S* for ideological purposes, or the consultation with a source text other than *S*. Such extra-linguistic factors, should they be found as the more likely definition of *R* in a particular instantiation of T_D, would clearly be irrelevant for inducting the function of the D-stem by way of a Syriac translation. Nevertheless, it is not sufficient to simply disambiguate a linguistic as opposed to extra-linguistic definition for *R*, for even if *R* can be shown to be linguistic in nature, it must also be found to be meaningfully attributable to the D-stem. This is because there exist potential definitions of *R* given *S* and T_D that are in fact linguistic in nature, but arise from factors both extrinsic to the choice of the translators as well as to any functionality of the D-stem, rendering the presence of the form in the target text otiose with respect to *R* on *S* and T_D. An oft-occurring example of a linguistic motivation accounting for the choice of a D-stem form in translation that offers little relevance for the decoding of its function is lexicalization, a diachronic process whereby the semantics of a given word-form has ceased to be predictable on the basis of its morphology, and instead acquires an idiosyncratic nuance that precipitates a unique entry in the lexicon.[37] In cases of lexicalization, the choice of the D-stem on the part of the Syriac translators would not be due to a desire to elicit a particular functional nuance of the stem, but rather that the translators were simply constrained by the *parole* of their receptor language.

In addition to controlling for linguistically meaningful as opposed to inconsequent uses of the D-stem such as lexicalization, it will also be important to demonstrate that those linguistic accounts that are proposed for *R* in light of *S* and T_D be well-motivated by, and consistent with, general linguistic science as well as historical and comparative Semitics. The disparate and largely meager treatments of the plural functionality of the D-stem in the grammars require enlisting the contributions of these broader and adjacent fields to hone and test what may have accounted for the $S : T_D$ analogy given the poverty of such descriptions in the grammars. By incorporating relevant data from studies arising out of linguistics and comparative Semitics that is often absent

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37. This understanding of lexicalization takes its cue primarily from Generative Grammar where, "there are two broad and related conceptualizations. The first of these characterizes lexicalization as permanent incorporation into the lexicon (…). What this entails is a shift away from online production towards storage in the lexicon as a lexical item in its own right. In this sense, lexicalization is an inevitable step if a new formation is to become established: if the process does not take place the derivation remains a nonce word" (P. ten Hacken, *The Semantics of Word Formation and Lexicalization* [Edinburgh: Edinburgh University Press, 2013], 46). Perhaps the most oft-quoted definition of "lexicalization" comes from Brinton and Traugott who state that "Lexicalization is the change whereby in certain linguistic contexts speakers use a syntactic construction or word formation as a new contentful form with formal and semantic properties that are not completely derivable or predictable from the constituents of the construction or the word formation pattern" (L. J. Brinton and E. C. Traugott, *Lexicalization and Language Change* [New York: Cambridge University Press, 2005], 96).

from such considerations,[38] a well-motivated and internally consistent account of the plural function Syriac D-stem can be achieved.

As this introductory survey of issues shows, an attempt to elucidate the plural function of the Syriac D-stem inductively through an examination of a text of translated Syriac requires important methodological qualifications. Accordingly, the first part of the present work will be dedicated to taking up each of the concerns just outlined, which will in turn lay the foundation for an examination of the D-stem in a corpus of translated Syriac to follow in the second half resulting in a characterization of its function by means of its use of a translational equivalent that is grounded in modern linguistic theory. The hope is that such a characterization of the D-stem will not only lead to a more robust characterization of the its function so as to address a gap in our current knowledge of Syriac grammar, but also contribute to a body of data that can then be integrated into a wider appreciation of the D-stem's function in the field of comparative Semitics.

1.3 Thesis Overview

To accomplish these aims, CHAPTER 2 will define and justify the sample corpus of translated Syriac to be subjected to analysis in terms of its character, length, and relationship to the *Vorlage* it was meant to translate. This will be followed by a statistical overview of the distribution of the Syriac D-stem resulting from the application of that procedure in CHAPTER 3. This statistical data reflects the relative frequency of the D-stem in Syriac as measured against the other Syriac verbal stems not only in the sample corpus, but in other corpora of varying length, and will be used to ensure that the pattern of usage of the stem in the sample corpus is sufficiently representative of that outside that corpus. These data will then be used as objective criteria informing the selecting of *S*, the linguistic forms in the Hebrew *Vorlage* that will serve as the basis of the analogical relation with the Syriac D-stem that will be tested for plurality.

Having established the values of *S* and T_D in CHAPTERS 2 and 3, CHAPTER 4 will turn its attention to *R*, the functional relation between *S* and T_D, and will be dedicated to investigating whether the translational equivalencies in the sample corpus may have arisen from a non-meaningful use of the D-stem such as with cases of lexicalization. CHAPTER 5 will consist of a

38. For example, Grabbe laments that, "Until recently the well-developed science of linguistics had seemed to bypass the Semitic languages, certainly Hebrew, to a large extent even though getting on toward its bicentenary" (L. L. Grabbe, *Comparative Philology and the Text of Job—A Study in Methodology* [Missoula, MT: Scholars Press, 1977], 195).

historical overview of the various ways that the Semitic D-stem has been considered plural, which will be then be assessed in light of modern linguistic science in order to determine the nature and type of plurality that can be legitimately said to be indicated by the form. In CHAPTER 6 the theoretical results in CHAPTER 5 will be applied to $S : T_{\text{D}}$ in order to establish how and in what way the Syriac D-stem was used in the sample corpus to indicate a nuance of plurality.

CHAPTER 2

TRANSLATION, *VORLAGE*, AND TRANSLATIONAL EQUIVALENCIES

2.1 Introduction

As was stated in CHAPTER 1, the present project seeks to come to a better understanding of the plural function of the Syriac D-stem by examining its use as a translational equivalent for linguistic items in a given source text. To accomplish this aim, an analogical method was proposed whose source and target domains, schematized as S and T_{D}, are respectively taken to be the Hebrew linguistic material in the *Vorlage*, or source text, of a Syriac translation that has been rendered into that language by means of the D-stem. The introductory chapter also enumerated a host of methodological issues facing such an endeavor that require the careful delineation and justification of the values assigned for each variable constituting the analogical argument structure undergirding such an investigation: S, the linguistic items in the *Vorlage* of the Syriac translation, T_{D}, the various D-stem verbs in the Syriac translation itself, and R, the potential plural relation responsible for the $S : T_{\text{D}}$ correspondence. The current chapter will address issues relevant to both S and T_{D}, while CHAPTER 3 will take a narrower view of the particular linguistic items chosen to serve as S.

2.2 Analogical Method: Potential Challenges

The success of applying an analogical method to the problem of the function of the Syriac D-stem through recourse to translated material depends in large part on the choice of the linguistic items being subjected to analysis. Since an analogical inference "proceeds from the similarity of two or more things in one or more respects to the similarity of those things in some further respect,"[39] the most basic assumption of such an argument structure is a knowledge of the "two or more things" being compared. This is particularly true for the source domain S, the "left" side of the $S : T_{\text{D}}$ analogical ratio as it were, because it is from the source domain that an analogical inference proceeds, providing the basis for the relational induction being sought. In the present work, the

39. I. M. Copi, *Introduction to Logic* (New York: Macmillan, 1961), 340.

source domain *S* are linguistic items in the *Vorlage* of a text of translated Syriac that have been rendered by a D-stem verb, and so any relational inference regarding the functionality of these D-stem forms requires a knowledge of, and access to, the source text of the translation in question. Thus, the choice of a translated text of Classical Syriac must be one where there can be high confidence that its *Vorlage* can be reliably ascertained.

Another critical variable that needs to be accounted for concerns the target domain of the analogical ratio T_D, the "right" side of the analogical argument, which for the present purposes has been defined as D-stem verb-forms attested in a Syriac translation. In order to gain insight into the function of the D-stem through the $S : T_D$ analogy, it will be important that the translated text comprising the target domain exhibits language genuinely representative of Classical Syriac. It would not be fruitful, for instance, to attempt to describe authentic Syriac syntax from the Harclean version of the New Testament due to the fact that "The chief characteristic of the Harclean version is its slavish adaptation to the Greek, to the extent that even clarity is sacrificed."[40] As a result, it must be assured that the choice of the translated text constituting the target domain of the analogical argument not be overly influenced by the language of its *Vorlage*.

Finally, beyond the accessibility of the *Vorlage* constituting *S* and the character of the language represented in T_D is the further requirement that the translational equivalents paired in the $S : T_D$ analogy be legitimate and well-motivated. This is especially critical for a methodology that attempts to exploit the functional analogue drawn by the Syriac translators in employing their own D-stem for various linguistic items in their source text. This is because should the Syriac translators have adopted an approach to their work similar to that of Cicero and Jerome who prized the intended meaning of their source texts in their translations over their formal equivalence,[41] there is no guarantee that particular instances of T_D in the target text can be mapped to discrete linguistic forms *S* in the source text at all. Conversely, even if the Syriac translators' intent for their work included a quantitative equivalence of the individual word-forms in their target text, the question of how best to determine such direct lexical correspondences remains. Thus, in addition to the textual and linguistic considerations bearing upon the appropriate selection of the texts constituting *S* and T_D is the further requirement of an objective,

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40. B. M. Metzger, "The Syriac Versions," in *The Early Versions of the New Testament: Their Origin, Transmission, and Limitations* (Oxford: Oxford University Press, 1977), 69.

41. See Cicero's comments on his aims of translation in Cicero, *De Optimo Genere Oratorum*, in *On Invention, The Best Kind of Orator, Topics*, H. M. Hubbell, trans., Loeb Classical Library 386 (Cambridge, MA: Harvard University Press, 1949), 365; and Jerome's famous distinction between "sensus de sensu" versus "verbum e verbo" in S. E. Hieronymus, *Opera Omnia*, in *Patrologiae Cursus Completus. Series Latina,* Vol. 22, J.-.P Migne, ed. (Paris: Excudebat Vrayet, 1845), 571.

accurate, and consistent method for determining translational equivalents of individual linguistic items in the $S : T_D$ analogy from which functional relation R for the Syriac D-stem can be inducted.

2.3 The Text and *Vorlage* of the Syriac Translation of the Psalms According to the *Peshiṭta* Version

In order to meet the requirements set out for S and T_D above, the choice has been made to analyze a sample corpus from the book of Psalms from the Syriac translation of the Hebrew Bible[42] according to the *Peshiṭta* version. Dating from the latter half of the 2nd Century,[43] the translated material from the *Peshiṭta* Psalter commends itself for the present project for a number of reasons to be explained and justified in the following sections. The first is that the Hebrew *Vorlage* of the *Peshiṭta* generally and that of the Psalms particularly, can be recovered with a fairly high level of confidence and so we are able to reliably provide the requisite linguistic items for S in our schema. Secondly, given the nature of the translational enterprise in general combined with the translation technique in operation during the early phases of Syriac Bible translation, the *Peshiṭta*, while nevertheless a translation, has been shown in numerous scholarly treatments to be a genuine representative of Classical Syriac. Related to this is the fact that the language of the *Peshiṭta*, which became the authoritative version of the Old Testament for all Churches within the Syriac tradition, had a profound influence on the standardization and diffusion of its language.[44] A final point that will be made is that in selecting a sample corpus from the Psalms, a book of poetry, with its with its relatively high proportion of uncommon vocabulary and non-standard syntax, there is a higher

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42. The use of the term "Hebrew Bible" here and in the balance of the thesis is meant to draw a distinction between the books considered canonical by early Rabbinic Judaism (see the list of books in *Talmud Bavli, Baba Bathra* 14b) and the larger corpus considered the "Old Testament" by some Christian Churches that includes the so-called apocryphal, psuedopigraphal, and deuterocanonical material.

43. Since all internal and external evidence typically adduced for a *terminus ad quo* for the *Peshiṭta* Old Testament can be met with serious challenges (see Weiztman, *Syriac Version*, 254–58), an exact date for the translation must remain approximate. Nevertheless, it is possible to conjecture that at least some portions of the *Peshiṭta* Old Testament were complete by the time of Tatian, putting its *terminus ad quo* at roughly 150 CE, an approximate date that further comports with quotations from *Peshiṭta* Old Testament in external literature (see R. F. Shedinger, "Did Tatian Use the Old Testament Peshitta? A Response to Jan Joosten," *Novum Testamentum* 41.3 [1999]: 265–79).

44. See M. H. Goshen-Gottstein, "Prolegomena to a Critical Edition of the Peshitta," in *Scripta Hierosolymitana* 8, C. Rabin, ed. (Jerusalem: The Magnes Press, 1961), 26.

likelihood that the translators would make choices in their translation that reflect the style and syntax of their own idiolect of Syriac.

2.3.1 *Methodological Issues Related to the Source Domain* S

The first requirement for an analogical method to be successfully applied to the function of the D-stem via translated Syriac is the ability to reliably access the source domain *S* of the $S : T_D$ analogy. By selecting a sample corpus from the *Peshiṭta* version of the Hebrew Bible for such purposes, we are in the fortunate position of being fairly confident about the *Vorlage* used to produce this particular Syriac translation. While the version's origins in any exact sense remain unknown, there have been a number of analyses[45] conducted on individual books of the Hebrew Bible included in the *Peshiṭta* Old Testament that together have shown its *Vorlage* to be a Hebrew text that resembles to a great degree what came to be the standardized Masoretic text-type as found in the modern printed editions of the Hebrew Bible such as *Biblia Hebraica Stuttgartensia* (*BHS* henceforth).[46] Summarizing the conclusions of these studies, Romeny states that, "The [Leiden edition of the *Peshiṭta*] and the studies based on it have made it clear that the Hebrew model of the Peshitta must have been nearly identical with the so-called Masoretic Text of the Hebrew Bible," and that "The Peshitta even reflects a vocalization of the Hebrew text that stands very close to the vocalization recorded many centuries later by the Masoretes."[47] Perceived divergences

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45. Some representative examples include: M. D. Koster, *The Peshiṭta of Exodus: The Development of Its Text in the Course of Fifteen Centuries* (Amsterdam, the Netherlands: Van Gorcum, 1977); A. Gelston, *The Peshiṭta of the Twelve Prophets* (Oxford: Clarendon Press, 1987); J-E. Eriksson, *The Hymns of David Interpreted in Syriac: A Study of Translation Technique in the First Book of the Book of Psalms* (*Ps 1-41*) *in the Pešiṭta* (Uppsala: Uppsala universitet, 1989); R. Taylor, *The Peshiṭta of Daniel* (Leiden: Brill, 1990); H. Szpek, *Translation Technique in the Peshiṭta to Job: A Model for Evaluating a Text with Documentation from the Peshiṭta to Job* (Atlanta: Scholars Press, 1992); D. Lane, *The Peshiṭta of Leviticus* (Leiden: Brill, 1994); J. Erbes, *The Peshiṭta and the Versions: A study of the Peshiṭta Variants in Joshua 1-5 in Relation to Their Equivalents in the Ancient Versions* (Uppsala: Uppsala University, 1999); C. Morrison, *The Character of the Syriac Version of the First Book of Samuel* (Leiden: Brill, 2001); G. Greenberg, *Translation Technique in the Peshiṭta to Jeremiah* (Leiden: Brill, 2002); H. F. Van Rooy, "The Peshitta of Ezekiel and the Septuagint: A Study of the Two Traditions in Ezekiel 1," *Old Testament Essays* 18.2 (2005): 394–405; I. Carbajosa, *The Character of the Syriac Version of Psalms: A Study of Psalms 90-150 in the Peshitta* (Leiden: Brill, 2008); J. W. Dyk and P. S. F. van Keulen, *Language System, Translation Technique, and Textual Tradition in the Peshitta of Kings* (Leiden: Brill, 2013); and G. Mushayabasa, *Translation technique in the Peshitta to Ezekiel 1-24: A Frame Semantics Approach* (Leiden: Brill, 2015).

46. Karl Elliger and Walter Rudolph, eds., *Biblia Hebraica Stuttgartensia* (Stuttgart: Deutsche Bibelgesellschaft, 1984).

47. B. ter Haar Romeny, "The Syriac Versions of the Old Testament," in *Nos sources: Art et Littérature Syriaques* 1, M. Atallah (Antélias: Centre d'Etudes et de Recherches Orientales, 2005), 99.

between the Hebrew *Vorlage* of the *Peshiṭta* and the Masoretic text-type are fairly insignificant when compared to their overall homogeneity, leading Weitzman to comment, "Although we shall inevitably be paying most attention to passages where they [the *Peshiṭta* and its Hebrew *Vorlage*] differ, it has to be stated at the outset that close correspondence is the rule."[48]

In addition to selecting a Syriac text that has been translated from a *Vorlage* that can be sufficiently, albeit imperfectly, accessed, one that has been translated from a Hebrew original further commends itself both methodologically as well as linguistically. From a purely methodological perspective that Hebrew and Syriac represent two Semitic languages that are closely related but nevertheless remain distinct[49] fulfills a requisite criteria for analogical argument design as prescribed in the scientific and philosophical literature. For example, Bartha states that "An *analogical argument* is an explicit representation of a form of analogical reasoning that cites accepted similarities between two systems to support the conclusion that some further similarity exists,"[50] yet Anderson is careful to note that such similarity cannot come at the expense of dissimilarity for "analogy (…) specifically and primarily consists in likeness of relations among dissimilar terms, not at all in mere likeness between the terms themselves."[51] The requirement for similarity and dissimilarity between analogical domains is due to the fact that should both sides of an analogy be overly similar, it would crowd out any conceptual space for a relation to obtain between the items being compared — clearly a relation would exist between two identical entities, viz., uniformity, equality, or isomorphism, but not an *analogical* one. On the other hand, it is also clear that for any two analogical domains for which no similarity at all exists it is not possible to draw any type of relation that proceeds from source to target domain at all. Thus, in utilizing a Syriac translation that has been produced from a Hebrew *Vorlage* where two closely related yet distinct Semitic languages are involved, a key methodological tenet required for the elucidation of the Syriac D-stem by way of analogical deduction has been met.

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48. Ibid.

49. For a justification of this characterization between Tiberian Hebrew and the Aramaic dialect of Syriac see H. Gzella, "Northwest Semitic in General," in *The Semitic Languages: An International Handbook,* S. Weninger, J. C. E. Watson, M. P. Streck, and G. Khan (Berlin: De Gruyter, 2011), §4.3, p.431; and J. Huehnergard, "What Is Aramaic?" *ARAM* 7 (1995): 2675–86.

50. Bartha, *By Parallel Reasoning: The Construction and Evaluation of Analogical Arguments*, 1; original emphasis.

51. J. F. Anderson, "Analogy in Plato," *The Review of Metaphysics* 4.1 (1950): 113.

2.3.1.1 *The Text of* S

As a result of the scholarly consensus regarding the prevailing similarity between the Hebrew *Vorlage* of the *Peshiṭta* Hebrew Bible with that of the Masoretic text-type, the Hebrew text printed in *BHS* has been as the source domain *S* for the present project. Since *BHS* constitutes a diplomatic edition in which editors have decided to print a single manuscript, viz., *Codex Leningradensis* or B19a, the *apparatus criticus* supplying variant readings from other Medieval Hebrew manuscripts and the ancient versions has been consulted often in the course of the work, as has the manuscript material from Qumran when extant. This has especially been the case where the editors of *BHS* have issued qualitative statements regarding various alternate readings. Evidence from alternate readings has been weighed and discussed in the course of analysis when a linguistic item translated with a Syriac D-stem verb is impacted by a textual variant.

2.3.2 *Methodological Issues Related to Target Domain* T_D

In addition to requirements related to *S* just delineated, the introductory comments above also alluded to the necessity that T_D, the D-stem forms in a sample corpus of translated Syriac material, must be a sufficiently representative of Classical Syriac so as to successfully ascribe any plural function of the D-stem to that species of language. As a result, the selection of a sample corpus from the *Peshiṭta* version of the Hebrew Bible needs to be justified as a *bona fide* specimen of that language, and furthermore, as a translation it is especially important to show that the *Peshiṭta* has not been overly colored by the Hebrew of its source text.

2.3.2.1 *The Language of the* Peshiṭta *as Classical Syriac*

The *Peshiṭta* version has received much of its modern scholarly attention as a textual witness to the proto-Masoretic Text of the Hebrew Bible. However, as Dirksen notes, "The Peshiṭta…version is [also] of prime importance as a monument of the Syriac language."[52] Nevertheless, Theodore Nöldeke, in his standard Syriac reference grammar, is far less sanguine about the potential for the *Peshiṭta* translation of the Old Testament to yield insights into Syriac as a language. In the preface to the second edition of his grammar, Nöldeke explains that he has greatly expanded his use of the Syriac New Testament, but refrains from drawing more widely from the Syriac translation of the

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52. P. B. Dirksen, "The Peshiṭta and Textual Criticism of the Old Testament," *Vetus Testamentum* 42.3 (1992): 376.

Old: "The Syriac Old Testament frequently approximates the original Hebrew text too closely; and, precisely because of the intimate relationship of the languages, we sometimes find ourselves at a loss as to whether the verbal reproduction is still in conformity with the true Syriac idiom, or is really a Hebraism."[53] This sentiment also seems to be responsible for his decision to exclude translated Syriac from his section on syntax, offering the following disclaimer: "The *Syntax* I have based wholly upon original authors belonging to the age in which Syriac was an absolutely living speech."[54] Nöldeke's disavowal of Syriac translated from a Hebrew *Urtext* as a repository of genuine Syriac syntax seems *prima facie* logical and accords with Goldenberg's sentiment that "from the standpoint of stylistic status and idiomatic authenticity, the *Pšiṭta* will not necessarily make the ideal *testo di lingua* to represent the classical standard, especially for a language like Syriac with its huge corpus of excellent original prose."[55]

Despite the potential for the *Peshiṭta's* Syriac to have been distorted by its Hebrew *Vorlage*, as the earliest corpus[56] of any substantial length written in Syriac there is little doubt that the translation played an exceptional role in the formation of the classical norm of the language for as Healey notes, "Even those Aramaic-speaking Christians whose own dialect was not Syriac and not Edessan Syriac began to regard the Syriac of the Peshitta as normative;"[57] a sentiment with which Muraoka agrees: "Whatever a precursor or precursors of Early [*sic*] Syriac may have looked like, it seems to us reasonable to assume that the biblical and related literature played a most vital role in the formative periods of Syriac writing."[58] Furthermore, Brock states that the products of the earliest phase of Syriac translational activity of which the *Peshiṭta* Old Testament is a part "can essentially be seen as bringing the source text to the Syriac reader, whereas with later ones the movement is the reverse, drawing the reader towards the original."[59] Such a characterization

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53. Nöldeke, *Compendious Syriac Grammar*, xiii*ff*.

54. Ibid., ix.

55. G. Goldenberg, "Bible Translations and Syriac Idiom," in *The Peshiṭta as a Translation: Papers Read at the II Peshiṭta Symposium Held at Leiden 19-21 August 1993* (Leiden: Brill, 1995), 25.

56. In fact, the oldest dated biblical MS (British Museum Add. ms 14425, 5b1 according to the Leiden sigla) is a Syriac translation of the Pentateuch in which portions of the books of Genesis, Exodus, Numbers, and Deuteronomy survive.

57. Healey, "Syriac," in *The Semitic Languages: An International Handbook,* 643. In another publication Healey states similarly: "there was an early interest in translating religious texts into Syriac and these translations had a part in raising Syriac to a new level, especially when the Bible began to be translated into Syriac" (J. F. Healey, "The Edessan Milieu and the Birth of Syriac," *Hugoye* 10.2 [2007]: ¶31).

58. T. Muraoka, "Response to G. Goldenberg 'Bible Translations and Syriac Idiom,'" in *The Peshiṭta as a Translation: Papers Read at the II Peshiṭta Symposium, Held at Leiden, 19-21 August 1993,* P.B. Dirksen and A. van der Kooij, eds. (Leiden: Brill, 1995), 42.

59. Brock, "Towards a History of Syriac Translation Technique," 4.

accords well with the sentiment of Weitzman who uses a diverse set of criteria in this *Introduction* to come to the conclusion that the *Peshiṭta* Old Testament, in particular, "can fairly be described as an idiomatic, though faithful, translation. The translators aim primarily to convey the plain text…However, broadly following the classical ideal, they convey not the words but the content…"[60]

2.3.2.2 *The Text of* T_D

In addition to the character of the Syriac language attested in the *Peshiṭta*, another clear advantage of utilizing a sample corpus from the translation for the present project is that a reliable base for the target text containing T_D is available in the *Leiden Edition*.[61] Prior to the publication of the *Leiden Edition*, research on the *Peshiṭta* suffered from the fact most studies were based upon the text in one of the older printed editions, usually as found in one of the great European polyglots or in the edition of Lee, each of which was in turn based to a large degree upon the seventeenth century MS Paris, Bibliothèque Nationale, Syr. 6 (17a5 in the Leiden sigla), a manuscript which Bloch called "the worst of all known MSS of the Peshitta."[62]

The *Leiden Edition* is a quasi-eclectic version whose running text for the books of the Old Testament is based upon ms B. 21 *inferiore* of the Ambrosian Library, Milan (7a1 according to the *Leiden* sigla) which has been emended only in cases of *lacunae*, illegibility, "obvious clerical errors that do not make sense,"[63] and "in those cases where the reading of the manuscripts chosen as the basic text of the edition is not supported by two or more manuscripts from the material used up to and including the tenth century."[64] Emendations to 7a1 based upon these criteria not only appear in the running text but are also collected in the first of two *apparatus critici* where the reconstructed reading is isolated with that of 7a1 *en face*. Variations from the running text appearing in "manuscripts up to and included the twelfth century"[65] not in the class of those just

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60. Weitzman, *The Syriac Version of the Old Testament*, 61ff.

61. *Vetus Testamentum Syriace iuxta simplicem syrorum versionem* (Leiden: E.J. Brill, 1966–).

62. Goshen-Gottstein, "Prolegomena to a Critical Edition of the Peshitta," 137. Bloch states that Lee had access to several other mss including Cambridge Univ., Oo. L 1, 2 (Leiden=12a1, the so-called Buchanan Bible), Bodleian Poc. 391 (Leiden=17a4), Bodleian Or. 141 (Leiden=17a3, Ussher's ms), Brit. Mus. Egerton 704 (Leiden=17a1), and Cambridge Univ., 1. 2. 4 (Leiden=12d1), but made little, if any, use of these (see Bloch, "The Printed Texts of the Peshitta Old Testament," 139). Nevertheless, Romeny claims that Lee did in fact "made some use of the so-called 'Buchanan Bible'" (Romeny, "The Syriac Versions of the Old Testament," 80).

63. P. A. H. de Boer and W. Baars, "General Preface," in *Vetus Testamentum Syriace* (Leiden: Brill, 1972), VIII.

64. Ibid.

65. Ibid., X.

described, that is, those which do not meet the qualifications for the first apparatus, are recorded in a second *apparatus criticus*. This second apparatus aims at rigorous objectivity, listing variant readings from the manuscripts wholly independent of any qualitative indications on the part of the text's editors. The reason for these explanatory comments on the nature of the editorial policies governing the *editio criticus* of the *Peshiṭta* as set out by the *Leiden Edition* is because they necessitate certain text-critical decisions to be made on the part of the researcher who wishes to use the *Leiden Edition* as a basis for analysis, for as de Boer states: "The text printed in this edition—it must be stated *expressis verbis*—ought to be used in exegetical and textual study together with the apparatuses, while conclusions *e silentio* cannot be drawn."[66] Therefore, a number of the variants listed in the second apparatus in the *Leiden Edition* represent readings superior to those printed in the running text and should therefore be used as the basis of analysis for the current project. As such, a preliminary consideration of all inner-Syriac variants was undertaken for this study prior to the process of linguistic description, with emendations made to the running text in light of the testimony of other manuscripts.

2.3.3 *Corpus, Length, Translational Equivalents, and the Identification of Verbal Stems*

It now remains to address several issues that have implications for both *S* and T_D. As a result, the following four sub-sections will deal with important methodological issues affecting the analysis of the source and target texts from which *S* and T_D will be culled, namely, the choice of the specific Old Testament corpus to be subjected to analysis, the size of the sample taken from within that corpus, the method used for identifying corresponding linguistic material in the texts, and the approach used for identifying and disambiguating the verbal stems in each text.

2.3.3.1 *The Selection of the Psalms*

The sample corpus to be subjected to analysis will be taken from the book of Psalms according to the *Peshiṭta* version. The decision to investigate the material from this particular book of the *Peshiṭta* was based upon a number of factors. Firstly, the text of the Syriac Psalter has been the subject of intense scrutiny,[67] even to the point that Weitzman has commented, "The Psalter has

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66. Ibid., VIII. This decision was met with harsh criticism by Goshen-Gottstein who states, "I would like to emphasize in the strongest possible terms that merely printing a collection of variants means leaving half the work undone" (Goshen-Gottstein, "Prolegomena to a Critical Edition of the Peshitta," 63, n.172).

67. Some of these include F. Baethgen, *Untersuchungen über die Psalmen nach der Peshiṭta* (Kiel: Schwers'sche Buchhandlung, 1878); B. Oppenheim, *Die Syrische Übersetzung des Fünften Buches der Psalmen* (*Psalm 107-150*)

been investigated more thoroughly than any other book of the Peshiṭta Old Testament."[68] That the large majority of these studies took place prior to the publication of the *Leiden Edition* means that they were predominately concerned with the shape of the Syriac text and inner-Syriac variants, thus offering an additional level of confidence in the textual status from which target domain T_D will be based.

A further rationale in choosing a sample Syriac corpus from the Psalms is that their Hebrew original is in poetry. Since, as Alter has said, "many of the poetic texts of the Bible include formidable philological problems,"[69] the difficulty of the Hebrew underlying the translation of the *Peshiṭta* Psalms reduces the potential for the translators to have conformed their language to that of the source text because where the language of a given *Vorlage* is difficult and enigmatic the translators are more apt to respond by means of dynamic equivalency. For example, Barr states, "If a text is really difficult and obscure to the translator, he may opt for a free translation,"[70] and Ribera, while speaking specifically of the Targums, implicates all the ancient versions when he states, "When the Hebrew Masoretic Text is difficult to understand the Targum, like other ancient versions, supplies translations which often differ from the original Hebrew and which at the same time are suitable in context."[71] This sensitivity to context in the face of a *Vorlage* that was thought to be difficult is related to the overall assessments of the nature of the translation of the *Peshiṭta* Old Testament that were highlighted above. In relation to *Peshiṭta* Psalms 90–150 Carbajosa wrote: "The person responsible for P-Ps [Peshiṭta Psalms] seeks to give a translation that is clear and that at the same time is faithful to the source text. This fidelity, though, aims more toward respecting the sense of the Hebrew text than toward reflecting each of its details. Accordingly, it makes the changes necessary in relation to MT, so that the translation is readable and is adapted to the spirit

(Lëipzig: Druck von W. Drugulin), 1891; J. F. Berg, *The Influence of the Septuagint Upon the Pešiṭṭâ Psalter* (Ph.D. diss., Columbia, New York: W. Drugulin), 1895; L. Techen, "Syrisch-Hebräisches Glossar zu den Psalmen nach der Peschita," *Zeitschrift für die alttestamentliche Wissenschaft* 17 (1897): 129-71, 280-331; W. E. Barnes, *The Peshiṭta Psalter According to the West Syrian Text* (Cambridge: Cambridge University Press, 1904); F. Zimmerman, "The Text of the Psalms in the Peshiṭta," *Journal of Theological Studies* 41 (1940): 44-46; E. R. Rowlands, "Inner-Syriac Corruptions in the Book of Psalms," *Journal of Theological Studies* 42 (1941): 65-67; and A. Vogel, "Studien Zum Pešiṭta-Psalter," *Biblica* 32 (1951): Feb., 32-56; May, 198-231; Aug., 336-363; Nov., 481-502; M. Weitzman, *A Statistical Approach to Textual Criticism with Special Reference to the Peshiṭta of the Old Testament*, PhD Dissertation, University of London (1973).

68. M. P. Weitzman, "The Peshiṭta Psalter and Its Hebrew *Vorlage*," *Vetus Testamentum* 35 (1985): 341.

69. R. Alter, *The Art of Biblical Poetry, Revised and Updated* (New York: Basic Books, 2011), xiv.

70. J. Barr, "The Typology of Literalism in Ancient Biblical Translations," *Mitteilungen des Septuaginta-Unternehmens* 15 (Göttingen: Vandenhoeck und Ruprecht, 1979), 290.

71. J. Ribera, "The Targum: From Translation to Interpretation," in T*he Aramaic Bible: Targums in Their Historical Context*, D. R. G. Beattie and M. J. McNamara, eds. (Sheffield: Sheffield Academic Press, 1994), 219.

of the Syriac language."[72] He later states that in particular, "A large number of variants of P-Ps with relation to MT have their origin in the translation of objectively difficult terms."[73] Such observations would suggest that the poetry in the Hebrew *Vorlage* of the *Peshiṭta* Psalter, with its often difficult syntax and specialized vocabulary, provides a particularly well-suited opportunity to encounter genuine Syriac idiom in translation.

The fidelity of the *Peshiṭta* Psalter to its Masoretic Hebrew *Vorlage* also means that it was accomplished largely free from the influence of other ancient versions. For example, Weitzman has concluded that the *Peshiṭta* Psalms do not rely on, nor constitute a revision of, a Jewish Targum,[74] and while many admit that "The P[eshiṭta] translator did then consult the LXX when in difficulties,"[75] Lund is of the opinion that, "the description of S [the *Peshiṭta* Psalms] as a daughter version of G [ancient Greek translations of the Old Testament] or as dependent on G or as later influenced by G, as found in secondary literature, is unjustified."[76] Given the varying opinions regarding the degree of influence that the Greek versions may have had on either the translation or on subsequent copyists of the *Peshiṭta*,[77] each of the linguistic items examined as part of the analogical method to appear later in this project have been checked against existing editions of the Greek Old Testament. This was done to ensure that a given instance of T_{D} was in fact motivated by a functional relationship with *S* and not the influence of a particular Greek version. While this cautionary step was applied throughout, even where such Greek influence can be demonstrated, it is unlikely to have had any impact on the choice of a given Syriac D-stem verb.[78] This is because

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72. I. Carbajosa, *The Character of the Syriac Version of Psalms: A Study of Psalms 90–150 in the Peshitta*, P. Stevenson, trans. (Leiden: Brill, 2008), 72.

73. Ibid., 206.

74. This, however, is not to say that the *Peshiṭta* Psalms do not contain vestiges of Jewish exegesis (see M. P. Weitzman, "The Origin of the Peshitta Psalter," in *Interpreting the Hebrew Bible: Essays in Honour of E. I. J. Rosenthal*, J. A. Emerton and S. C. Reif, eds. [Cambridge: Cambridge University Press, 1982], 296–98; Idem., *The Syriac Version of the Old Testament*, 149–61; 206–37).

75. Weitzman, "The Peshiṭta Psalter and Its Hebrew *Vorlage*," 354.

76. J. A. Lund, "The Influence of the Septuagint on the Peshitta: A Re-Evaluation of Criteria in Light of Comparative Study of the Versions in Genesis and Psalms," PhD Dissertation, Hebrew University, Jerusalem (1988): 416. Contrary to Weitzman and in accord with Lund, Carbajosa likewise does not find direct influence of a Greek version on the translation of the *Peshiṭta* Psalms (at least in Pss 90–150), but does admit to it in a later stage of copying: "The clear cases of LXX influence on P-Ps have been identified in the process of textual transmission and not at the time of translation. In other words, the translator would not have consulted the Greek version when translating" (Carbajosa, *op. cit.,* 270).

77. For a summary of the various views on the degree of Greek versional influence upon individual books of the *Peshiṭta* Old Testament according to individual scholars see Weiztman, *The Syriac Version of the Old Testament*, 68 along with attendant bibliography in the footnotes there.

78. One possible exception to this general rule is that a particular Syriac verb, having been lexicalized in the D-

those instances of Greek influence on the *Peshiṭta* Psalms typically identified in the literature involve the choice of individual lexical items completely unrelated to the specific verbal morphology of underlying Hebrew *Vorlage*.

Due to all of these considerations, the choice to let *Peshiṭta* Psalms and its Hebrew *Vorlage* serve as the repository of textual data out of which *S* and T_D can be gleaned for or the analysis of the Syriac D-stem is thus sound.

2.3.3.2 *The Selection of Psalms 1–30*

While the Syriac Psalter according to the *Peshiṭta* version is especially well-suited for the methodological requirements of the present project as set out in the previous sections, its length does present challenges for the detailed analysis demanded here. As a result, the number of individual Psalms to be subjected to analysis have been capped at the first 30 excluding both the Hebrew and Syriac superscriptions even when these are otherwise present in various manuscripts and editions.[79] This seemingly arbitrary delimitation was due to practical reasons arising from the computational and machine learning encoding process these Psalms (in both Hebrew and Syriac) were subjected to in preparation for linguistic analysis. This computational method, which will be described below, had the great advantage of providing a level of objectivity and exactitude in pairing elements in the source text with their translation into the target language, but was extraordinarily labor-intensive and time consuming. As a result, a compromise had to be struck between the demands of accuracy and the ability to run complex queries on the linguistic data afforded by the computational method, and the length of corpus that could be encoded in a timely manner. Furthermore, while thirty psalms might seem a completely artificial boundary for analysis, the choice of this number was strategic in that there appear 1,000 verbs in the Hebrew text of these psalms and 995 in their *Peshiṭta* translation (excluding the superscriptions), comprising both an adequate and manageable data-set for analysis.

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stem, might have been chosen in translation to better accord with the semantics of a linguistic item in a Greek version that the translators choose to render in lieu of the Hebrew for whatever reason.

79. The decision to exclude the superscriptions of the Psalms is principally motivated by the fact that they did not form any part of the original translation, but were composed and inserted at a later date, and so were excluded from the *Leiden Edition*. For relevant literature see H. F. van Rooy, "Towards a Critical Edition of the Headings of the Psalms in the Different Syriac Traditions," in *Bible and Computer: The Stellenbosch AICI-6 Conference. Proceedings of the Association Internationale Bible et Informatique "From Alpha to Byte." University of Stellenbosch 17-21July, 2000* (Leiden: Brill, 2002), 545; and D. G. K. Taylor, "The Psalm Headings in the West Syrian Tradition," in *The Peshiṭta: Its Use in Literature and Liturgy, Papers Read at the Third Peshiṭta Symposium,* Monographs of the Peshiṭta Institute, Leiden, vol 15, B. ter Haar Romeny, ed. (Leiden: Brill, 2006), 365–78.

Despite the need to truncate the number of psalms that could be accommodated in the present analysis at what would seem a rather unconventional limit, there are several factors that suggest that the results of the present analysis will not be adversely affected by this length of corpus. Firstly and primarily, since the goal of the current work is to delineate a functional relation *R* between source and target domains *S* and T_D, the raw frequency of forms investigated has little effect on any linguistic relation that may be present. Secondly, a more manageable set of translational equivalencies comprising *S* and T_D allows a fuller analysis of possible *R* relations in light of the linguistics literature than would otherwise be possible with a longer corpus. At the same time, when compared with other studies on Syriac Bible versions,[80] or on versions in other languages for that matter,[81] the number of word-forms subjected to analysis here are comparable, especially when the necessity of accounting for the psalms in both Hebrew as well as in Syriac is taken into consideration.[82] Thus the first thirty psalms remain a suitable corpus size for linguistic and textual investigation that has the potential to yield interesting results.

2.3.3.3 *Deciphering the* S *:* T_D *Analogy: Translational Equivalences by Computational Linguistic Analysis*

The next major methodological requirement for an analogical delineation of the Syriac D-stem by way of a translated corpus is an accurate, consistent, and reliable determination of translational equivalencies between the source and target texts. To state this another way, given a particular D-stem in the sample corpus of translated Syriac, which has been formalized here as T_D, the determination of the linguistic item in the source text that gave rise to T_D on the part of the translators is of paramount import when attempting to detect a pluractional relation *R* between them. Therefore, a procedure was required for the determination of the $S : T_D$ analogy that would not only ensure the greatest objectivity, accuracy, and consistency in establishing the source and target domains for analogical comparison, but also one that is sensitive to the nuances of

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80. See, for example, G. Mushayabasa, *Translation technique in the Peshitta to Ezekiel 1-24: A Frame Semantics Approach* (Leiden: Brill, 2015) and D. Bakker, *Bardaisan's Book of the Laws of the Countries: A Computer-Assisted Linguistic Analysis* (Leiden: Leiden Institute for Religious Studies, 2011). For a rough comparison bwetween the corpora the Book of the Laws of the Countries has 804 unique lemmata (224 verbs, 65 in the Syriac D-stem) used 8,065 times, while Psalms 1–30 has 750 lemmata (265 verbs, 64 in the D-stem) used 5,750 times.

81. For example, see A. van der Kooij's monograph *The Oracle of Tyre: The Septuagint of Isaiah XXIII as Version and Vision* (Leiden: Brill, 1998) which takes as its corpus only one chapter from the book of Isaiah, viz., 23.

82. To put the length of the corpus size of Psalms 1–30 into context, *The International Corpus of English* uses corpus samples of approximately 2,000 words in length (see *The International Corpus of English* (*ICE*), "Corpus Design," http://ice-corpora.net/ice/), while Psalms 1–30 in Hebrew contains 6,493 words and in Syriac, 7,116.

translation technique employed by those responsible for the *Peshiṭta*. In order to meet all of these requirements a computational and machine learning procedure was put to this task that exploited the consistency, objectivity, and processing power of a computer.

In 1999 a research initiative funded by the Nederlandse Organisatie voor Wetenschappelijk Onderzoek (NWO) under the auspices of the *Peshiṭta* Institute, Leiden and the Eep Talstra Center for Bible and Computer (ETCBC, formerly the Werkgroep Informatica or WIVU) housed at the Vrije Universiteit, Amsterdam, dubbed, the Computer-Assisted Analysis of the Peshiṭta (CALAP) and its second generation the *Turgama Project*, was formed to build computer models that would be able to meet the rigorous demands for the analysis of translated Syriac texts. These projects were conducted by a group of international scholars comprised of computer programmers, linguists, and Semitists who combined their efforts to establish a method for the analysis of ancient Syriac translations that could address a wide array of research questions. Central to these methodological considerations was the conviction that the massive amount of morphological, lexical, and syntactical information involved in translational analysis could best be accommodated through the assistance of computational techniques. As a result, a host of proprietary computer programs were written specifically for the analysis of translated Syriac[83] while others previously used for the analysis of Tiberian Hebrew were modified and put to this task,[84] the latter of which was responsible for the widely used and acclaimed *Groves-Wheeler Westminster Hebrew Morphology*.[85] It was these methods and programs produced by the CALAP and *Turgama* projects that were employed in the preparation of the Hebrew and Syriac data that would serve as the basis for the delineation of translational equivalencies, $S : T_{\text{D}}$, for the present project. Unlike many previous works that formulate translational equivalencies between a source text and an ancient translation on the basis of a word-by-word method that prioritizes the semantics of word-forms in

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83. See K. D. Jenner and E. Talstra, "CALAP and Its Relevance for the Translation and Interpretation of the Syriac Bible," in *Bible and Computer: The Stellenbosch AIBI-6 Conference* (Leiden: Brill, 2002), 681–97; K. D. Jenner, W. van Peursen, and E. Talstra, "CALAP: An Interdisciplinary Debate between Textual Criticism, Textual History and Computer-Assisted Linguistic Analysis," in *Corpus Linguistics and Textual History: A Computer-Assisted Interdisciplinary Approach to the Peshitta*, P. S. F. van Keulen and W. Th. van Peursen, eds. (Assen: Van Gorcum, 2006), 13–44; and R. Oosting, "Computer-Assisted Analysis of Old Testament Texts: The Contribution of the WIVU to Old Testament Scholarship," in *The Present State of Old Testament Studies in the Low Countries: A Collection of Old Testament Studies Published on the Occasion of the Seventy-fifth Anniversary of the Oudtestamentisch Werkgezelschap*, K. Spronk, ed. (Leiden: Brill, 2016), 192–206.

84. See E. Talstra, C. Hardmeier, and J. Groves, *Quest: Electronic Concordance Applications for the Hebrew Bible* (*Data Base and Retrieval Software*) (Haarlem: Nederlands Bijbelgenootschap, 1992); and W-D. Syring, "Quest 2 – Computergestützte Philologie und Exegese," in *Zeitschrift für Althebraistik* 11 (1998): 85–9.

85. See "The Westminster Leningrad Codex" (https://students.wts.edu/resources/alangroves/grovesprojects.html) and "Westminster Hebrew Morphology" (https://www.grovescenter.org/projects/westminster-hebrew-morphology/).

the surface text, the present project adopted the computational methods and procedures of the *Turgama* project that establishes such translational equivalents based upon syntax. Here, the calculation of lexical correspondences between the Hebrew and Syriac of the sample corpus were determined on the basis of their matching clause-internal functions. The computational analyses of these texts and the subsequent establishment of translational equivalents based upon them is tremendously complex and the length required for their explanation would far exceed what is possible here. The interested reader can obtain a lucid and detailed explanation of the computational method employed here in the superb description provided by Cody Kingham on the ETCBC website.[86]

2.3.3.4 *Identification of Verbal Stems*

While the computational analysis that paired parallel linguistic units on the basis of their syntactical function within clause atoms provided a methodologically sound and linguistically robust method for establishing translational equivalents between the *Peshiṭta* and its Hebrew source text, in an investigation involving the function of one of the Syriac verbal stems one additional challenge remains. It must be admitted from the onset that the identification and delineation of the various verbal stems in both languages is beset with some fundamental challenges arising from the textual history of the Hebrew and *Peshiṭta* texts that must be accounted for in the adoption of the computational method and in establishing the $S : T_{\text{D}}$ analogy. The following section offers a rationale for the identification of the various verbal stems in both Hebrew and Syriac which depends on the vocalic melody pattern interdigitized with the Hebrew and Syriac root consonants encountered in the sample corpus.

2.3.3.4.1 The Basis of the Identification of the Hebrew Verbal Stems

The principal issue involving the Hebrew text is that the majority of extant manuscripts of the Hebrew Bible, as well as the various printed editions based upon them, reflect but one of several textual traditions attested in antiquity, and indeed a specific substratum therein. This so-called "Masoretic text" takes its name from the para-textual commentary, the *Masorah*, that is preserved in many of these manuscripts as does the name of the scribes responsible for it, eponymously

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86. C. Kingham, "Data Creation," *Eep Talstra Center for Bible and Computer*, 2017, updated 2018: http://www.etcbc.nl/datacreation/; see also, C. Kingham and W. Van Peursen, "The ETCBC Database of the Hebrew Bible," *Journal for Semitics* 27.1 (2018): 1–13.

referred to as the "Masoretes." These scholars were active in the medieval period from the second half of the first millenium[87] and it was the work of one particular circle of Masoretes from the Tiberian area on the Western shore of the Sea of Galilee, that of the family of Aaron ben Asher, that is largely responsible for the final form of this text-type. The latter is comprised of several components of disparate historical origin and provenance. One of these, the consonantal base of this group of texts, predates the work of the scribes responsible for its final form by many centuries as evidenced by its homogeneity with ancient MSS from in and around the Judean Desert on the one hand,[88] and the fact that "most of the ancient translations were based upon one of the representatives"[89] of this proto-Masoretic consonantal text on the other. To this purely consonantal text the Masoretes added, among other para-textual elements, a system of vocalization that captured a particular reading tradition of this received consonantal base.[90] It is this system of vocalization that most often makes the identification of the various Hebrew verbal stems possible when they would be otherwise indistinguishable in their purely consonantal form.[91]

Given that the textual basis of the Hebrew Psalms utilized for this thesis as outlined in §2.3.3 is the Masoretic text-type as printed in *BHS*, it must be admitted that we are relying on a particular text and reading tradition of the Hebrew Bible for our sample corpus that may differ in

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87. The *terminus ad quo* of the Masoretic activity can be roughly established as having come after the completion of both the Jerusalem and Babylonian *Talmudim* in that they both betray a complete lack of awareness of type of Masoretic activity (see, for instance, E. Levita, מסורת המסורת [London: Longmans, Green, Reader & Dyer, 1867], 127). Thus, with the completion of the *Talmudim* represented in the work of the *Saboraim* and *Geonim* typically placed in the 6th Century, it is generally assumed that the work of the Masoretes began in earnest shortly thereafter (for an overview of the dating of the material in the two *Talmudim* see H. L. Strack and G. Stemberger, *Introduction to the Talmud and Midrash*, M. Bockmuehl, trans. [Minneapolis: Fortress Press, 1992] 1–8; J. H. Hertz, "Forward," in *Berakoth: Hebrew-English Edition of the Babylonian Talmud* [London: Soncino Press, 1960], §V, p.xxiv; and for a later, although somewhat controversial dating scheme see D. W. Halivni, *The Formation of the Babylonian Talmud*, J. L. Rubenstein, trans. [Oxford: University Press, 2013], 4–28).

88. On this point Tov states, "When the early Qumran texts of the 𝔐 [the Masoretic Text] group are compared with the consonantal framework of L [codex Leningrad B19A] (dating from 1009), one realizes how close they are to medieval sources. This applies to all the Qumran texts and the reconstructed Hebrew source of several Targumim and of an early revision (recension) [*sic*] of 𝔊, *kaige*-Theodotion. The combined evidence shows that the consonantal framework of 𝔐 changed very little, if at all, in the course of more than one thousand years. Even more striking is the fact that the texts from the other sites in the Judean Desert [i.e., those discovered outside of Wadi Qumran] are virtually identical with the medieval texts, probably because they derived from similar circles" (E. Tov, *Textual Criticism of the Hebrew Bible*, 30).

89. Tov, *op. cit.*, 25

90. It should be emphasized here that it was the *system* of vocalization that was added to the consonantal text of the Hebrew Bible by the Masoretes and not the "vowels" *per se*, which are better understood to be a part of what many take to be an already ancient reading tradition. On this, see below in n.95.

91. This is true, *mutatis mutandis,* in as much as strong verbs are in view.

some respects from those not only across the group of Masoretic manuscripts, but also from other reading traditions vocalized according to a different convention.[92] In addition to this, while an exact date for the completion of the *Peshiṭta* Old Testament remains obscure, it is certain to have been accomplished centuries before the Masoretes began their activity.[93] This means that a comparison of linguistic elements in a sample corpus from the *Peshiṭta* Hebrew Bible with those from a Hebrew text in the Masoretic tradition identified by means of vowels signs and/or *dageshim*, upon which a disambiguation of the verbal stems depends, would rely upon a feature of the text that the translators of the *Peshiṭta* Old Testament had no access to.

Despite these issues, reliance upon the Masoretic vocalization for the identification of linguistic elements in the Hebrew source text is justified here. A first reason for such confidence is that the comparatively late graphemic vocalization of the Masoretes captured a reading tradition of the biblical text that nevertheless originated well before their scribal activity. On this point, Khan states:

> …the reading trandition was not a medieval creation of the Masoretes but was an ancient tradition that the Masoretes recorded by their notation system. This tradition had been faithfully passed on orally from teacher to pupil over many generations. There is no evidence that the Masoretes reformed the reading tradition and felt free to introduce exegetical or linguistic innovations of their own.[94]

Finally, extant Greek and Latin transliterations of the Hebrew biblical text that anticipated the work of the Masoretes by several centuries have been shown to indicate distinctions in the language that are consistent with the vocalization indicated by their later work.[95]

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92. For example, biblical manuscripts exhibiting the Babylonian and Palestinian systems of vocalization at times attest to different readings of the same consonantal text undergirding the MT (e.g., see the variant readings in the Yemenite manuscript of the *Megilloth* vocalized according to the Babylonian convention, Bodleian Library MS. Oppenheim Add. 4° 139 and its description in Y. Ratzabi, "Massoretic Variants to the Five Scrolls from a Babylonian-Yemenite MS," *Textus* 5 [1966]: 93–113).

93. On the date of the *Peshiṭta* Old Testament see n.43 above.

94. G. Khan, "The Hebrew Bible," in *The Oxford Illustrated History of the Bible* (Oxford: Oxford University Press, 2001), 77. In a similar way Morag states that "it must, however, be borne in mind that the origins of the vocalization go back to a period far earlier than that of the Massoretes [*sic*], and that, as a source of historical information, the vocalization should be accorded serious consideration" (S. Morag, "On the Historical Validity of the Vocalization of the Hebrew Bible," *Journal of the American Oriental Society* 94 [1974]: 315).

95. For detailed analysis of these issues see E. A. Speiser, "The Pronunciation of Hebrew according to the Transliterations in the Hexapla," *Jewish Quarterly Review* 16 (1925–6): 343–82; *Idem*., "The Pronunciation of Hebrew Based Chiefly on the Transliterations in the Hexapla (Continued)," *Jewish Quarterly Review* 23 (1932–3): 233–65; and *Idem*., "The Pronunciation of Hebrew Based Chiefly on the Transliterations in the Hexapla (Continued)," *Jewish Quarterly Review* 24 (1934–5): 9–46; A. Sperber, "Hebrew Based upon Greek and Latin Transliterations," *Hebrew Union College Annual* (1937–8): 118; E. Brønno, *Studien über hebräische Morphologie und Vokalismus auf Grundlage der mercatischen Fragmente der zweiten Kolumne der Hexapla des Origenes* (Leipzig: Dt. Morgenländ. Ges, 1943), 462;

In the end, while it should be fully acknowledged that the reading of the Hebrew biblical text exhibited a degree of variation as evidenced by the different conventions of vocalization as well as through ancient transliterations into Greek and Latin, from this it does not follow that the Masoretic convention of disambiguating linguistic forms via their system of vocalization is a Medieval Jewish invention. Due to all of these factors, the use of the Masoretic vocalization for the present analysis is justified despite its having been added to the Hebrew text some time after the completion of the *Peshiṭta* from which our sample corpus is taken.

2.3.3.4.2 The Basis of the Identification of the Syriac Verbal Stems

The Syriac text too presents challenges for the disambiguation of verbal stems and this from at least two different directions. Where the Masoretic text offers a rather rigid interpretation of its consonantal base through an extensive system of vocalization added comparatively late in its textual history, the Syriac textual tradition utilizes conventions markedly more diverse and fluid in clarifying the consonantal text(s) it accompanies.[96] Thus, while the *Leiden Edition* made available a reliable critical text[97] of the *Peshiṭta* Old Testament, it did so by adopting a policy for its printing that includes only the barest minimum of diacritical marks and no vocalization, and this despite the fact that both make it possible to disambiguate a wide array of forms that would be otherwise indistinguishable.[98] The lack of any kind of vocalization in the *Leiden Edition* makes it impossible to recognize differences in surface forms that do not include an affix, but even here, Syriac attests to multiple (in this case, verbal) forms with an identical affix leaving the vowel melodies the sole means to tell them apart (e.g., Gt vs. Dt-stems in an unvocalized text).[99] For the purpose of

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J. Barr, "St Jerome and the Sounds of Hebrew," *Journal of Semitic Studies* 12.1 (1967): 33; and B. P. Kantor, "The Second Column (Secunda) of Origen's Hexapla in Light of Greek Pronunciation," PhD dissertation, University of Texas-Austin (2017): 183–200.

96. For expositions on the various systems of vocalization and syllabic disambiguation by means of a diacritical point in the Syriac ms tradition see the masterful work by J. B. Segal, *The Diacritical Point and the Accents in Syriac* (Oxford: Oxford University Press, 1953) and more narrowly, G. Kiraz, *The Syriac Dot: A Short History* (Piscataway, NJ: Gorgias Press, 2015).

97. The assumption here is that the "text" in question is found in the combination of the running text and the second critical apparatus of the *Leiden Edition*.

98. The preface of part I fascicle I states, "Most of the diacritical or vocalization points have been left out because in most cases it cannot be determined when and by whom they were inserted and the methods used seem to be inconsistent" (P. A. H. de Boer, "General Preface," in *The Old Testament in Syriac According to the Peshiṭta Version* [Leiden: Brill, 1977], IX).

99. "Where the tradition of vocalisation [*sic*] is not certain, one is not always able to determine with certainty the pattern of a particular verb form" (T. Muraoka, *Classical Syriac*, 42).

identifying Syriac verbal forms apart from those instances where affixes make them explicit, other orthographic clues were employed, for instance, in those cases where roots with weak consonants uniquely react in phonological contexts elicited by the underlying vocalization of the various stems, e.g., ܚܚܗ (G-stem, perfect 3mp) vs. ܚܚܝܗ (D-stem, perfect 3mp). Nevertheless, there still remain a great many instances where one is met with verbal surface forms that are orthographically ambiguous in the purely consonantal text of the *Leiden Edition*. For these, both Ceriani's fascimile edition of MS B21 *inferiore* of the Ambrosian Library, Milan (7a1 in the *Leiden* sigla)[100] was consulted for its fuller representation of diacritical points as was the Dominican Mission to Mosul's fully vocalized Eastern Syriac edition of the Old Testament prepared under the direction of Chorepiscopus Clemens Joseph David, Archbishop of Damascus from 1879–90.[101] Such a choice was purely pragmatic and should not be interpreted as a qualitative endorsement of its text, for while its deficiencies have been well documented,[102] the Mosul edition at least stands outside of the family of printed editions based upon Sionita's impoverished *editio princieps*, to wit, the European polyglots as well as the editions of Lee and Urmia.[103]

2.3.3.5 *Issues relating to both* S *and* T_D*: Conclusion*

CHAPTER 1 laid out the intention of this thesis to leverage the data contained in a text of translated Syriac as a means to better understand any plural function of the Syriac D-stem. To do this, an analogical method was proposed and defended that would attempt to elucidate the function of the stem through an analysis of the relationship between the linguistic items in a *Vorlage* of translated Syriac and the Syriac D-stem forms that were used to translate them. In order to successfully make such a deduction, the text of translated Syriac to be used as the basis for analysis needed to meet several vitally important criteria that included the ability to access its source text as well as the need to be sufficiently representative of Classical Syriac. To fulfill both of these requirements, a sample corpus comprised of Pss. 1–30 from the Peshiṭta Psalter was selected for its status as a faithful, yet idiomatic witness of the Hebrew Masoretic text-type.

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100. A. M. Ceriani, *Translatio Syra Pescitto Veteris Testamenti: ex Codice Ambrosiano sec. fere VI, Photolithographice Edita, Curante et Adnotante* (In officinis photolithographica Angeli della Croce et typographica J. B. Pogliani et sociorum, London: Apud Williams et Norgate), 1876.

101. C. J. David, ed., *The Syriac Bible According to the Mosul Edition* (Piscataway, NJ: Gorgias Press), 2011.

102. Bloch offers the sobering assessment, "It is surprising that its [the Mosul edition] existence is comparatively unknown. This, however, may be due to the fact that its value for the textual critic is very small, if any whatsoever (J. Bloch, "The Printed Texts of the Peshitta Old Testament," 141).

103. On the relationship between the Mosul text and those based upon Sionita's, see Bloch, *op. cit.*

While the selection of a sample corpus from the Peshiṭta Psalms and its Hebrew *Urschrift* meets the requirements for many of the methodological issues confronting the successful analogical deduction of the function of the Syriac D-stem, such a choice does present two additional challenges. Firstly, the challenge remains of accurately determining which forms in the source text were translated by those in the sample from the Peshiṭta. Many previous studies have undertaken such a task by means of attempting to match the semantics of individual word-forms in the source text with those thought to have the same meaning as those in the target text. This over-reliance upon the semantics of individual word-forms for translational analysis has the consequence of leaving many of the other domains of the respective languages that would have contributed to the shape of the translation implicit and under-appreciated. For these reasons, a computer-aided and machine learning procedure conceived under the auspices of the Turgama project was employed for the determination of translational equivalents that matched discrete linguistic items across the texts on the basis of their grammatical and syntactical role(s). This minimized the need to make often implicit and intuitive decisions regarding translational correspondents that are based primarily upon semantics.

A second challenge that pertains to using a Syriac sample corpus translated from a Hebrew *Vorlage* for elucidating the function of the Syriac D-stem is the need to precisely identify the linguistic items in each language based upon their morphology. For the Hebrew Masoretic text-type underlying the *Peshiṭta* Psalms, the problem is that the vowel signs disambiguating the Hebrew forms were added to its consonantal base several centuries after its translation into Syriac would have been completed. However, since there is good evidence that it is the vowel signs themselves, and not the reading tradition that they were meant to represent, that had their origin in an era after the completion of the *Peshṭta* Old Testament, the use of the Masoretic vocalization for the identification of linguistic forms for the present project remains appropriate. As for the precise identification of Syriac forms, particularly the various verbal stems, a challenge arises from the fact that the most reliable critical edition of the *Peshiṭta* Old Testament, to wit, the *Leiden Edition*, adopted a policy for its printed text that did not include any diacritical points or vocalization that can be put to the task of disambiguating orthographically identical forms. As a result, in cases where a parsing of a Syriac form in the sample corpus was not possible by means of the orthography of the *Leiden Edition* alone, recourse was made to individual manuscript evidence and/or fully vocalized uncritical texts, while although of a secondary quality to the *Leiden Edition* and based upon later Syriac reading traditions, when used in conjunction with the latter allowed for an informed determination of certain word-forms.

CHAPTER 3

The Specification of Source Domain *S*

In the previous chapter, several components critical to the successful application of the analogical method for the elucidation of the function of the Syriac D-stem via translated Syriac were discussed and justified in detail. One of these was the decision to subject a sample from the *Peshiṭta* Psalter to analysis, meaning that the linguistic items for *S* in the $S : T_D$ analogy would be culled from a corpus of Syriac poetry. The advantages of this selection included the *Peshiṭta* Psalms' linguistic and theological influence upon the wider Syriac literary tradition as well as the potential for the Syriac language reflected in translated poetry to genuinely represent Classical Syriac sufficiently free of the contamination of its source language. However, while this choice of corpus may be particularly well-suited for the aims of the present work, it would be ideal if those results were applicable beyond the 30 psalms subjected to analysis. Thus, it is important to ascertain how much the language encountered in the sample corpus is representative of not only the wider book of which it is a part, but also the other books of the Hebrew Bible.

Another critical component of the analogical method discussed in the previous chapter was the importance of determining *S* in the $S : T_D$ schema. As was pointed out there, an analogical deduction proceeds on the basis of a comparison between two entities "where something unfamiliar is made intelligible through being compared with something else, presumably more familiar, to which it has certain similarities."[104] While scholarly work on the *Peshiṭta* gives us confidence in the identity of the *Urtext* underlying the translation in a broad sense, it does nothing to aid in determining the *specific* linguistic items that should serve as *S* in the $S : T_D$ analogy. The choice of particular instantiations of *S* should be well-motivated by the formal character of the texts themselves and not be an *ad hoc* choice on the part of the researcher.

In order to address both of these issues, the current chapter will present a distributional statistical analysis of the Syriac and Hebrew verbal stems as they are attested in our sample corpus, the entire book of Psalms, and finally all of the books of the Hebrew Bible. This will be done to put the usage profile of the Syriac D-stem in the sample corpus into context against that of these longer corpora containing different genres as well as provide a comparative perspective of

104. Copi, *Introduction to Logic*, 340.

how the D-stem is being employed vis-à-vis the other stems in both Syriac and Hebrew. These analyses will serve to address the two issues raised above. Firstly, such a distributional analysis can be used as a metric to gauge how representative the use of the Syriac D-stem in the sample corpus is against other biblical texts translated into Syriac. Secondly, by comparing the distributions of both the Hebrew and Syriac verbal stems as they are attested more generally in these corpora, it will be possible to mark patterns and trends that will help inform the selection of the specific linguistic items to serve as *S* in the $S : T_{\text{D}}$ analogy.[105]

3.1 Statistical Distribution

In turning to a distributional analysis of the verbal stems there are two perspectives with which this data needs to be examined: first, intralinguistically but across corpora, and secondly, interlinguistically and within corpora. As such, the distribution of the stems in these different corpora will be presented in each table below in the order of the frequency with which they occur in each respective language with the understanding that translational equivalency not should be inferred when stems appear opposite one another in a given table. The presentation of the data to follow proceeds in the order of successively larger compositions, with each new set of distributional data compared against that of the sample corpus. Subsequent observations will then be made with respect to the verbal stems within the corpora of each language to be followed by discussion of the difference in distributions between the languages.

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105. In his discussion on the appropriate procedure for comparative Semitic methodology, Bennett speaks of a "spiral approach" where it is necessary to first engage in what he terms "lexicostatistics" where "one may begin with a lexicostatistical analysis for a rough determination of internal groupings," whereby "lexicostatistics" is defined as "judging linguistic relationship by frequency of shared features" (P. R. Bennett, *Comparative Semitic Linguistics: A Manual* [Winona Lake, ID: Eisenbrauns, 1998], 25). In so doing, Bennett provides a precedent for the approach undertaken here.

Table 3.1: Distribution of Verbal Stems in Psalms 1–30[106]

Hebrew Stems			Syriac Stems		
	Occurrences	**% of All Verbs**		**Occurrences**	**% of All Verbs**
G	642	64.2%	G	602	60.5%
H	147	14.7%	D	187	18.79%
D	138	13.8%	H	105	10.55%
N	48	4.8%	Gt	44	4.42%
Dt	20	2%	Dt	36	3.62%
Dp	3	.3%	Ht	17	1.71%
Hp	2	.2%	Š	2	.201%
			Št	2	.201%
Total:	1,000		**Total:**	995	

These distributions in the sample corpus stand against the statistics appearing in the following two tables for the entire book of Psalms.[107] Table 3.2 below, captures the frequency of the verbal stems in the book of Psalms in its totality with the sample corpus included, while table 3.3 presents the stem distributions of the book with the sample corpus removed, noting the differences that result.

106. It should be recalled that all statistics and verbal distributions appearing in this chapter relevant to the Psalms do not include the superscriptions.

107. As explained above in n.42, the decision was made to exclude the so-called Old Testament apocryphal, psuedopigraphal, and deuterocanonical material from the present project due to their varied attestation in the manuscripts. This also means that the commonly named "apocryphal" Psalms, viz. Pss 151–155, that appear in some Old Testament *Peshiṭta* manuscripts, the Greek versions, and only in Hebrew in 11QPs[a], have been excluded from the statistics presented throughout this chapter (see W. Wright, "Some Apocryphal Psalms in Syriac," *Proceedings of the Society of Biblical Archaeology* 9 [1887]: 257–66; and W. Baars, *The Old Testament in Syriac VI*: *Apocryphal Psalms* [Leiden: Brill, 1972]).

Table 3.2: Distribution of Verbal Stems in the Book of Psalms

Hebrew Stems	Occurrences	% of all Verbs
G	3,480	60.7%
D	884	15.42%
H	874	15.25%
N	311	5.42%
Dt	109	1.90%
Dp	49	.85%
Št	17	.3%
Hp	9	.16%
Total:	5,733[109]	

Syriac Stems	Occurrences	% of all Verbs
G	3,120	57.38%
D	1,074	19.75%
H	629	11.57%
Dt	264	4.86%
Gt	242	4.45%
Ht	61	1.12%
Quad.[108]	26	.44%
Št	15	.28%
Š	6	.11%
Total:	5,437[110]	

Table 3.3: Distribution of Verbal Stems in Pss 31–150

Hebrew Stems	Occurrences	% of all Verbs	Variance from Complete Psalter
G	2,838	59.96%	-0.74%
D	746	15.76%	0.34%
H	727	15.36%	0.11%
N	263	5.56%	0.14%
Dt	88	1.86%	-0.02%
Dp	46	0.97%	0.12%
Št	17	0.36%	0.06%
Hp	7	0.15%	-0.01%
Total:	4,733		

Syriac Stems	Occurrences	% of all Verbs	Variance from Complete Psalter
G	2,518	56.69%	-0.69%
D	887	19.97%	0.22%
H	524	11.80%	0.23%
Dt	228	5.13%	0.27%
Gt	198	4.46%	0.01%
Ht	44	0.99%	-0.13%
Quad.	26	0.59%	0.15%
Št	13	0.29%	0.01%
Š	4	0.09%	-0.02%
Total:	4,442		

This data from the book of Psalms in both Hebrew and Syriac stands against the distribution of the stems in all of the books of the Hebrew Bible minus the Psalms as found in table 3.4:

108. "Quadriliteral." The term "quadriliteral" is not a verbal stem in the typical sense, but covers a range of verbal morpho-syntactic profiles the range of which are covered in Nöldeke §180, but nevertheless decline according to the prosody of the D- and Dt-stems despite being semantically independent forms.

109. These figures, along with those of the rest of the books of the Hebrew Bible, are based upon the morphological analysis carried out under the auspices of the Eep Talstra Center for the Bible and Computer (ETCBC), Vrije Universiteit, Amsterdam and the Data Archiving and Networked Serves (DANS), Royal Netherlands Academy of Arts and Sciences (see W. T. van Peursen, C. Sikkel, and D. Roorda, *Hebrew Text Database*, ETCBC4b, 2015).

110. For the Syriac text, the morphological data for Psalms 1–30 was prepared personally according to the conventions of the *Turgama* project of the Werkgroep Informatica, Vrije Universiteit. However, the statistics on the verbal stems for the entire book beyond our sample corpus are from the PESHOT-T digital corpus.

Table 3.4: Distribution of Verbal Stems in the Hebrew Bible Less the Book of Psalms

Hebrew Stems

	Occurrences	% of All Verbs
G	46,681	68.79%
H	8,525	12.56%
D	5,871	8.65%
N	3,836	5.65%
Dt	854	1.26%
Dp	446	.66%
Hp	418	.62%
Št	155	.23%
Gp	6	.009%

Aramaic Verbs in Hebrew Bible

G	654	.96%
H	167	.24%
D	88	.13%
Gt	56	.08%
Gp	40	.06%
Dt	30	.04%
Š	15	.02%
Total:	67,865	

Syriac Stems

	Occurrences	% of All Verbs
G	48,137	69.55%
D	7,778	11.24%
H	6,959	10.05%
Gt	3,106	4.49%
Dt	2,315	3.34%
Quad.	287	.42%
Št	271	.39%
Ht	249	.36%
Š	113	.16%
Total:	69,215	

Syriac Data Controlled for Aramaic *Vorlage* in Hebrew Bible[111]

	↓Syriac HB Total	↑Syriac verbs from Aramaic portions of Dan, Ezra, et al.	Diff.	Adj. Freq.
G	48,137	723	47,414	69.75%
D	7,778	244	7,534	11.08%
H	6,959	140	6,819	10.03%
Gt	3,106	61	3045	4.48%
Dt	2,315	47	2,265	3.34%
Quad.	287	15	272	.4%
Ht	249	9	240	.35%
Š	113	1	112	.16%

The data from the distributions of verbal stems within each corpus can now be aligned against one another so as to mark the variations in their proportions across the various corpora.

111. Here the number of Syriac verbs appearing in the Aramaic portions of the Hebrew Bible have been subtracted from the total number of verbs that occur in the *Peshiṭta* Hebrew Bible. This calculation helps achieve a more accurate comparison to the stem frequencies of the Hebrew data by controlling for the population dilution that the Aramaic verbs contribute to in the Hebrew corpus. As this sub-table shows, accounting for the Aramaic portions of the Hebrew Bible in this way does little to affect the overall proportions of the use of the Syriac stems.

Table 3.5: Percentage of Usage of Verbal Stems

Hebrew

	Pss 1–30	vs.	Pss 31 – 150	Difference	vs.	Hebrew Bible (Less Ps)	Difference
G	64.2%		59.96%	-4.24%		68.79%	4.59%
H	14.7%		15.36%	.66%		12.56%	-2.14%
D	13.8%		15.76%	1.96%		8.65%	-5.15%
N	4.8%		5.56%	.76%		5.65%	.85%
Dt	2%		1.86%	-.14%		1.26%	-.74%
Dp	.3%		.97%	.67%		.66%	.36%
Hp	.2%		.15%	-.05%		.62%	.42%
Št	-		.36%	.36%		.23%	.23%
Gp	-		-	-		.009%	.009%
			Avg. Difference: 1.11%			**Avg. Difference:** 1.61%	

Syriac

	P-Pss 1–30	vs.	*P*-Pss 31–150	Difference	vs.	*P*-Hebrew Bible (Less Ps)	Difference
G	60.5%		56.69%	-3.82%		69.55%	9.05%
D	18.79%		19.97%	1.18%		11.24%	-7.55%
H	10.55%		11.80%	1.25%		10.05%	-.50%
Gt	4.42%		4.46%	.04%		4.49%	.07%
Dt	3.62%		5.13%	1.51%		3.34%	-.28%
Ht	1.71%		.99%	-.72%		.36%	-1.35%
Š	.201%		.09%	-.11%		.16%	-.04%
Št	.201%		.29%	.09%		.39%	.19%
Quad.	-		.59%	.59%		.41%	.41%
			Avg. Difference: 1.03%			**Avg. Difference:** 2.16%	

3.1.1 *Intralinguistic Distribution of Verbal Stems*

Prior to considering the data for each respective language in these three corpora individually, a first item to notice in tables 3.1–5 is that the distribution of the verbal stems in both the Hebrew and Syriac versions of the sample corpus largely approximates that of both the entire book of Psalms on the one hand that of the books of the Hebrew Bible on the other. This is a particularly important point to underscore prior to discussing the differences in the stem distributions so as to not allow the analysis of stem variances to obscure the relative homogeneity that is attested in this facet of the two languages.

When notable disparities in the stem distributions between the sample corpus and another text do occur, they tend to be encountered not against the book of Psalms, but against the

Hebrew Bible as a whole. The average difference in stem distributions in both Hebrew and Syriac between Pss 1–30 and the book of Psalms hovers right around 1% while between the sample corpus and the Hebrew Bible, this climbs to 1.61% for Hebrew and 2.16% for Syriac.

	Pss 1–30 vs. Pss 31–150	Pss 1–30 vs. Hebrew Bible (Less Ps)	
Hebrew	1.11%	1.61%	Avg. Difference
Syriac	1.03%	2.16%	

What this suggests is that the disparities between the sample corpus and the Hebrew Bible are not owed to anomalies in the language of Pss 1–30, but rather are a by-product of the poetic genre of the Psalms. Nevertheless, these variances still remain relatively modest given the large disparity in the number of verbal forms in these two populations and so even with the divergencies noted between the poetic Psalms corpora and that of the mixed-genre books of the Hebrew Bible, there is an overall consistency in this linguistic domain of the verbal stems that is exhibited by all three corpora. Nevertheless, important insight can be gained by examining those places where the stem distributions in these various corpora do depart.

The Hebrew Stems

As the source text of the *Peshiṭta,* the shape of the Hebrew data with respect to the verbal stems offers several interesting observations that are relevant to our overall aims. Firstly, it is noteworthy that the greatest amount of variability amongst verbal stems across Hebrew corpora is to be found in the G-, H- and D-stems.[112]

Hebrew	Pss 1–30		Pss 31–150	Difference		Hebrew Bible (Less Ps)	Difference
G	64.2%		59.96%	-4.24%		68.79%	4.59
H	14.7%	vs.	15.36%	.66%	vs.	12.56%	-2.14%
D	13.8%		15.76%	1.96%		8.65%	-5.15%

With regard to the G-stem, Pss 1–30 in Hebrew display a comparatively richer density of G-stem verbs than is attested in Pss 31–150 by a fairly significant 4.24%. Although displaying a higher saturation of G-stem forms than Pss 31–150, Pss 1–30 still fall well short of the G-stem usage rate in the wider Hebrew Bible (excluding the Psalms), with the G-stem being employed 4.59% more in the Hebrew Bible than in the sample corpus. Thus, while the Hebrew version of the sample corpus outstrips Pss 31–150 in its relative frequency of G-stem verbs by a fairly significant amount, both

112. The difference in the distribution of the N-stem between the sample corpus and the book of Psalms at .76% is greater than that of the H-stem (.66%), but its variance between the sample corpus and the books of the Hebrew Bible is quite modest (.85%) compared to that of the H-stem (-2.13%), hence the latter's inclusion here.

portions of the Psalms pattern together in their more sparing use of this basic stem over against the books of the Hebrew Bible.

Simultaneously, the Psalms material utilizes a richer palette of forms other than the G-stem and in particular, the D-stem. While the density of the D-stem is higher in both Psalms corpora over against the Hebrew Bible, it is slightly more so in the book of Psalms than in the sample corpus (1.96% more), but even here the D-stem in the sample corpus comprises a significantly higher rate of usage when considered against its relative frequency in the Hebrew Bible, being used just over 5% more often.[113]

Thus, one observation to be made as a result of the distributional analysis of the Hebrew stems across these corpora is that although G-stem verbs comprise a smaller proportion of the overall verbal population in both Psalms texts against the Hebrew Bible, this is offset by an increase in the frequency of their derived stems, a fact that will be brought to bear more significantly in the interlinguistic discussion below.

The Syriac Stems

As regards the Syriac texts, two particularly striking features revealed in TABLE 3.5 are, in the first place, how closely the distribution of verbal stems in *P*-Pss 1–30 approximates that of *P*-Pss 31–150, with an average variance of just 1.03% between the two corpora, and secondly, that of the wider translation of the Hebrew Bible at 2.16%.

	Pss 1–30 vs. Pss 31–150	Pss 1–30 vs. Hebrew Bible (Less Ps)	
SYRIAC	1.03%	2.16%	Avg. Difference

This suggests that with respect to the verbal stems, the sample corpus is an appropriate representation of the larger book of which it is a part as well as those other books that make up the *Peshiṭta* Hebrew Bible. The tight correspondence amongst the distributions of verbal stems in the Syriac corpora of varying lengths can be visualized with the following line chart capturing the data in TABLE 3.5 above.

113. It is interesting to note that of the 80 roots in the Hebrew Bible that appear exclusively in the Hebrew D-stem, 14 appear in the Hebrew Psalter a total of 71 times out of the 5,733 verbal occurrences in the book (1.24%). That such a low proportion of the verbs in the Psalms are D-stem-only roots means that theses forms are not responsible for the dramatic jump in frequency across corpora. This suggests that the significantly higher frequency of the Hebrew D-stem in the Psalms is for the most part meaningful and compositional rather than a product of the lexical stock of the language.

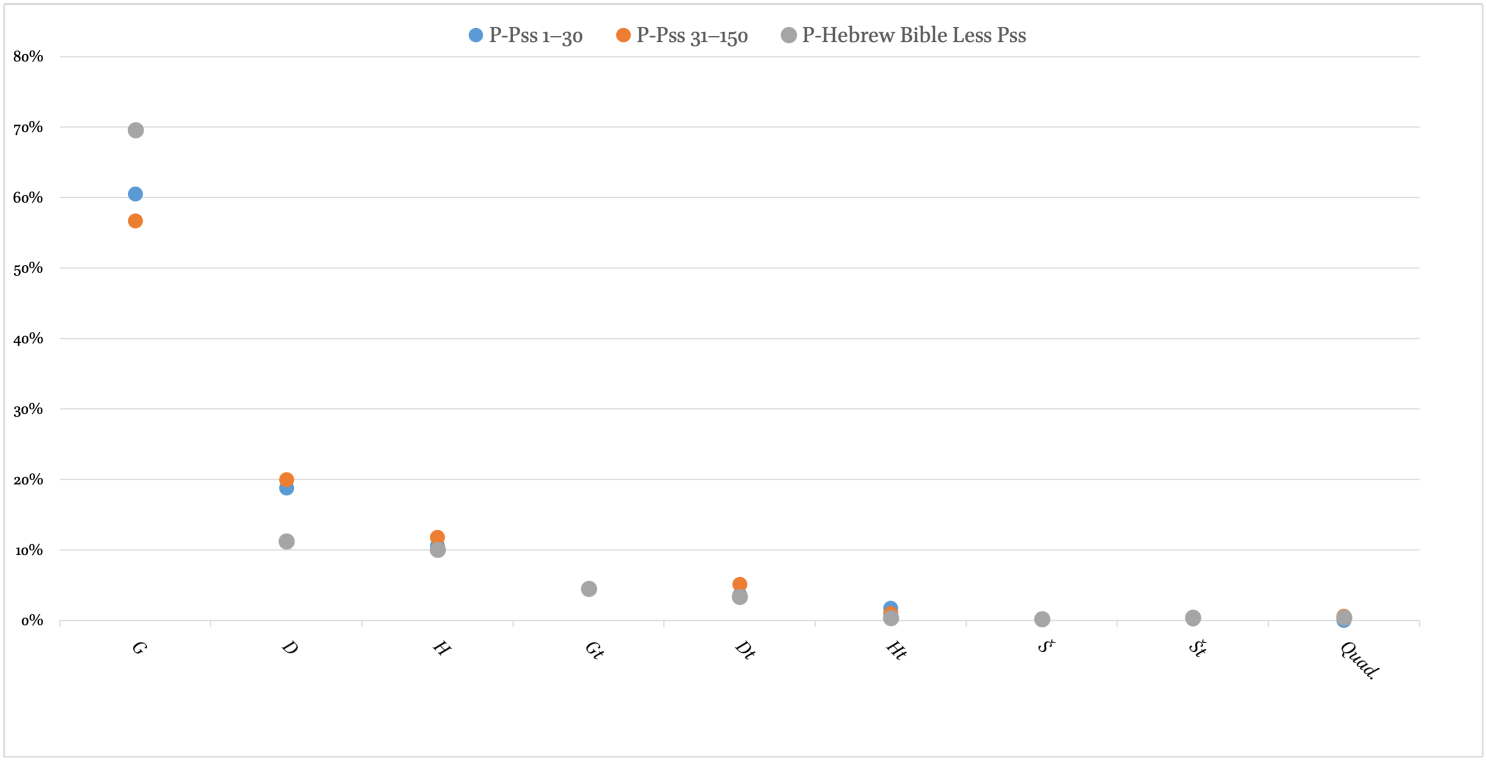

Chart 3.1: Verbal Stem Distribution Across *Peshiṭta* Corpora of Varying Length

Arrayed in this manner, the consistency with which the proportion of Syriac verbal stems are deployed across corpora is clear. Nevertheless, one notable discrepancy between *P*-Pss 1–30 and *P*-Pss 31–150 on the one hand and the *P*-Hebrew Bible on the other is the former pair's concurrent richer saturation of D-stem forms and commiserate paucity of G-stem verbs as compared to the latter. This can be seen in following summation:

Syriac	Pss 1–30		Pss 31–150	Diff.		Hebrew Bible (Less Book of Ps.)	Diff.
G-stem	60.5%	vs.	56.69%	*-3.82%*	vs.	69.55%	*9.04%*
D-stem	18.79%		19.97%	1.17%		11.24%	-7.56%

Although both corpora from *P*-Psalms are significantly impoverished in their saturation of G-stem verbs as compared to the broader *P*-Hebrew Bible, *P*-Pss 31–150 is even more so. In the sample corpus the G-stem is utilized almost 4% more often than in the remaining Psalms (emphasized in italics above), yet still far less than in the *Peshiṭta* version of the Hebrew Bible on the whole (≈9% less), putting the distribution of the G-stem in the sample corpus between the two longer corpora.[114] As regards the D-stem, both texts from the Psalms align closely in their usage rate of the stem, but both of these rates are significantly higher than what is attested by the *P*-Hebrew Bible (*P*-Pss 31–150 employs the D-stem 8.73% more often than the *Peshiṭta* translation of the Hebrew Bible). For now we simply note that far and away the greatest variances amongst the verbal stem distribution in the Syriac texts occurs between the two Psalms corpora and the wider Hebrew

114. This can be represented schematically as: *P*-Psalms (56.69%) < *P*-Pss 1-30 (60.5%) < *P*-Hebrew Bible (69.55%).

Bible with respect to the G- and D-stems, a fact that will become important in the selection of *S* in the $S : T_D$ to follow.

3.1.2 *Interlinguistic Distribution of Verbal Stems*

The intralinguistic observations made thus far with respect to the distributions of the Hebrew and Syriac verbal stems has demonstrated that a sample corpus of the first thirty Hebrew psalms and their translation into Syriac are fitting representatives of the larger corpora of which they are a part. It is now necessary to consider these distributions interlinguistically in order to establish an antecedent *S* in the $S : T_D$ analogy from which our analysis can proceed. This is because in order to be in the best position to elucidate the functional relation *R* that the Syriac translators established in their $S : T_D$ analogy it is critical that the linguistic items chosen for *S* arise from their actual usage patterns rather than the pre-critical choice(s) of the researcher.

The following table captures the variance in distributions of those stems that are common to both Hebrew and Syriac as they are attested in the three corpora investigated. Hebrew and Syriac have more verbal stems in common than just these three, but the G-, D-, and H-stems have been singled out for analysis because in addition to their being shared between these languages, they are also those that are the most frequently employed in the texts investigated (see TABLE 3.5 above).

TABLE 3.6: INTERLINGUISTIC STEM VARIANCE

		Pss 1–30		**Pss 31–150**		**Hebrew Bible (Less Ps)**	
G-stem	HEBREW	64.2%	-3.7%	59.96%	-3.27%	68.79%	.76%
	SYRIAC	60.5%		56.69%		69.55%	
D-stem	HEBREW	13.8%	4.99%	15.76%	4.21%	8.65%	2.59%
	SYRIAC	18.79%		19.97%		11.24%	
H-stem	HEBREW	14.7%	-4.15%	15.36%	3.56%	12.56%	-2.51%
	SYRIAC	10.55%		11.8%		10.05%	

A first item to note in TABLE 3.6 is that the variations in the distributions encountered amongst these stems represent the largest disparities in relative frequencies of any of the verbal stems encountered in these texts despite being shared by the languages. It must again be stressed that this macro perspective is a rather blunt instrument unable to decipher which Syriac stems might have been employed for a particular Hebrew form in the *Peshiṭta's Urtext*. Nevertheless, when the distribution of a given morphological form shared by the languages of both a source and target text deviates by as much as 5%, as it is with the D-stem in the sample corpus, this very clearly suggests the presence of translation technique where a motivation other than simply formal

equivalence led to the choice(s) in translation.

To help make sense of the interlinguistic stem distributions presented in TABLE 3.6 it is helpful to first consider two stems that Hebrew and Syriac do not share. In a case where a Hebrew *Vorlage* attests a stem that Syriac does not possess, it is obvious that the translators would be required to use an alternative form in their target text. For example, the Hebrew N-stem, which despite being traceable to Proto-Semitic, is completely absent in Syriac along with every other dialect and phase of Aramaic.[115] Hebrew grammars are unanimous in assigning to the Hebrew N-stem the function of the medio-passive complement to the G-stem,[116] and as such it accounts for 5.65% of all verbs in the Hebrew Bible, a non-trivial proportion for which an alternative means must be employed if these forms are to be brought into Syriac. The function of the Hebrew N-stem is germane here because Syriac in turn possesses a stem not attested in Hebrew but is nevertheless functionally similar to it. Thus while the Aramaic dialects have no N-stem available to express a medio-passive meaning of its G-stem, they do utilize a wider array of *t*-stems, principally the Gt, which is wanting in Hebrew, to serve as the medio-passive counterpart to the basic stem in a manner similar to the *G-stem : N-stem* opposition in Hebrew.[117] Yet, despite the Gt-stem being

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115. To this point, Lipiński states that "no reliable attestation of the N-stem was encountered so far in both Epigraphic South Arabian and the Aramaic group of languages" (Lipiński, *Semitic Languages: Outline of a Comparative Grammar*, §41.16, 393; and O. D. Gensler, "Morphological Typology of Semitic," in *The Semitic Languages: An International Handbook*, 284ff §3.1.6, 157), and Waltke-O'Connor agree saying, "The characteristic *n* augment of the stem functioning principally as the marked counterpart of the G stem is attested over the entire Semitic area with the exception of Aramaic" (*IBHS*, 378). A notable exception to these statements can be found in *Combination I* of the *Deir 'Alla* plaster inscription which, under most attempts at decipherment, attests to three examples of the N-stem (i.e., I.8, 12 [x2]; see J. Hoftijzer and G. van der Kooij, *Aramaic Texts from Deir 'Alla* [Leiden: Brill, 1976]). That the *Combination* texts of *Deir 'Alla* are Aramaic is the conclusion of Hoftijzer (*op. cit.*), yet it is also the case that the inscriptions do exhibit a great many hallmarks of the Canaanite dialects (for these see P. K. McCarter, "The Dialect of the Deir 'Alla Texts," in *The Balaam Text from Deir 'Alla Re-evaluated,* J. Hoftijzer and G. Van der Kooij, ed. [Leiden: Brill, 1991]; 89ff). For this reason, Hackett is far less sanguine about the status of the *Deir 'Alla* plaster inscriptions as a *bona fide* archaic species of Old Aramaic, calling into question whether this is a legitimate example of the use of the N-stem in Aramaic (J. A. Hackett, *The Balaam Text from Deir 'Allā*, Harvard Semitic Monographs 31, F. M. Cross, ed. [Chico, CA: Scholars Press, 1980], 117). For an account of how the N-stem, so pervasive in the Semitic langauges and a genunie relic of Proto-Semitic, is wholly absent from Aramaic see D. Yellin, "The Hippa'el-Niph'al Conjugation in Hebrew and Aramaic, and the Assimilation of the *t* in the Hitpa'el Conjugation," *Journal of the Palestine Oriental Society,* IV, 1924: 85-106, esp. 97-99.

116. The bibliography justifying this point is extensive. For details on the history of research on the N-Stem, as well as being one of the most illuminating and thorough-going treatments of the stem in its own right, see S. W. Boyd, "A Synchronic Analysis of the Medio-Passive-Reflexive in Biblical Hebrew," PhD Dissertation, Hebrew Union College – Jewish Institute of Religion (1993).

117. Evidence of the overlap between the Hebrew N-stem and *t*-stems in Semitic is implicit the statement by Halvey, "Generally, nif'al and hitpa'el are mutually exclusive, that is, only one template can be chosen in a given context for denoting middle-reflexive or inchoative" (R. Halevy, “Reflexive”, in *Encyclopedia of Hebrew Language and*

moribund in Hebrew aside from several contested attestations,[118] it accounts for 4.49% of the Syriac verbs in the *Peshiṭta* translation of the books of the Hebrew Bible. Intuitively then, it would seem that these two stems, the N-stem in Hebrew (5.65% of all verbs) and Gt-stem in Syriac (4.49% of all verbs), are fitting candidates for translational equivalency on a functional level despite their respective absence in one and the other language. This is even more pronounced in Pss 1–30 where the Hebrew N-stem comprises 4.8% of all verbs while the Syriac Gt-stem 4.42% of all verbs.

	Pss 1–30		Pss 31–150		Hebrew Bible (Less Ps)
Hebrew					
N	4.8%		5.56%		5.65%
Syriac		vs.		vs.	
Gt	4.42%		4.46%		4.49%

Thus, a fairly equally distributed medio-passive verbal stem that is nevertheless formally unique to these languages is a *Tendenz* that holds across all three corpora investigated here.[119]

The point of underscoring the distributional regularity between two stems that are respectively unique to Hebrew and Syriac is that despite lacking a formal equivalence, the common function of these verbal forms seems to have contributed to their remarkably similar distributions irrespective of corpus genre or length. This functional rather than formal alignment makes the comparatively wide disparities in the proportions between the G-, D-, and H-stems captured in TABLE 3.6 above all the more curious[120] as the level of dissonance between these shared

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Linguistics,G. Khan, ed. [Brill Online, 2013], s.v. "Reflexive").

118. Four times the root פקד appears with a *t*-infix but without the characteristic doubling of the second radical of the Dt-stem in Judg. 20.15 (וַיִּתְפָּקְדוּ, הִתְפָּקְדוּ), v.17 (הִתְפָּקְדוּ) and v.21.9 (הִתְפָּקְדוּ). Both Brockelmann (*Grundiss der Vergleigchenden Grammatik*, 529ff) and Blau (*Phonology and Morphology of Biblical Hebrew*, 218; "Über die t-Form des Hif'il im Bibelhebräisch," *Vetus Testamentum* 7.4 [1957]: 386) believe these forms to be genuine attestations of a Hebrew Gt-form. However, the long *ā*-vowel under R_1 in a pre-tonic open syllable would be unexpected if patterning with the Gt-forms of cognate languages which all have R_1 leading a pre-tonic closed syllable either as first member of a consonant cluster with *shewa mobile* or as the leading edge of a CVC group. The pre-tonic open *qameṣ* in these forms is more akin to the compensatory lengthening exhibited prior to gutturals, a reflex most likely occasioned by the emphatic consonant *qôf* as R_2. This is also the position of König in F. E. König, *Historisch-Kritisches Lehrgebäude der Hebräischen Sprache*, Vol. 1 (Leipzig: J. C. Hinrichs'sche Buchhandlung, 1881), 198ff.

119. The same notion can be felt in the statement of M. Farina, "When comparing the distribution of the (-)*t*- affix and of the *n*-prefix in Aramaic dialects and in Biblical Hebrew, respectively, one notices that there is a sort of complementary distribution. In the first group the *t*-stems are widespread and progressively develop into a full system, whereas the *n*-stem is only scantly and doubtfully attested. On the contrary, in Biblical Hebrew the *n*-stem is diffused and productive, while the *t*-prefix, although well rooted into the verbal system, is limited to the intensive stem" (M. Farina, *An Outline of Middle Voice in Syriac: Evidences of a Linguistic Category* [Piscataway, NJ: Gorgias Press, 2011], 59).

120. This effect is particularly noteworthy because the aggregate number of verbs for each language in Psalms 1–

stems far outstrips that of the N- and Gt-stems just discussed. That the Syriac translators seemed to have appreciated the function of verbal stems irrespective of a corresponding form in their own language immediately suggests that the variation in the distributions exhibited in stems that the two languages *do* share is owed to different construals of the events they are denoting with verbs in the G-, D-, and H-stems.

Furthermore, in the higher resolution afforded by the shorter length of the Psalms corpora two additional aspects of the data come into focus. Firstly, the relative proportions of D- and H-stem verbs in these Psalms texts are markedly greater than in they are in the books of the Hebrew Bible.

		Pss 1–30	**Diff.**	**Pss 31–150**	**Diff.**	**Hebrew Bible (Less Ps)**	**Diff.**
D-stem	Hebrew	13.8%	4.99%	15.76%	4.21%	8.65%	2.59%
	Syriac	18.79%		19.97%		11.24%	
H-stem	Hebrew	14.7%	-4.15%	15.36%	-3.56%	12.56%	-2.51%
	Syriac	10.55%		11.8%		10.05%	

Secondly, although this effect takes place with both verb forms, it does so unevenly. For both *P*-Pss 1–30 and *P*-Pss 31-150 the relative frequency of the D-stem outpaces that of their Hebrew counterparts, with a 4.21% difference for Pss 31-150, a margin that expands to 4.99% in the sample corpus.[121] Conversely, for the H-stem just the opposite occurs. While both Pss 1–30 and Pss 31-150 pattern together in attesting a greater density of Hebrew H-stem verbs as compared to the other books of the Hebrew Bible, these H-stems are utilized markedly more often than in the Syriac corpora. In concert with these discrepancies in the distributions of the D- and H-stems in Hebrew and Syriac is the variation displayed by the G-stem in both languages.

		Pss 1–30	**Diff.**	**Pss 31–150**	**Diff.**	**Hebrew Bible (Less Ps)**	**Diff.**
G-stem	Hebrew	64.2%	-3.7%	59.96%	-3.27%	68.79%	.76%
	Syriac	60.5%		56.69%		69.55%	

Within each respective language, it was noted above that both texts from the Psalms utilize the G-stem much less often than do the books of the Hebrew Bible, but cross-linguistically, this phenomenon is even more pronounced in Syriac where the G-stem is used markedly less in *P*-Pss 1–30 and *P*-Pss 31–150 than in their Hebrew counterparts.

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30 (Hebrew, 1,000 vs. Syriac, 995) as well as the Psalter on the whole (Hebrew, 5,733 vs. Syriac, 5,436) is extremely close thus offering a considerably more meaningful picture of the real situation than is possible across the entire Hebrew Bible.

121. In fact, the greatest variance between any two proportions of verbal stems irrespective of corpus is the D-stem in Pss 1–30 with nearly 5% more occurring in Syriac than in Hebrew, and this despite the fact that the aggregate number of verbs in these Psalms differs by only five verbs (see TABLE 1).

By way of initial summary of the interlinguistic data just presented, the important points to underscore are that even though the Psalms corpora in both languages utilize their D- and H-stems significantly more often than do the remaining books of the Hebrew Bible, the Hebrew and Syriac texts do so unevenly. The distribution of the Syriac D-stem is markedly greater than that of the Hebrew D-stem, while in turn, the Hebrew H-stem displays a greater density than it does in Syriac. Against this landscape is the G-stem, which the Syriac employs more than 3% less often than in Pss 1–30 and 31-150, despite being nearly identical in distributions in the Hebrew Bible.

In addition to these general trends it is also important to note that the degree to which the D-stem is used more frequently in the Syriac corpora matches almost precisely the rate at which the H-stem is used more often in the Hebrew texts.

	Pss 1–30			**Pss 31–150**			**Hebrew Bible (Less Ps)**		
	Hebrew	Syriac	Diff.	Hebrew	Syriac	Diff.	Hebrew	Syriac	Diff.
D-stem	13.8%	18.79%	4.99%	15.76%	19.97%	4.21%	8.65%	11.24%	2.59%
H-stem	14.7%	10.55%	-4.15%	15.36%	11.8%	-3.56%	12.56%	10.05%	-2.51%
	Statistical Variance (σ^2)		.204%	Statistical Variance (σ^2)		.151%	Statistical Variance (σ^2)		.065%

Such a phenomenon raises the question as to whether the rather complementary shape of the D- and H-stem distributions exhibited between languages across these texts is due to the fact that the load of the impoverished number of H-stems in Syriac vis-à-vis the Hebrew is being carried by the Syriac D-stem thus resulting in its elevated frequency. Given the regular association of the Semitic D-stem with some manner of causativization, it could be the case that the Syriac translators valued a functional correspondence over one of form in a manner suggested by the inversely proportional Syriac N-/Hebrew Gt-stem distributions discussed above, and drew upon the causative nuance of their own D-stem to translate the unambiguously causative H-stem in their Hebrew *Urtext*. However, the distributional profile of the G-stem across these texts of both languages complicates a potential explanation of the deviations affecting the D- and H-stems based upon functional equivalence, especially in the Psalms corpora. That the Syriac G-stem is utilized less frequently than that of Hebrew allows for the possibility of an alternate interpretation of the D-/H-stem data, viz., that at least a portion of the Hebrew G-stem forms in the Psalms texts are being translated into Syriac with the D-stem given that the frequency of the latter significantly outstrips that of its Hebrew cognate to the point that it constitutes the greatest disparity of shared stem distributions across all three texts subjected to analysis.

3.1.2.1 *Interlinguistic Distribution of the Verbal Stems: Significance and Conclusion*

What these interlinguistic observations reveal is that even from this coarse-grained perspective the translation of the verbal stems from Hebrew into Syriac for these texts was likely more so motivated by a *functional* as opposed to purely *formal* relations. In other words, when translators eschew a formal, morphological equivalent of a given form in their source text in deference to an alternate form despite the availability of a direct cognate, this suggests that a more fitting semantic or functional equivalent was preferred in spite of the variance in formal features. For example, there may be certain verbal predicates denoting events that in Hebrew are typically marked by a non-D-stem verb, but there exist some particular linguistic or pragmatic features in such contexts that were thought to align more closely with the Syriac translators' functional understanding of their own D-stem and so tolerated a departure from their source text's *signifiant* in order to preserve its *signifié*.

These extra-formal, linguistic motivations on the part of the translators that led them to depart from the form of their source text that would prove most valuable in leveraging translated Syriac for the purpose of elucidating any plural nuances associate with the Syriac D-stem. Such formal variants owed to functional choices present a unique opportunity to exploit the fundamental linguistic axiom that the nexus of form and function in language is fundamentally arbitrary,[122] in other words, from the fact that two languages share a given linguistic form it does not follow that they also associate the same function(s) with that form. Lyons articulates this principle well when saying, "there are distinctions of meaning made in one language that are not made in another; that learning the vocabulary of another language is not simply a matter of acquiring a fresh set of labels to attach familiar meanings."[123]

Thus, the results of the analysis of the verbal stem distributions presented above not only confirm that the pattern of verbal usage in the sample corpus is consistent with that of the longer corpora to which it was compared, but in light of the variations between the distributions of shared verbal stems, this also suggests a fruitful and methodologically sound *testo di lingua* for the analogical deduction of the Syriac D-stem.

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122. This is the fundamental concept of Saussure's linguistic program: "Le lien unisssant le signifiant au signifié est arbitraire, ou encore, puisque nous entendons par signe le total résultant de l'association d'un signifiant à un signifié, nous pouvons dire plus simplement: le signe linguistique est arbitraire" (Saussure, *Cours de Linguistique Générale*, 100).

123. Lyons, *Introduction to Theoretical Linguistics*, 55.

3.2 Verbal Stem Distributions, Translational Equivalents, and the Selection of *S*

While the distributional data presented thus far suggests that the pattern of verbal usage in the sample corpus is consistent with the language of much larger corpora and that the translators were unafraid to express the sense of their *Urtext* at the expense of its form, it now remains to exploit this data in the selection of the source domain *S* in the $S : T_D$ analogy. The choice of the linguistic items to serve as *S* in such an argument structure should be consistent with, and be motivated by, the statistical distribution of the forms as they are encountered in the text sample itself and not arbitrarily selected by the researcher.

To begin leveraging these statistical analyses in the selection of the comparative basis *S*, the following data from TABLE 3.6 above has been repeated below.

		Pss 1–30	
G-stem	HEBREW	64.2%	-3.7%
	SYRIAC	60.5%	
D-stem	HEBREW	13.8%	4.99%
	SYRIAC	18.79%	
H-stem	HEBREW	14.7%	-4.15%
	SYRIAC	10.55%	

These data show that the Hebrew G-stem in the sample corpus exhibits a markedly richer saturation (64.2%) than that of its counterpart in the same *Peshiṭta* Psalms (60.5%). This was also the case for the Hebrew H-stem, which accounts for 4.15% more of the verbs in Pss 1–30 than does the Syriac H-stem in *P*-Pss 1–30. Given that the Hebrew G- and H-stems comprise a nontrivially larger proportion of the verbs in the sample corpus than is attested by their Syriac translations suggests that the *Peshiṭta* version is utilizing alternate means for rendering these two Hebrew stems. One of the potential "alternative means" that commends itself from this distributional data is the Syriac D-stem, which, unlike the Syriac G- and H-stems that are used more sparingly in the *Peshiṭta* sample corpus than in the Hebrew, comprises a greater proportion of verbs in the Syriac text (18.79%) than does its Hebrew counterpart (13.8%) by nearly 5%. This distributional profile is suggestive of a translation technique that may involve a difference in language systems for how Hebrew and Syriac denote various types of events, a state of affairs that would prove tremendously valuable for deducing a function of the Syriac D-stem from an underlying Hebrew form.

In order to account for the largesse of Hebrew G-stem verbs in the sample corpus, it is helpful to consider the translational equivalents of every Hebrew G-stem verb in *P*-Pss 1–30 as calculated by the *Targuma* computational method.

Table 3.7: *Peshiṭta* Translational Equivalents of the Hebrew G-stem in *P*-Pss 1–30

Hebrew G-stem Total Forms: 642	Syriac Translational Equivalents	Count	% of Total
	G-stem	425	66.2%
	D-stem	58	9.03%
	H-stem	25	3.89%
	Gt-stem	23	3.58%
	Dt-stem	14	2.18%
	Ht-stem	8	1.25%
	Št-stem	1	.16%
	Non-Verbal		
	Noun[124]	35	5.45%
	Adjective	5	.78%
	Minuses[125]	48	7.48%

In light of the fact that the Hebrew G-stem is used 3.7% more often than its Syriac G-stem counterpart, the higher resolution afforded the computational method confirms that the *P*-Pss 1–30 enlists a variety of means other than its formal cognate to bring such verbs into Syriac.

Yet, in concert with the greater frequency of G-stem forms in the Hebrew sample corpus over against the Syriac, the distributional analysis also revealed a significantly richer density of the D-stem across all *Peshiṭta* corpora over against their Hebrew *Vorlagen*. This raises the specter of whether the elevated distribution of their Syriac D-stem forms was a by-product of its having been used to translate the Hebrew G-stem. For the sample corpus, this too is confirmed by computational analysis that found that over 9% of all Hebrew G-stem verbs in the sample corpus were in fact translated with a D-stem verb in the *Peshiṭta*. This figure is even higher when the "minuses," which affect 7.48% of the Hebrew G-stem verbs in the corpus, are taken into account.[126]

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124. These are all instances where the Hebrew has a substantival participle or infinitive and will be discussed in more detail below.

125. The category "Minus" refers to instances where a given G-stem verb in a clause either: (a) has no corresponding verbal form in the parallel Syriac clause; or (b) the parallel verb in the Syriac text occurs in a different clause than that which is parallel to the one containing the Hebrew G-stem form in question. The most frequent source of category (b) minuses in the sample corpus arose from Syriac's penchant to introduction a relative clause introduced by the particle -ܕ that is absent from the Hebrew when translating a participial *nomen agentis*.

126. There are 24 instances of the (b)-type "minuses" as defined in the previous note involving a Hebrew G-stem verb. Of these, 17 are translated with the Syriac G-stem, 4 with the D-stem, two with the Dt-stem, and in a single instance, the Gt-stem. With these numbers incorporated into the statistics for the translational equivalents presented in table 3.7, the percentage of Hebrew G-stem verbs that are translated with the Syriac G-stem increases to 68.84% and those by the Syriac D-stem to 9.65%.

Precritically, this statistical profile suggests that the greater frequency of Syriac D-stem verbs in the sample corpus is due to the fact that it is being used to translate nearly a tenth of all Hebrew G-stem verbs attested there and simultaneously why the Syriac G-stem is so significantly underrepresented. The finer-grained analysis of translation equivalents wrought through the establishment of parallel syntactical elements within parallel clauses confirms this to in fact be the case. With such a sizable proportion of Hebrew G-stem forms being translated with the Syriac D-stem, the former immediately commends itself as a potential candidate to fill the role of *S* in the $S : T_{\text{D}}$ analogy to help elucidate a possible plural nuance of the Syriac D-stem. In a scenario where these Hebrew G-stem forms serve as *S*, the central concern becomes what might it be about these particular contexts and events denoted by these particular Hebrew verbs that led the Syriac translators to render them with a D-stem verb in their own language at such an elevated rate.

Before settling on the Hebrew G-stem as the source domain *S* in our translational analogy, it is also necessary to consider another conspicuous discrepancy amongst verbal stem distributions summarized in TABLE 3.6 above, viz., that between the H-stems in Hebrew and Syriac.

		Pss 1–30	
H-stem	HEBREW	14.7%	-4.15%
	SYRIAC	10.55%	

That the Syriac H-stem is employed notably less than that of the Hebrew in the sample corpus indicates that the Syriac translators have employed means beyond their own H-stem to translate these Hebrew verbs. The statistics for how the Syriac has rendered the Hebrew H-stem verbs in the sample corpus as determined by the *Turgama* method appears in TABLE 3.8 below:

TABLE 3.8: *PESHIṬTA* TRANSLATIONAL EQUIVALENCIES OF THE HEBREW H-STEM IN *P*-PSS 1–30

HEBREW H-STEM TOTAL FORMS: 147	SYRIAC TRANSLATIONAL EQUIVALENTS	COUNT	% OF TOTAL
	H-stem	48	32.65%
	G-stem	44	29.93%
	D-stem	33	22.45%
	Dt-stem	5	3.4%
	Ht-stem	1	.68%
	Š-stem	1	.68%
	Non-Verbal		
	Noun	3	2.04%
	Adjective	3	2.04%
	Minuses	9	6.12%

What this data for the Syriac translational equivalents for the Hebrew H-stem further confirms is that the overall richer saturation of Syriac D-stem verbs in *P*-Pss 1–30 as compared to their Hebrew D-stem counterparts is in fact owed to it being utilized for a wider array of Hebrew verbs than just its formal cognate. Here, as was the case with the Hebrew G-stem above, the Syriac D-stem is used to translate the Hebrew H-stem at a significant rate, comprising nearly one-quarter (22.45%) of all of the Syriac verbs in *P*-Pss 1–30 used in translation of the Hebrew H-stem.[127] Such a translational profile could, *prima facie*, be accounted for as having been motivated by the common causative function often adduced for both the H- as well as D-stems. Since the grammarians are united in their conviction that the Hebrew H-stem is "the active conjugation [i.e., stem] of causative action,"[128] then it would be natural for the Syriac translators to use a stem in their own language with a similar function. In such a scenario then, the relation *R* that obtains in the analogy *H-stem* : *D-stem* is one of causativization.

While it may be a valuable observation that the causative function shared by the H- and D-stems potentially manifested in an observable translation technique in *P*-Pss 1–30, there are several considerations related to both the Hebrew H-stem as well as to its statistical profile in the corpus that would detract from its usefulness as the antecedent *S* in $S : T_D$. The first issue is semantic. Utilizing the Hebrew H-stem as the source domain *S* in an effort to deduce the function of the Syriac D-stem in an analogical schema requires that the function of the Hebrew H-stem be sufficiently transparent and predictable (see discussion on §3.3 above). However, a cursory survey of scholarly opinion on the Hebrew H-stem reveals that this is anything but the case. For example, Waltke-O'Connor state that "The fundamental causative notion of the *Hiphil* can be nuanced by consideration of the kind of verbal root to which it is affixed and by the modal relationship that exists between the subject and the objects(s)."[129] This need to "nuance" the causative sense of the Hebrew H-stem in various syntactical environments and in light of certain verb classes has led Claassen to conclude that "the 'causative' may not be regarded as the basic function of the Hiph'il. It is rather one of the few functions in which the Hiph'il could be used."[130] As a result, while

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127. Like the statistics relating to the Hebrew G-stem forms above where a large portion of the minuses were simply owed to the Syriac verb appearing in a non-parallel clause due to the introduction of a relative clause in the Syriac, the same is true for the nine minuses relating to the Hebrew H-stem. However, where the minuses of the G-stem revealed a number of additional Syriac D-stem verbs used for its translation, in regard to the Hebrew H-stem there are no Syriac D-stem forms in non-adjacent relative clauses. Of the nine minuses affecting Hebrew H-stem, five are due to the Syriac verb being separated from its parallel verb due to the intervention of a relative clause. These five verbs are comprised of three G-stem verbs, one H-stem, and one Ht-stem.

128. Joüon, *Grammar of Biblical Hebrew*, 160.

129. *IBHS*, 436.

130. W. T. Claassen, "The Hiph'il Verbal Theme in Biblical Hebrew," PhD Dissertation, University of Stellenbosch

causativization may very well have motivated the pairings of the *Hebrew H-stem* : *Syriac D-stem* in *P*-Pss 1–30, it is far from a given that this is in fact the case.

The second issue that confronts selecting the Hebrew H-stem for the variable *S* in our analogical schema is statistical in nature. It is the case that in *P*-Pss 1–30 the Hebrew H-stem is translated with the Syriac D-stem at a much higher *rate* (22.45%) than the Hebrew G-stem is translated with the D-stem (9.03%), but with 642 *total verbs* in the sample corpus, the Hebrew G-stem is used nearly 4.5x more often than the 147 H-stem verbs. Thus, while a much larger *percentage* of Hebrew H-stem forms are translated with the Syriac D-stem as compared with the percentage of Hebrew G-stem verbs translated with the D-stem, the decidedly larger population size of the Hebrew G-stem cloaks the fact that nearly 2x more Syriac D-stem verbs are employed in the translation of a Hebrew G-stem verb than in one of the H-stem. This can be seen in the following table where every Hebrew linguistic item translated with a Syriac D-stem form has been tabulated. The figures appearing in parens will be explained in the more general discussion below.

Table 3.9: Hebrew Verbs Translated with the Syriac D-Stem in *P*-Pss 1–30

Number of Syriac D-stem Verbs Used for the Following Hebrew Items (187 Verbs in Total)	Count	% of Total
Heb. D-stem	62 (1)	33.16%
Heb. G-stem	58 (4)	31.02%
Heb H-stem	33 (0)	17.65%
Heb. Dp-stem	3	1.6%
Heb. Dt-stem	2	1.07%
Heb. N-stem	1	.53%
Non-Verbal		
Noun	9	4.81%
Adjective	7	3.74%
Minuses	12	6.42%

What these data show is that is that nearly one-third of all the Syriac D-stem verbs attested in *P*-Pss 1–30 were employed in the translation of the Hebrew G-stem. In terms of their absolute frequencies, it is striking that the Syriac D-stem is used to translate its Hebrew cognate only four more times than it was utilized as a translational equivalent for the Hebrew G-stem. In other words, in a raw count, the Syriac D-stem was almost as frequently preferred for the Hebrew G-stem as it was for its formal cognate. When those Hebrew verbs are taken into account whose

(1971): 95.

translational equivalent appears in a non-parallel clause due to a subordinating relative clause in the Syriac, these raw frequencies are even more striking.[131] There is only one Syriac D-stem verb that has been separated from its Hebrew D-stem translational equivalent by an intervening relative clause, while there are four Syriac D-stem forms separated from their Hebrew G-stem forms by the same means. Adjusted for these so-called "minuses" where the Syriac form used to render a Hebrew verb does not appear in a parallel clause due to hypotaxis, the raw count for the Hebrew D-stem verbs translated with a Syriac D-stem is nearly the same as those Hebrew G-stem forms translated with the Syriac D-stem.[132] Updating the proportion of Hebrew verbs appearing in these stems changes their statistical distributions to the following:

Table 3.10: Hebrew Verbs Translated with Syriac D-Stem in *P*-Pss 1–30 Adjusted for Relative Clauses

	Number of Hebrew Verbal Stems Translated with Syriac D-Stem				
	Syriac D-Stem Verbs as Translational Equivalent	% of Total	Syriac D-Stem Verbs Separated from Translational Equivalent by Relative Clause	Total Verbs	% of Total
Heb. D-stem	62	33.16%	1	63	33.69%
Heb. G-stem	58	31.02%	4	62	33.16%
Heb. H-stem	33	17.65%	0	0	17.65%

These statistics showing the proportion of Syriac D-stem verbs utilized to translate various linguistic elements in the Hebrew text (tables 3.9 and 3.10) add a level of depth to the perspective offered by the relative frequencies of the Syriac items used to translate the Hebrew verbal stems (table 3.5). While the percentage of Syriac D-stem verbs used to render the Hebrew H-stem as compared with other Syriac linguistic elements is relatively high, as a proportion of the overall use of the Syriac D-stem it is nevertheless employed for the H-stem roughly half as often as it is for the Hebrew D- and G-stem verbs. Thus, in regard to whether the elevated overall proportion of Syriac D-stem verbs against their Hebrew counterparts revealed in table 3.5 was a reflex of bearing the translational load of the Hebrew G-stem or H-stem whose corresponding proportions of Syriac verbs are markedly lower, table 3.9 demonstrates that it is in fact the Syriac D-stem's use for the Hebrew G-stem that is primarily responsible for the former's elevated overall frequency. The fact that in one third of the times that Syriac translators decided to use their D-stem in *P*-Pss 1–30 it was for the purpose of translating a Hebrew G-stem, a proportion that nearly matches the rate that their own G-stem was used, is a significant and intriguing result. Thus, from a purely statistical perspective it is the Hebrew G-stem that commends itself for the variable *S* in the analogical procedure proposed for the present project. Nevertheless, in addition to the distributional analysis

131. See n.125 above.

132. This is the total of the raw count plus the figure in parens.

that points to the G-stem as the best candidate for the source domain *S* in the $S : T_D$ analogy, another key consideration that commends the G-stem comes out of linguistic considerations.

3.3 The Hebrew G-Stem as S in the $S : T_D$ Analogy

It has already been emphasized several times that irrespective of the linguistic items assigned to the variable *S* in our analogical method, its function needs to be sufficiently transparent if it is to provide a reliable basis for a functional extension to the Syriac D-stem. Thus, in addition to the statistical reasons just enumerated, setting the variable *S* to the G-stem has the further advantage of proceeding from a morphologically and functionally "simple" form.

From a purely formal perspective, the Hebrew G-stem is unmarked relative to the rest of the verbal paradigm, lacking as it does affix and reduplication.[133] A consequence of the Hebrew G-stem's morphological simplicity is that it is semiotically unmarked for a discrete function where, "A mark signals the presence of a given property, and is understood as being opposed in form and/or in function to non-signalization of that same property."[134] To interpret the G-stem's simplicity as an indication of its lack of markedness draws upon a descriptive tool that is well-entrenched in linguistic theory. Speaking to the marked/unmarked dichotomy, Jakobson writes:

> When a linguist investigates two morphological categories in mutual opposition, he often starts from the assumption that both categories should be of equal value, and that each of them should possess a positive meaning of its own: Category I should signify A, while Category II should signify B; or at least I should signify A, and II the absence or negation of A. In reality, the general meanings of correlative categories are distributed in a different way: if Category I announces the existence of A, then Category II does not announce the existence of A, i.e. it does not state whether A is present or not. The general meaning of the unmarked Category II, as compared to the marked Category I, is restricted to the lack of "A-signalization."[135]

The morphologically unmarked status of the Hebrew G-stem correlates with its syntactic and semantic simplicity, lacking as it does any restrictions with regard to valency and situation type, thus establishing itself as a kind of "default" stem within the Hebrew verbal system (this applies more broadly to all Semitic languages). To consider the Hebrew G-stem the default stem is not to suggest that it "means" something semantically simple, such as "active voice" or "simple

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133. For an insightful discussion on the morphological simplicity of the Hebrew G-stem vis-à-vis the so-called "derived" stems, see Aronoff, *Morphology by Itself*, 146; and for a similar assessment see also *IBHS*, 362.

134. P. D. Korchin, "Markedness and Semitic Morphology," PhD Dissertation, Harvard University (2001): 1.

135. R. Jakobson, "Structure of the Russian Verb," in *Roman Jakobson: Russian and Slavic Grammar Studies 1931-1981*, L. R. Waugh and M. Halle, trans. and eds., (Berlin: Mouton, 1984), 1; originally as "Zur Struktur des russischen Verbums," in *Gvilelmo Mathesio qvinqvagenario a discipulis oblata* (Prague, 1932).

action," but rather that when the denotation of an event does not require the morphological marking of a more specialized functional nuance associated with one of the so-called "heavy" stems,[136] it defaults to the G-stem. This unmarked, default, status of the Hebrew G-stem is also the view of Aronoff who states, "We may say that it is the default binyan, meaning that any verb root not assigned to another binyan by whatever means will occur in the *qal.*"[137] This was also confirmed empirically by Verheij who, in his sophisticated statistical analysis of the Hebrew verbal stems concluded, *inter alia,* that:

> From a quantitative perspective, then, it appears that the Qal is not just the largest binyan, but that there is indeed a very substantial numerical difference between it and the other binyanim. It may be no coincidence that Qal, which is the most simple binyan in the morphological terms…, should also turn out to be the most frequent one. Therefore, it may perhaps be best seen as the 'default binyan' of the Hebrew Bible, to be used in cases where there is not particular reason to use one of the other, smaller, and perhaps more specific binyanim.[138]

As the default stem of the Hebrew verbal system, it is not that the G-stem "has" a function, but rather "it may be the case that the Qal just activates the verbal potential of the root."[139] Such a notion of the G-stem agrees with Weninger's comment on the basic stem in Proto-Semitic that, "the weight of the lexical semantics lies in the consonants."[140] As a default stem that simply allows consonantal roots to enter into the *parole* as verbs denoting events, the Hebrew G-stem is not:

> …semantically robust in the way that we expect of productive patterns [i.e., those used in the creation of neologisms]. But this last fact is understandable from its nature as a default class: it doesn't have to be robust, for all it does is to sweep up what the more powerful classes have left in their wake. *Qal* is therefore derivationally marginal but inflectionally pervasive. Such a class would be difficult to account for without the notion of a default.[141]

It may seem counterintuitive to choose a stem for the variable *S* that as "a default binyan would not seem to have any particular function at all,"[142] especially when it has been continually stressed how important a thorough-going knowledge of the antecedent in the $S : T_D$ is in deducting a relation *R* between the terms of an analogical argument. However, as intimated in the quotation by Weninger above, the "default" status of the Hebrew G-stem means simply that the stem's

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136. See n.389 above for this descriptive term.

137. Aronoff, *Morphology by Itself*, 146.

138. A. J. C. Verheij, *Bits, Bytes, and Binyanim*: *A Quantitative Study of the Verbal Lexeme Formations in the Hebrew Bible* (Leuven: Peeters, 2000), 42.

139. Ibid., 131.

140. Weninger, "Reconstructive Morphology," 155.

141. Aronoff, *op. cit.* See also Goshen-Gottstein who follows Hommel in his use of the "null set" symbol, ∅, for the G-stem to indicate its default status (Goshen-Gottstein, "The System of Verbal Stems in the Classical Semitic Languages," 87; and F. Hommel, *Die Semitischen Völker und Sprachen* [Leipzig: Otto Schulze, 1883]).

142. Verheij, *op. cit*., 42.

contribution to the semantic profile of the underspecified lexical "core"[143] of the consonantal root is at most its most minimal when compared to the so-called "derived" stems. This follows from the fact that, as Arad has shown, "The root receives specific interpretations *when embedded in the context of particular environments*,"[144] such that, "the binyan serves as such an environment where the root is assigned an interpretation."[145] As such, the Hebrew G-stem can then be seen as the morphological context that has the smallest effect upon the semantics of a verb-form in the derivational process of lexeme formation and is the most transparent in the sense that it allows for the lexical core of the root to be most fully realized apart from the influence of a given verbal stem.

The advantage of this minimal contribution to the meaning of a verbal lexeme on the part of the G-stem for the present project is that in selecting it for the source domain *S* it is possible to avoid the well-documented uncertainties of the other stems' contribution to the semantics of a verb-form. As a result, of all the verbs in the Hebrew verbal system it is those in the G-stem for which the lexicon alone is able to provide the fullest account of their meaning. For comparative purposes then, verbs in the Hebrew G-stem are best-suited to serve in the source domain *S* in an analogical relation to the Syriac D-stem forms in our sample corpus because the former's function and semantics stand the best chance of being fully understood and exploited by the Syriac translators. With the Hebrew G-stem verbs being unencumbered by any semantic and syntactical contexts in which they can appear, the Syriac translators were free to choose the best stem in their own language to capture the broad spectrum of nuances able to be subsumed by a default stem. This has the effect of determining a relation *R* in the $S : T_{\text{D}}$ analogy that does not rely upon knowledge of the meaning and/or function of one of the Hebrew verbal stems.

A further advantage of leveraging the *Hebrew G-stem* : *Syriac D-stem* analogy for $S : T_{\text{D}}$ is that such a *basic stem* : *non-basic stem* contrast permeates every proper attempt at delineating the function of the verbal stems past and present.[146] In fact, a failure to present the semantic and/or functional contribution of the Semitic verbal stems by way of contrast has been met with sharp criticism. This was evident, for instance, in Goshen-Gottstein's review of Moscatti's treatment of

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143. This is the terminology utilized by Arad in her version of the "root hypothesis," where an underspecified lexical core of a root takes on "multiple contextual meaning" (MCM) such that the "context" of a root is the "environment" of the different verbal stems (see M. Arad, *Roots and Patterns: Hebrew Morpho-Syntax* [Dordrecht: Springer, 2005], 94–105).

144. Arad, *op. cit.*, 193; original emphasis.

145. Ibid.

146. That such an approach is well-entrenched in Semitic grammatical methodology as represented by the words of Gesenius, which even if overstated, nevertheless capture the typical approach to the semantics of the Semitic verb: "From the pure stem, or *Qal*, the derivative stems are formed according to an unvarying analogy, in which the idea of the stem assumes the most varied shades of meaning, according to the changes in its form" (*GKC*, 1115).

the verbal stems, which the former chastised, saying, "this description [of the verbal stems] steers clear (consciously?) of any systematic presentation and presents the facts atomistically."[147] Furthermore, Waltke-O'Connor lament that treatments of the verbal stems "have neglected the very systematic character of the system,"[148] and that "the atomistic approach often fails to take adequate note of the fact that the verbal stems constitute a system, a system of clearly differentiated morphemes, which, by definition, involves both form and function."[149] The fundamental need to approach the stems as a system of contrasts can also be seen in the recent work of Doron who, in a more formally linguistic approach, says that no meaningful description of the semantic contribution of a given stem to a verbal lexeme can take place apart from an analogical contrast between variously-stemmed verbs of the same root: "it is crucial that all the meaning contrasts discussed…are achieved by the pairing of equi-rooted verbs. On the other hand, when a single verb is derived from a root, i.e. when the verb is not paired with another equi-rooted verb, then the contribution of the template [i.e., stem] is more erratic."[150] Yet, it is not just "contrast" alone that is essential for elucidating the functional contribution of the stems, but critically, contrast of a given stem with a "basic form." To this point, Berman's words are particular appropriate for the method being proposed here:

> The first question here is what constitutes the "basic form" of any verb in the language. For it is this basic form which needs to be entered at the head of any given set of verbs in the language, along with an indication of its idiosyncratic semantic and syntactic features. All other related verb forms (where the notion "related" means "having a shared morphological and semantic base") are then characterized as deriving from and based upon this "basic form" in the sense that they incorporate additional properties to be associated with the given base.[151]

Thus, it is clear that the method of deducting the function and/or semantics of a non-basic stem by way of recourse to its relationship with the G-stem enjoys a long-standing and well-motivated tradition. Furthermore, Doron's requirement that the function of stems be delineated through the comparison of equi-rooted verbs is also eminently compatible with *Hebrew G-stem* : *Syriac D-stem* contrast in a source and target text as is being proposed here. Clearly, it will not (necessarily) be the case that the Hebrew and Syriac will use the same root in the *G-stem* : *D-stem* opposition as Doron advocates, yet heuristically it might be supposed that the Syriac translators chose a root in

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147. Goshen-Gottstein, "The System of Verbal Stems," 72, n.8; cf., S. Moscati, A. Spitaler, E. Ullendorff, W. von Soden, *An Introduction to the Comparative Grammar of the Semitic Languages: Phonology and Morphology*, S. Moscati, ed. (Wiesbaden: Harrassowitz, 1964), 122–130.

148. *IBHS*, 353.

149. Ibid.

150. A. Doron, "Agency and Voice: The Semantics of Semitic Templates," *Natural Language Semantics* 11 (2003): 16.

151. R. A. Berman with S. Bolozky, *Modern Hebrew Structure* [Tel-Aviv: University Publishing Projects, 1978], 95.

their own language with a semantic core (or "lexical prime"[152]) thought to be equivalent to that encountered in their Hebrew text and thus an appropriate choice for translation. As such, two roots, while orthographically distinct and residing within the lexicon of different languages, can be considered "semantically equi-rooted" for the purposes of intelligibly rendering the *Urtext* into the target language. With such "semantically equi-rooted" forms constituting the basis of the *Hebrew G-stem* : *Syriac D-ste*m analogy, it is then possible, as Doron and Berman suggest, to deduce the function of the stem of the verb occupying the target domain of the analogical comparison (i.e., T_{D} in our schema).

3.4 Statistical and Linguistic Motivation for *S*: Conclusion

What this chapter has shown is that since the distributions of verbal stems attested in the sample corpus are extraordinarily consistent with those of longer corpora of various genres, it is safe to assume that Pss 1–30 in Hebrew and in Syriac constitute samples of text that accurately represent the compositions of which they are a part. Beyond the intralinguistic analysis of the verbal stem distributions, the chapter also also examined these distributions interlinguistically. This analysis confirmed that the higher proportion of G-and H-stem verbs in the Hebrew text of the sample corpus over against their counterparts in the *Peshiṭta*, combined with the greater saturation of Syriac D-stem verbs, is due to the fact that the latter is being used to translate those Hebrew G- and H-stem verbs that did not receive their formal equivalent in Syriac in *P*-Pss 1–30.

Since the data revealed that the Syriac translators chose to render a significant proportion of the Hebrew G- and H-stem verbs encountered in their *Urtext* by means of the Syriac D-stem, these two Hebrew stems immediately presented themselves as possible candidates for *S* in the *S* : T_{D} analogy from which a relation *R* could be deduced. The large proportion of Hebrew H-stem forms that are translated with a Syriac D-stem verb in *P*-Pss 1–30 combined with a shared causative nuance made the Hebrew H-stem a strong potential candidate to serve as the foundational element of a comparative analysis.

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[152] In essence, a "lexical prime" is the notion that Semitic speakers primarily associate semantic content with a consonantal root rather than an entire word-form. The concept is a variation on psychological work which found that exposure to an initial cognitive stimulus influences the reaction to a secondary one (see A. D. Friederici, K. Steinhauer, and S. Frisch, "Lexical Integration: Sequential Effects of Syntactic and Semantic Information," *Memory & Cognition* 27.3 [1999]: 438) and for its application to Semitic see D. Ravid, et. al., "Foundations of the Early Root Category: Analyses of Linguistic Input to Hebrew-Speaking Children," in *Acquisition and Development of Hebrew: From Infancy to Adolescence*, R. A. Berman, ed. [Amsterdam: John Benjamins, 2016], 95).

However, further statistical and theoretical considerations in fact pointed to the Hebrew G-stem as being a better fit for the source domain *S*. This is because while a higher *percentage* of Syriac D-stem verbs was used to translate the Hebrew H-stem than the G-stem, this was largely due to the smaller overall population of H-stem verbs in the corpus. Furthermore, when Syriac D-stem was employed in *P*-Pss 1–30, a nearly identical percentage of Syriac D-stem verbs was employed in translation of the Hebrew D-stem, its morphological cognate, as was employed for the Hebrew G-stem. In fact, while nearly one-third of all Syriac D-stem forms were used to translate the Hebrew D-stem, an almost identical proportion was used for the Hebrew G-stem. This suggests that there is some feature possessed by a good number of G-stem forms in the sample corpus that the translators felt to be an appropriate fit with the function of their own D-stem.

While the frequency data concerning the verbal stems for both Hebrew and Syriac in the sample corpus point to the Hebrew G-stem as the best candidate for the variable *S* in $S : T_D$, so also did considerations arising from linguistic theory. As analogical inference proceeds from the familiar to the unfamiliar, it is critically important for *S* to be a linguistic form whose function is ascertainable so as to draw implications with respect to T_D, the D-stem form that the Syriac translators used for *S*. Choosing one of the non-basic, or so-called "derived," stems for *S* runs the risk of employing an "unfamiliar" antecedent in an attempt at drawing implications about an equally "unfamiliar" consequent since many of the functions of these derived stems are as idiosyncratic and contextually conditioned as the D-stem itself. Conversely, the morphological simplicity of the Hebrew G-stem confirms its status as an unmarked form that consequently lacks the more complicated functional accoutrements that are marked and licensed by the more morphologically complex verbal stems. This unmarked quality of the G-stem contributes to its status as the "default" stem for Hebrew, the preferred morphological form of a verbal lexeme when not required to denote the voice and/or transitivity features of the derived stems. Since the G-stem's semantic contribution to a verbal lexeme is the most minimal of all the verbal stems, it is the ideal candidate to serve as the basis of an analogical extension to the Syriac D-stem. In proceeding from the "familiar" to the "unfamiliar" in analogical argumentation, the function and semantics of a G-stem verb are most directly discernible from its consonantal root since the contribution of the verbal stem to the semantic profile of the verbal lexeme is at its minimum.

As a result of these statistical and linguistic considerations, those Hebrew G-stem forms in the sample corpus that have been translated with the Syriac D-stem will constitute the antecedent source domain *S* of the $S : T_D$ analogy out of which a relation *R* will be sought. It is based upon this relation that the Syriac translators liberally applied the *Hebrew G-stem* : *Syriac D-stem* analogy in their own text and it is to these that we now turn.

CHAPTER 4

Lexicalization as a Potential Definition of *R*

In light of the discussion in the previous chapter where the decision to set the *S* variable in the *S* : T_D analogy to the Hebrew G-stem was made on statistical as well as linguistic grounds, the list of roots appearing in the Hebrew G-stem that are translated with a D-stem verb in *P*-Pss 1–30 as determined by the *Turgama* method are presented in TABLE 4.1 below. Since the verbal stems belong to a domain of the Semitic verbal system that operates independently of the system of inflectional forms marking tense, aspect, and modality in the Semitic family of languages, it is necessary only to list the various roots implicated in these translational equivalents and not their conjugated surface realizations. Nevertheless, TABLE 4.1 also contains data selected for its potential to have impacted the Syriac translators' choice of the D-stem for the Hebrew G-stem in the sample corpus that is not owed to the function of the stem itself. As we are interested in taking advantage of the functional equivalence these translators established when rendering Hebrew G-stem verbs with their own D-stem so as to inform our own understanding of the latter, any such relation constituting the *S* : T_D analogy that is not functional in nature must be ruled out.

Therefore, in addition to the roots undergirding *S* : T_D, TABLE 4.1 also offers a comparison of their inflectional forms along with the number of times they appear in these stems against their total number of attestations in the sample corpus. By enumerating the former it will not only be possible to compare the translators' degree of fidelity to the conjugations of their source text against these instances of deviation in verbal stem, but it will also help determine whether the inflection of these roots had any bearing on their translational choices. Listing the frequency of these roots in each respective stem along with how often they are paired together in the translation will help assess the degree of relative freedom the translators' felt in rendering these Hebrew G-stem verbs with their own Syriac D-stem. This data will help control for whether it was the lexical constraints of Syriac that were responsible for the decision to translate these G-stem roots with their D-stem rather than the function of the stem itself. Principal among such constraints are roots which may have been lexicalized in the D-stem in which case the choice of the latter would not be due to what was seen as a functional equivalence between the two verb-forms thereby nullifying their relevance for the deduction of the function of the Syriac D-stem .

Table 4.1: Hebrew G-Stem Verbs Translated with Syriac D-stem Verbs in *P*-Pss 1–30

Key to column data, Table 4.1

(A) Chapter and verse where translational equivalence of (E) and (F) occurs.

(B) Number of times **Hebrew** root appears in the G-stem in Psalms 1–30.

(C) Total number of times **Hebrew** root appears in Psalms 1–30.

(D) Number of instances where the particular G-stem verb in (E) is translated with the particular **Syriac** D-stem verb in (F).

(E) **Hebrew** G-stem root that is translated with **Syriac** D-stem.

(F) **Syriac** D-stem root that translates **Hebrew** G-stem.

(G) Number of times **Syriac** root appears in D-stem in Psalms 1–30.

(H) Total number of times **Syriac** root appears in Psalms 1–30.

(I) Inflectional forms of attested *G-stem* : *D-stem* pair in (E) and (F). Pairs in italics indicate a variance between Hebrew and Syriac. Bold italics are variances in conjugation due to the inflection of the Hebrew not being available in Syriac.

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
4.6; 9.11; 21.8; 22.5; 22.5; 22.6; 25.2; 26.1	11	12	8	בטח	ܫܚܛ	19	19	Imperf., Imperf.; Perf., Perf. (x5); Impv., Impv.; *Ptcp., Pass. Ptcp.*
5.7; 15.2; 28.3	3	9	3	דבר	ܡܠ	9	9	Ptcp., Ptcp. (x3)
10.4	8	8	1	דרשׁ	ܒܥܐ	1	1	*Imperf., Ptcp.*
1.1; 15.2; 23.4; 26.1; 26.11	5	7	5	הלך	ܗܠܟ	7	7	Imperf., Imperf.; *Imperf., Perf.*; Perf., Perf. (x2); Ptcp., Ptcp.
18.15	1	1	1	המם	ܗܡܡ	3	5	***Wayyiq., Perf.***
4.6; 27.6	2	2	2	זבח	ܕܒܚ	2	2	Imperf., Imperf.; Impv., Impv.
22.20	1	1	1	חוּשׁ	ܐܫܬ	2	2	Impv., Impv.
4.2; 6.3; 9.14; 25.16; 26.11; 27.7; 30.11	7	8	7	חנן	ܐܬܚ	7	13	Impv., Impv. (x7)
5.12; 7.2; 11.1; 17.7; 25.20	9	9	5	חסה	ܫܚܛ	19	19	Perf., Perf. (x3); Ptcp., Ptcp. (x2)
23.1	1	2	1	חסר	ܫܡܛ	1	1	Imperf., Imperf.
29.9	1	1	1	חשׂף	ܒܨ	1	2	***Wayyiq., Ptcp.***
6.10	3	3	1	לקח	ܩܒܠ	5	5	*Imperf., Perf.*
2.4	1	2	1	לעג	ܟܗܐ	2	2	Imperf., Imperf.

5.11	1	1	1	מרה	ܡܪܝ[153]	1	1	Perf., Perf.
5.9; 27.11	2	3	2	נחה	ܢܚܐ	7	7	Impv., Impv. (x2)
15.3; 24.5	12	15	2	נשׂא	ܢܣܐ	5	5	Imperf., Imperf.; *Perf., Ptcp.*
25.11	1	1	1	סלח	ܣܠܚ	1	1	*Perf., Impv.*
3.6	1	1	1	סמך	ܣܡܟ	2	2	*Imperf., Perf.*
18.36; 20.3	2	2	2	סעד	ܣܥܕ	2	2	Imperf., Imperf. (x2)
27.5	3	3	1	צפן	ܨܦܢ	2	4	Imperf., Imperf.
6.3; 30.3	2	2	2	רפא	ܪܦܐ	2	2	***Wayyiq., Perf.***; Impv., Impv.
13.6; 27.6	4	4	2	שׁיר	ܫܝܪ	15	15	Imperf., Imperf. (x2)
18.15; 18.17; 20.3	3	3	3	שׁלח	ܫܕܚ	3	3	Imperf., Imperf.; *Imperf., Perf.*; ***Wayyiq., Perf.***
16.1; 17.8	7	8	2	שׁמר	ܢܛܪ	3	8	Impv., Impv. (x2)
16.5	2	2	1	תמך	ܬܡܟ	1	7	Ptcp., Ptcp.
17.5	2	2	1	תמך	ܬܡܟ	2	2	***Inf. Abs., Perf.***

[153] The verb form in the surface text of the root ܡܪܝ in *P*-Ps 5.11 is ܐܬܡܪܝ, more precisely a *Palpel* stem rather than the D-stem it is presented as here. However, as a biliteral root whose reduplication occurs due to an analogy with the morphology of the D-stem it has been included here for the degree to which is follows not only the form, but also the semantics and fuctions of D-stem (see L. Costaz, *Grammaire Syriaque,* §344, 80).

Nevertheless, Sokoloff/Brockelmann, unlike *CSD*, list ܡܪܡܪ as its own lemma suggesting that the from is he *Palpel* of ܡܪܪ rather than the biliteral root ܡܪ (*Syriac Lexicon*, s.v. ܡܪܡܪ, p.835; *CSD*, s.v. ܡܪܪ, p.838). However, since ܡܪܪ is attested in the *Peshiṭta* as a *Palpel* in the majority of its occurrences it is better to consider it biliteral rather than geminate in nature (see *CSD*, s.v. ܡܪ, p.297; and S. P. Brock and G. A. Kiraz, *Gorgias Concise Syriac-English*, *English-Syriac Dictionary* [Piscataway, NJ: Gorgias Press, 2015], s.v. ܡܪ).

4.1 *Hebrew G-Stem : Syriac D-Stem* Verbs and Their Conjugations

The data in TABLE 4.1 reveal that the *Peshiṭta* sample corpus follows the conjugations of its Hebrew *Vorlage* extraordinarily closely, deviating from the inflectional forms of its *Urtext* in 13 out of these 58 *G-stem* : *D-stem* pairings, but with five of these being owed to the fact that Syriac does not possess the particular conjugation attested in the Hebrew (i.e., the *wayyiqtol* [4x] and infinite absolute [1x]).[154] This is a significant point because in the INTRODUCTION it was stressed that the value of a translational analogy for the elucidation of the Syriac D-stem is wholly dependent upon whether the relation between it and the source domain it translates can be shown to be linguistically meaningful as well as relevant to the function of the stem. With the Syriac following the Hebrew conjugations so closely in these *G-stem* : *D-stem* pairs, the inflectional domain of these languages should be regarded as having had little influence on the pairings reflected in TABLE 4.1 above.

On the other hand, the propensity for the Syriac translators to retain the inflectional forms of these verbs while deviating in their choice of stem does have promising implications for our present aims. The translators' fidelity to the conjugations of these verb forms against their choice to deviate in their choice verbal stem suggests the presence of some set of semantic and/or functional features possessed of these particular G-stem verbs that the Syriac translators felt was most appropriately represented by their own D-stem, thus giving further credence to the decision to exploit the *Hebrew G-stem : Syriac D-stem* analogy for our present aims.

4.2 Potential Lexical Constraints on the Choice of the Syriac D-stem

In addition to the overall homogeneity of the conjugations employed in the *Hebrew G-stem* : *Syriac D-stem* translational analogies, another notable feature of the data presented in TABLE 4.1 is that a large percentage of the Syriac roots presented there appear exclusively in the D-stem in the

154. These deviations are as follows. Those figures in italics are conjugations not attested in Syriac.

HEBREW CONJUGATION	FREQUENCY OF CONJUGATION OF HEBREW G-STEM VERB	SYRIAC PERFECT CONJUGATION	SYRIAC ACT. PARTICIPLE	SYRIAC PASS. PARTICIPLE	SYRIAC IMPER.
Imperfect Conjugation	17	4 (3.6, 6.10, 18.17, 26.11)	1 (10.4)		
wayyiqtol	*4*	3 (18.15 [2x], 30,3)	1 (29.9)		
Perfect Conjugation	13		1 (15.3)		1 (25.11)
Infinite Absolute	*1*	1 (17.5)*			
Active Participle	8			1 (21.8)	

* The *BHS* critical apparatus recommends reading תָּמְכוּ here, yet 8QPs, the only Qumran ms where Ps 17.5 is attested, has תמך with *kaf finalis*, thus the reading in MT has been retained here (M. Baillet, J. T. Milik, and R. de Vaux, *Les 'petites grottes' de Qumrân,* Discoveries in the Judean Desert Vol. 3 [Oxford: Clarendon Press, 1962], 148–9).

sample corpus. This is significant because should a given verbal root become lexicalized[155] in the D-stem, then its use as a translational equivalent for the G-stem is more likely to be owed not to the choice of the translators to indicate a particular functional nuance of this Syriac stem, but rather to the constraints of the lexical stock of the target language.

Lexicalization is an especially important concern for the D-stem in a Semitic language for Kouwenberg has found that the latter's highly marked formal morphology is often preferred for the denotation of specialized, idiosyncratic lexico-semantic nuances: "words with gemination, favored because of their expressive character and their formal extension, can replace the simple word and can themselves become the standard form for the expression of the concept in question."[156] Therefore, a necessary precursor to analyzing these *Hebrew G-stem* : *Syriac D-stem* pairs is to ensure that a meaningful use of the Syriac D-stem was the intention of the translators.

4.2.1 Hebrew G-stem : Syriac D-stem-*Only verbs* P-*Pss 1–30*

While the sample corpus is too small to provide any wholesale conclusions for the broader Syriac language regarding the lexicalized status of the D-stem-only verbs in *P*-Pss 1–30 that are implicated in the *Hebrew G-stem* : *Syriac D-stem* analogy, their potential impact on the present project is nevertheless non-trivial.

As revealed in TABLE 4.1, of the 23 unique *roots* appearing in the Syriac D-stem used to translate a Hebrew G-stem verb in the sample corpus, 17 (or 73.91%) are attested only in the D-stem in *P*-Pss 1–30 and account for 45 out of the 58 fully inflected forms (77.58%).[157] Of this group of 17 roots, four appear exclusively in the D-stem not only in the sample corpus, but also in the whole of the *Peshiṭta* Hebrew Bible, namely, ܗܠܟ, ܟܬܪ, ܡܘܡ, and ܣܘܒ, while another six, ܐܣܝ, ܦܩܕ ܚܣܝ, ܩܒܠ, ܫܒܚ, and ܫܕܪ, are attested only in the Dt-stem apart from the D-stem. This means that more than half (i.e., ten of seventeen) of the Syriac roots appearing only in the D-stem in translation of the Hebrew G-stem in the sample corpus are also exclusively attested in the D-stem or its medio-reflexive counterpart across the entire *Peshiṭta* translation of the Hebrew Bible. Furthermore, of the remaining seven D-stem-only roots implicated in the *Hebrew G-stem : Syriac D-stem* analogy in the sample corpus, that is, those that are conjugated beyond the D/Dt-stems in the broader *Peshiṭta*, there is a marked propensity for these roots to be used in the doubling stems throughout the books of the wider Hebrew Bible as shown in TABLE 4.2 below. The absolute

155. For a definition and related comments on "lexicalization" see nn.37 and 162.

156. Kouwenberg, *Gemination in the Akkadian Verb*, 38.

157. These roots are: ܐܣܐ, ܕܒܚ, ܕܒܪ, ܗܠܟ, ܚܣܪ, ܚܣܝ, ܟܬܪ, ܡܟܠ, ܡܘܡ, ܡܢܪ, ܣܒܪ, ܣܘܒ, ܣܟܟ, ܦܩܕ, ܩܒܠ, ܫܒܚ, ܫܕܪ.

frequencies of each root as it appears in the Hebrew Bible is followed by its percentage rate of usage.

Table 4.2: D-stem-Only Roots in *P*-Pss 1–30 Attested in Other Stems in the *Peshiṭta* Hebrew Bible

	G-Stem	D-Stem	H-stem	Gt-Stem	Dt-Stem	Other
ܐܬܐ	248 (76.31%)	50 (15.38%)		26 (8.00%)	1 (0.31%)	
ܐܬܕ	23 (17.97%)	104 (81.25%)		1 (0.78%)		
ܒܥܐ	20 (62.50%)	4 (12.50%)	6 (18.75%)		2 (6.25%)	
ܒܟ	5 (10.87%)	30 (65.22%)	4 (8.70%)		7 (15.22%)	
ܒܚܐ	19 (16.81%)	93 (82.30%)			1 (0.88%)	
ܒܚܝ	47 (58.02%)	14 (17.28%)		16 (19.75%)	4 (4.94%)	
ܒܛܠ		149 (91.98%)	2 (1.23%)		6 (3.7%)	5 (3.09%)

Such a profile raises further the specter that a process of lexicalization independent of translational choice may have led to the use of the Syriac D-stem in the instances reflected in table 4.1, significantly blunting their usefulness for the delineation of a function of the Syriac D-stem.

4.2.2 Hebrew G-stem : Syriac D-stem *with D-Stem-Only Roots*

In order to rightly discern the impact that these D-stem-only roots may have on the relation *R* in the *Hebrew G-stem* : *Syriac D-stem* analogy, several issues require disentangling. Firstly, it will be important to ascertain how widely these Syriac D-stem-only roots are employed for Hebrew stems other than the G-stem in the corpus. If a particular Syriac root is only attested in the D-stem throughout the entire corpus irrespective of the Hebrew stem and/or root in the *Urtext* it was meant to translate, it is much more likely that a lexicalization process elicited the choice of the Syriac D-stem translation. Conversely, should one of these 17 Syriac D-stem-only forms be frequently used in translating roots in the *Hebrew* D-stem, then the likelihood of the Syriac form having undergone lexicalization is not a foregone conclusion.

Secondly, it will also be necessary to determine how often a particular Hebrew G-stem verb that is translated here with a Syriac D-stem-isolate is rendered elsewhere in the corpus with a non-D-stem verb. Clearly, other Syriac roots used to translate the Hebrew G-stem forms appearing in table 4.1 are likewise in the G-stem (or a different Syriac stem for that matter), then the choice to translate that form with the Syriac D-stem is more likely to have been motivated by a desire to capture a specific nuance of the Hebrew source-text with the D-stem. In other words, to account for the phenomenon of the relatively high rate of Syriac D-stem verbs appearing only in that stem that are employed in translation of the Hebrew G-stem, it is necessary to investigate the phenomenon both from the perspective of the linguistic contexts of the Syriac translation as well as from that of the Hebrew source text. Thus to control for the prospect of the lexical domain of

the Syriac language having led to the choice of the D-stem for these roots employed for the Hebrew G-stem rather than the function of the stem, we are interested in detecting the presence of two phenomena: (1) how often these Syriac D-stem-only verbs go on to translate non-G-stem verbs elsewhere in the Hebrew corpus; and (2) whether the Hebrew G-stem verbs that are here given a Syriac D-stem in translation are translated elsewhere in the sample corpus with a Syriac form that is not in the D-stem.

To these ends, TABLE 4.3 below contains the list of Hebrew G-stem verbs translated with Syriac roots that are only attested in the D-stem in *P*-Pss 1–30 as well as their translational equivalents when paired with other root/stem combinations throughout the sample corpus.

Table 4.3: Syriac D-stem-only Verbs for Hebrew G-stem Verbs vs. Other Hebrew Verb Forms

Key to columnar data, Table 4.3

(A): Chapter and verse where translational equivalence of (C) and (E) occurs.

(B): X (Y, Z):

X = Total number of times Hebrew root in (C) is translated with Syriac root in (E).

Y = Total number of times Hebrew root in (C) appears in Pss 1–30.

Z = Total number of times Syriac root in (E) appears ins *P*-Pss 1–30.

(C): Hebrew root appearing in the G-stem that is translated with a Syriac D-stem.

(D): Number of times root in C appears in the Hebrew G-stem in Pss 1–30.

(E): D-stem-only Syriac root used to translate a Hebrew G-stem.

(F): Syriac root(s) other than those in E used to translate Hebrew G-stem root in C.

> Includes location in Psalms, verbal stem, and lexical category when other than a verb.

(G): Hebrew root(s) other than that in C that is/are translated with Syriac D-stem root in E.

> Includes location in Psalms, verbal stem, and lexical category when not a verb.

(A)	(B)	(C)	(D)	(E)	(F)	(G)
4.6, 9.11, 21.8, 22.5 (2x), 22.6, 25.2, 26.1	8 (12, 19)	בטח	(11)	ܐܡܪ	ܐܡܪ (noun 22.10), ܐܡܪ (G-27.3; Gt-13.6, 28.7)	ספר (Dp-22.23; D-22.31), בקשׁ (D-14.6), קוה (D-27.14 [2x])
5.7, 15.2, 28.3	3 (9, 9)	דבר	(3)	ܡܠܠ		דבר (D-2.5, 12.3 [2x], 12.4, 17.10)
10.4	1 (8, 1)	דרשׁ	(8)	ܒܥܐ	ܒܥܐ (G-14.2, 22,27, 24.6; Gt-10.15,) ܐܬܒܥܐ (G-10.13)	
4.6, 27.6	2 (2, 2)	זבח	(2)	ܕܒܚ		
1.1, 15.2, 23.4, 26.1, 26.11	5 (7, 7)	הלך	(5)	ܗܠܟ		הלך (Dt-26.3)
22.20	1 (1, 2)	חושׁ	(1)	ܚܘܫ		דמויה (noun 22.3)
5.12, 7.2, 11.1, 17.7, 25.20	5 (9, 19)	חסה	(9)	ܐܡܪ	ܐܬܟ (G-2.12, 18.3, 18.31; Gt-16.1)	see (G) of ܐܡܪ above
23.1	1 (2, 1)	חסר	(1)	ܚܣܪ		
6.10	1 (3, 5)	לקח	(3)	ܣܒܠ	ܢܣܒ (G-15.5), ܐܠ (G-18.17)	משׁה (H-18.17)
2.4	1 (3, 2)	לעג	(1)	ܣܚܩ		לעג (H-22.8)
5.11	1 (1, 1)	מרה	(1)	ܡܪܐ		
5.9, 27.11	2 (3, 7)	נחה	(2)	ܢܚܐ		דרך (H-25.5, 25.9), נשׂא (D-28.9), נהל (D-23.2), נחה (D-23.3)
15.3, 24.5	2 (15, 5)	נשׂא	(12)	ܣܒܠ	ܐܬܐ (Gt-16.4), ܢܦܠ (G-24.4), ܫܩܠ (G-4.7), ܢܣܐ (H-10.12, 24.7, 24.9, 25.1, 28.2; Ht-24.7, 24.9), ܐܬܢ (G-25.18)	see (G) of ܣܒܠ above
25.11	1 (1, 1)	סלח	(1)	ܣܠܚ		

3.6	1 (1, 2)	סמך	(1)	𐤎𐤌𐤊		תמך (G-17.5)
18.36, 20.3	2 (2, 2)	סעד	(2)	𐤎𐤏𐤃		
6.3, 30.3	2 (2, 2)	רפא	(2)	𐤓𐤐𐤀		
13.6, 27.6	2 (4, 15)	שׁיר	(4)	𐤔𐤉𐤓	וכו (G-21.14)	אדיר (adj. 8.2, 8.10, 16.3), אשׁור (noun 17.11), כבוד (noun 29.3), הלל (Dp-18.4; D-22.23, 22.24, 22.27), זמר (D-21.14), רנן (D-21.14), פז (noun 21.4)
18.15, 18.17, 20.3	3 (3, 3)	שׁלח	(3)	𐤔𐤋𐤇		
17.5	1 (2, 2)	תמך	(2)	𐤎𐤌𐤊	גד (D-16.5)	see (G) of 𐤎𐤌𐤊 above
Total:	45					

In order to assess the significance of this data TABLE 4.3, it is important to closely analyze the populations of columns F and G. The former lists all of the various Syriac means used to translate the Hebrew G-stem appearing in the *Hebrew G-stem* : *Syriac D-stem*. Should column F contain a wide array of stems other than the D-stem, but in particular a high frequency of the Syriac G-stem verbs, then the choice of the Syriac D-stem in these D-stem-only roots (listed in E) is more likely to have been motivated by lexical rather than functional nuances related to the D-stem. The same would be true if column G, which lists all of the Hebrew root/stem combinations that receive the D-stem-only verb elsewhere in the corpus, exhibits a widespread attestation of non-G-stem forms. Either one of these states of affairs would suggest that the Syriac D-stem roots enumerated in column E remain in the D-stem irrespective of the shape of the Hebrew. An important exception would be if column G were to be populated with Hebrew roots in its own D-stem. In such a case, it will not be possible, *prima facie*, to discern whether the translation utilizing the Syriac D-stem was motivated by a desire to replicate the Hebrew in the nearest Syriac cognate or whether the semantics of the Hebrew was thought to be best captured by a lexicalized Syriac root in the D-stem. Under such circumstances, recourse to other test diagnostics will be necessary to disambiguate translation technique from language convention. Thus, a first step toward leveraging the translation of Hebrew G-stem verbs into Syriac with the D-stem for the purpose of ascertaining the function of the latter is to ensure a meaningful as opposed to lexicalized use of the D-stem on the part of the Syriac translators in the D-stem only verbs attested in TABLE 4.2.

4.2.3 Hebrew G-Stem : Syriac D-Stem-*only Roots in the Wider Corpus*

What TABLE 4.3 reveals is that of the 20 unique $S : T_D$ pairs where the Syriac root is only attested in the D-stem in the sample corpus, six represent every attestation of these roots in the corpus,[158] rendering the controls for lexicalization just described otiose for these particular pairs of equivalents.

Of the remaining 14 *G-stem* : *D-stem*-only verb pairs, there are seven Hebrew roots that receive a different Syriac root in translation elsewhere in the corpus when not implicated in the $S : T_D$ analogy. These other Syriac roots, along with their stems, are listed in column F. What is immediately striking is that of all the Syriac roots populating column F, only ܚܕܐ in *P*-Ps 16.5, used to translate the G-stem of תמך, is in the D-stem. Besides this single instance, what column F shows is that every one of the Hebrew roots in our analogies are elsewhere translated with a Syriac G-stem verb or its medio-passive counterpart. In fact, when not receiving a Syriac D-stem verb from

158. These are שלח : ܫܕܚ and זבח : ܕܒܚ, מרה : ܡܪܐ, סלח : ܣܠܚ, סעד : ܣܥܕ, רפא : ܪܦܐ.

the roots enumerated in E, the G- and Gt-stems are the *only* Syriac stems used for verbs in F save for the H- and Ht-stems for יסף, the only stems in which this root appears in the whole of Syriac literature. Furthermore, for the translational equivalents of three verbal roots, namely דרשׁ, לקח, and נשׂא, the D-stem-only roots listed in E constitute the *least* preferred method of translation in the sample corpus, and for חסה and שׁיר, the Syriac D-stem was utilized only once more often than its cognate G-/Gt-stems. These facts suggest that for at least those verbs that enjoy translational equivalents beyond the D-stem-only roots listed in TABLE 4.3, the Syriac translators were not only comfortable using their own G-stem for these forms, but were also unencumbered by the lexical domain of their own language when choosing their own D-stem. In other words, because the Syriac translators felt free to translate these Hebrew G-stem verbs elsewhere in the corpus with their own G-stem, it stands to reason that there are unique features and characteristics related to the semantic contexts of these particular instances that elicited their use of the D-stem.

The initial suggestion that the Syriac D-stem-only roots in the sample corpus represent meaningful rather than lexicalized uses of the stem is further bolstered by the fact that when not being employed to translate the Hebrew G-stem verbs in C, many of these verbs are paired with *Hebrew* D-stem verbs as itemized in column G. In fact, when translating a Hebrew verb in the sample corpus other than one of those G-stem forms specified in column C, the D-stem-only roots in Syriac are used for its Hebrew D-stem counterpart the majority of the time.[159] Interestingly, save for דרשׁ and נחה, those instances where a Syriac D-stem-only verb is also used for a Hebrew D-stem (as shown in G) are those very places where the Syriac displays variability in the root-stem combination used to translate the G-stem in the *Hebrew G-stem* : *Syriac D-stem* analogy. To state this another way, when a Syriac D-stem-only verb used to translate a Hebrew G-stem verb in column C is also used for other various Hebrew root-stem combinations, two phenomena follow: (a) those other Hebrew verbs are most often in the D-stem; and (b) an alternate Syriac verb, most often a G/Gt-stem, is attested for these same Hebrew G-stem verbs. That these phenomena obtain in concert casts serious doubt on the notion that the Syriac roots listed in F have been fully lexicalized in the D-stem despite only appearing in that form in the sample corpus.

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159. The itemization of the forms in column (G) are as follows: D-stem = 17, H-stem = 4, Noun = 4, Adjective = 3, Dp-stem= 2, and D-stem = 1. In total then, of the 31 times the D-stem-only Syriac roots in E do not translate one of the G-stem roots in C, 20 are translating the *Hebrew* D-stem or its passive/reflective counterparts.

4.3 *Hebrew G-Stem : Syriac D-Stem*-only Roots: Conclusion

Beyond simply disambiguating lexicalized versus meaningful uses of these Syriac D-stem-only verbs in the sample corpus, attention to these types of interrelations between the Hebrew and Syriac verb-forms paired in translation also has the potential to reveal broader aspects of the Syriac language related to the D-stem more generally. Typically, the notion of lexicalization is thought to entail the inability to predict the semantics of a surface form by means of its morphological shape, thus necessitating a discrete entry in the lexicon so as to capture its idiosyncratic join of form and function. In other words, a word-form that has completed the process of lexicalization does not "mean" what it "should" based upon its morphological composition. However, such an understanding of lexicalization emphasizes the end rather than the means by which such a process occurs. Lexicalization properly construed is diachronic and arises from usage, a characteristic that led Lyons, following Leech,[160] to term the phenomenon "petrification," rather than its more common moniker. Describing this notion of petrification Lyons states the following:

> As soon as any regularly constructed expression is employed on some particular occasion of utterance, it is available for use again by the same person or by others as a ready-made unit which can be incorporated in further utterances; and the more frequently it is used, the more likely it is to solidify as a fixed expression, which native speakers will presumably store in memory, rather than construct afresh on each occasion. In this respect, frequently used syntactic compounds are like frequently used regular derived lexemes.[161]

As a result, the fact that a verb-form is only attested in a given stem is likely the result of its widespread use in a certain morphological shape that, on the one hand began to subsume all of its other surface realizations, and on the other resisted various dialectical updates so as to maintain its original formal shape, thus becoming "petrified."[162] What is important to remember though is that the processes of petrification/lexicalization for a given surface form most often arise from an original form-function nexus that was meaningful at a certain stage of the language but became so entrenched through usage that a particular morphological shape began to crowd out all other variations and/or became so closely associated with a highly nuanced meaning that it failed to evolve diachronically vis-à-vis the broader language.

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160. G. N. Leech, *Semantics: The Study of Meaning*, 2nd ed. (Harmondsworth: Penguin Books, 1974), 225–7.

161. Lyons, *Semantics*, Vol. 2 (Cambridge: Cambridge University Press, 1977), 536.

162. This is implicit in Lipka's comment that, "an essential condition and a prerequisite for this gradual diachronic process [of lexicalization] is the fact that a particular complex lexeme is used frequently" (L. Lipka, *An Outline of English Lexicology: Lexical Structure, Word Semantics, and Word-Formation*, 2nd ed. [Tübingen: De Gruyter, 1992], 95).

To take an example from Syriac, that the verbal root ܗܠܟ only appears in the D-stem does not mean that the construal of an event of "walking/going" is necessarily unrelated to the denotation of a particular type of event that would otherwise have been marked by the D-stem. In fact, it could be the case that the D-stem was deemed so uniquely appropriate for "walking/going" events that its continual and ubiquitous usage served to "petrify" ܗܠܟ in the D-stem. Thus, word-forms that have been lexicalized in a certain morphological form may still yield important evidence about the relation *R* in a *Hebrew G-stem* : *Syriac D-stem* analogy even when the target domain appears exclusively in the D-stem. In fact, if it could be shown that the same relation *R* exists between *Hebrew G-stem* : *Syriac D-stem*-only verbs as does between *G-stem* : *D-stem* verbs more generally, this is valuable evidence for revealing the path a lexeme took toward achieving this so-called lexicalized status. That the Syriac D-stem-only verbs in *P*-Pss 1–30 used to translate the Hebrew G-stem forms under consideration here are used almost exclusively for Hebrew D-stem verbs elsewhere in the corpus offers tantalizing clues of this very phenomenon.

The important point is that when the *Hebrew G-stem* : *Syriac D-stem* forms in the sample corpus are catalogued and considered in light of their wider usage elsewhere in the text, there are a substantial number of Syriac verbs that only appear in the D-stem throughout *P*-Pss 1–30. However, given that these Syriac D-stem-only verbs are almost exclusively used for Hebrew D-stem verbs elsewhere in the sample corpus it is unclear whether their use in translation of the Hebrew G-stem is due to function or rather a nascent lexicalization process that constrained the choice of the translators in their use of the D-stem. Nevertheless, since the Syriac translators are unafraid to translate these very Hebrew G-stem verbs into Syriac elsewhere with their own G-stem and do so in nearly every instance when not receiving one of these Syriac D-stem verbs under consideration here, it suggests that their use of the D-stem in these instances is purposeful and meant to capture a particular nuance of the verbal events encountered in their Hebrew *Vorlage*. Having established what appears to have been a meaningful and functional as opposed to lexicalized use of the D-stem in translation of the Hebrew G-stem in the sample corpus even when various Syriac roots only appear in that stem, it now remains to elucidate that function based upon the relation *R* constituting the *Hebrew G-stem* : *Syriac D-stem* analogy in *P*–Pss 1–30.

CHAPTER 5

THE D-STEM IN SEMITIC: DISCERNING A PLURACTIONAL BASIS FOR *R* IN *S* : T_D

The previous two chapters provided a linguistically motivated and statistically meaningful justification for looking to those instances where the Syriac translators brought the Hebrew G-stem into their own language with D-stem verbs as a means of gaining insight into the latter's function. As was stated in the introduction, the function of the D-stem that we are interested in exploring by means of $S : T_D$ is its regular, yet enigmatic, association with plurality. Thus, after having carefully considering a number of methodological issues that had the potential to obscure our ability to seize upon the testimony of Syriac translators to that end, it is now necessary to turn our attention to the function itself. However, such an undertaking is no simple task given that the Semitic D-stem's association with plurality is often left implicit in the grammars and when it is mentioned, is often explained by way of recourse to an equally opaque notion of "intensity."

As a result, investing the $S : T_D$ analogies in the sample corpus for evidence of a plural functional relation *R* will require drawing widely and reflecting critically upon contributions of historical Semitics, general linguistic theory, and comparative Semitic grammar. Only once the nature and type of plurality regularly associated with the Semitic D-stem has been clearly defined will it be possible to analyze the $S : T_D$ analogies in the sample corpus so as to bring the Syriac D-stem's role in marking such a function into sharper focus.

What is to follow then is an in-depth consideration of plurality as it relates to the Semitic D-stem arising from its traditional understandings and considered and honed in light of the contributions of general linguistic theory. The aim of such an extended and detailed effort serves two purposes. Firstly, considering the scant treatments of the subject in the grammars it is hoped that the contributions of linguistic science often absent from such considerations can provide a well-motivated and unified account of this linguistic phenomenon that is robust enough to facilitate the analogical deduction being undertaken here. Secondly, the success of any set of linguistic diagnostics in testing for a functional nuance is wholly dependent upon the precision of the linguistic theory used to construct them. Thus, an account of the plural function of the Syriac D-stem that goes well beyond the perfunctory lists of functions typically offered in the grammars of Semitic languages is required.

5.1 Historical Foundations: Introduction

Goshen-Gottstein begins his attempt at the classification of the Semitic verbal stems with the following disclaimer:

> It is not within the scope of this paper to inquire into the history of our subject since the beginnings of Semitic studies in Renaissance Europe. But since traditional attitudes and views often turn out to be rooted in that history, a few remarks may not be out of place. In fact, an understanding of the development of widely prevalent views may pave the way for our re-study.[163]

What was true for Goshen-Gottstein's work on the verbal stems is just as apropos here. In order to delineate a plural functional relation *R* that obtains between $S : T_{\text{D}}$ in *P*-Pss 1–30 it is necessary to consider some of the broader functions, both ancient and modern, that have been commonly associated with the D-stem in the Semitic family of languages.

5.1.1 *Arabic Influence and Hebrew Dominance*

The oldest and most numerous treatments of the D-stem can be found in the grammatical traditions of Arabic and Hebrew, a confluence owed to the fact that the grammatical progenitors of both languages wrote in Arabic, a state of affairs that further allowed Classical Arabic grammatical theory to determine the categories and terms used in the description of Hebrew.[164] Thus, the earliest characterization of the D-stem of any language is to be found in the Arabic grammar of Sībawaihi († 796), who, in his *Al-Kitāb*, described the form by means of a juxtaposition with the causative Arabic H-stem. In the standard German edition of *Al-Kitāb* by Jahn, Sībawaihi is translated as saying that, "Die 4. F. drückt bei den meisten Trilit. 1) aus, dass man Jemand in den Zustand versetzt, welchen die 1.F. ausdrückt…Auch die 2. F. kommt in dieser Bedeutung vor, wie diese Formen auch sonst gemeinsame Bedeutung haben," and then later, "Auch die 4. F. hat 4) diese Bedeutung als Nebenform zur 2. F., wie andererseits die 2. F.; wenn sie causative Bedeutung

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163. Goshen-Gottstein, "The System of Verbal Stems in the Classical Semitic Languages," 73.

164. While it is true that the influence upon Medieval Hebrew grammarians came from an Arabic milieu, it is more accurate to say that the influence upon Medieval Hebrew grammar reflects an admixture of Greek, Syriac, and Arabic grammatical thought that was brought to bear upon the Hebrew language as mediated through Arabic and its linguistic categories, which in turn rested upon Syriac grammarians who made the Classical Greek philosophy of language available to the Islamic world (on this see King's excellent work situating the Syriac grammatical tradition within the broader, nascent grammatical tradition of the Greco-Roman and Islamic milieu: D. King, "Elements of the Syriac Grammatical Tradition as these Relate to the Origins of Arabic Grammar," in *The Foundations of Arabic Linguistics: Sibawayhi and Early Arabic Grammatical Theory*, A. E. Marogy, ed. [Leiden: Brill, 2012], 189–210).

hat, Nebenform zur 4. F. ist."[165] Thus the primary function of the Arabic D-stem for Sībawaihi was essentially causative for those roots which do not utilize the H-stem for that purpose, and through observing his illustrative examples for this nuanced function, e.g., ظر "hübsch sein," and ظرف "verschönern,"[166] it is fairly clear that it was stative, intransitive verbs that are earmarked for causativization with the D-stem as opposed to H-stem.

In addition to this specialized causative function of the Arabic D-stem, Sībawaihi also notes "ohne dass die 4. F. diese Bedeutung hat," namely, an "Intensiv-Bedeutung," but this is carefully nuanced as well, "Die Intensität kann entweder in der gesteigerten Thätigkeit oder in der Steigerung des Erfolges liegen" and the representative example provided is, "علط das Kameel mit einem Querzeichen am Halse versehen, die 1. F. [FI] von einem, die 2. [FII] von mehreren Kameelen."[167] Here, the clear implication is that "Die Intensität" Sībawaihi has in view is not that represented in the majority of modern European grammars of which Bauer and Leander's comments are typical, "Formen, die eine größere Intensität, Energie bei der Ausführung der Handlung ausdrücken,"[168] but rather "Die Intensität" is to be conceived along the lines of what Swadesh popularized as "occurrence number"[169] with respect to North American indigenous languages. Such a notion was later given the now-canonical term "pluractional"[170] by Newman to describe Jespersen's original observation that verbs, in addition to substantives, express the notion

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165. G. Jahn, *Sîbawaihi's Buch Über die Grammatik*: *Übersetzt und Erklärt* (Berlin: Verlag von Reuther & Reichard, 1900), §444; 576ff, and for the Arabic original see H. H. Derenbourg, *La Livre de Sibawaihi*, 2 Vol (Paris: Imprimerie Nationale, 1881–1889), §444, 251–2. For an in-depth study on Sībawaihi's understanding of the D-stem see F. Leemhuis, "Sibawaih's Treatment of the D Stem," *Journal of Semitic Studies* XVIII (Oct. 1973), 238–56. Furthermore, Sībawaihi's conception of D-stem (Form II in Arabic grammar) is consistent with modern notions of the form, "Form II verbs are often causative of transitive Form I verbs, or, if Form I is intransitive, Form II may have transitive meaning. Another shade of meaning that is said to be conveyed by Form II is intensive or repeated action (*kassar-a* 'to smash, to shatter')" (Ryding, *A Reference Grammar of Modern Standard Arabic*, 491).

166. Jahn, *op. cit.*, "Beispiele," §444, 325.

167. Ibid., §445, 331.

168. Bauer and Leander, *Historische Grammatik*, §38*g,* 281. This sentiment can also be felt behind Gesenius' comment "The fundamental idea of *Pi'ēl*, to which all the various shades of meaning in this conjugation may be referred, is *to busy oneself eagerly* with the action indicated by the stem (original emphasis, *GKC*, 141)."

169. M. Swadesh, "Chitimacha," in *Linguistic Structures of Native America* (New York: The Viking Fund, 1946), 325.

170. See P. Newman, *The Classification of Chadic within Afroasiatic* (Leiden: University Press, 1908); *Idem*., *Nominal and Verbal Plurality in Chadic*, and *Idem*., "Pluractional Verbs: An Overview," in *Verbal Plurality and Distributivity*, P. Cabredo Hofherr and B. Laca, eds., (Berlin: De Gruyter, 2012), 185–210. For similar approaches and understandings from within Semitic see Greenberg, "The Semitic 'Intensive' as Verbal Plurality," 577; A. Fassi Fehri, "Verbal Plurality, Transitivity, and Causativity," in *Research in Afroasiatic Grammar 2: Selected Papers from the Fifth Conference on Afroasiatic Languages, Paris, 2000*, J. Lecarme, ed. (Philadelphia: John Benjamins, 2003), 151–85; c.f., Kaufman, "Semitics: Directions and Re-Directions," 281ff.

of "more than one," not via agreement number, but rather in "those cases in which it is really the verbal idea itself that is made plural."[171]

This cursory synopsis of Sībawaihi's intuitions regarding the Arabic D-stem reveals at least two important touchstones for what is to follow. Firstly, it is not simply that in the earliest grammatical treatment of this verbal stem in any Semitic language Sībawaihi ascribed causation and intensification as its primary functions, but more so that he provided a carefully nuanced, albeit largely implicit, understanding of the latter, what later scholars came to term verbal "pluractionality." Secondly, Sībawaihi's description of pluractionality is an appropriate place to begin any discussion on this function as it relates to the Semitic D-stem for it set the trajectory for how most grammars, irrespective of the particular Semitic language in view, came to describe it. This is because by virtue of its inception within the Arabo-Hebraic diglossia of Islamic Iberia that produced the first Hebrew grammarians, it was the Arabic linguistic tradition, rooted in the work of Sībawaihi, that set the terms by which Hebrew generally, and the D-stem particularly, would be described.[172] These early Hebrew grammars written in Arabic were in turn translated into Hebrew[173] whereupon they became accessible to European Jews who would later became a rich resource for Christian scholars of the Reformation looking to the get "back to the sources" (*ad fontes*) of the original languages of the Old Testament. This was particularly the case in Germany where the effects of the Reformation were initially felt the strongest and so when European Jewish scholars were looked to for their knowledge of the finer points of Hebrew grammar the brand of linguistic description they offered was one that had grown out of and bore the unmistakable marks of its Arabic precursors.

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171. O. Jespersen, *The Philosophy of Grammar* (London: George Allen & Unwin, 1924), 210.

172. For example, Saadia Gaon, writing in Arabic, makes a brief comment on the function of the Hebrew D-stem while discussing the proper use of the *dagesh forte* that is strikingly similar to the conception of Sībawaihi: "So when a verb is changed from intransitive to transitive it takes a dagesh, as, e.g., חָזַק changed to חִזֵּק, לָמַד changed to לִמֵּד...or when the verb denoting a single action is changed to denote a repeated action, as רָצַח and רִצֵּח, or an intensive action, as שָׁבַר and שִׁבֵּר" (S. L. Skoss, "Saadia Gaon, the Earliest Hebrew Grammarian," *Proceedings of the American Academy for Jewish Research*, vol. 21 [1952]: 94). Saadia's use of the D-stem of שׁבר to illustrate the "so-called" intensive function of the stem is followed by a great many subsequent European scholars, c.f., J. Weingreen, *A Practical Grammar for Classical Hebrew* (Oxford: The Clarendon Press, 1939), 100.

173. For Ibn Ezra's significant role in this phenomenon see Chomsky, *David Ḳimḥi's Hebrew Grammar* (*Mikhlol*), xix and R. Gottheil and W. Bacher, "Abraham ben Meïr Ibn Ezra," in *The Jewish Encyclopedia: A Descriptive Record of the History, Religion, Literature, and Customs of the Jewish People from the Earliest Times to the Present Day*, Vol. 6, I. Singer and C. Adler [New York: Funk and Wagnalls, 1906-1907), 520–24; Pick, "The Study of the Hebrew Language," 468; and N. Allony and A. Maman, "Judah ben David Ḥayyuj," in *Encyclopaedia Judaica*, Vol. 8, 2nd ed., M. Berenbaum and F Skolnik, eds. [Detroit: Macmillan Reference USA, 2007], 484–85.

These brief historical reflections on the D-stem show that when Hebrew grammatical studies began to make their way into the Christian academic circles of Europe by means of Jewish scholars, they exported an understanding of the D-stem to the Western world which was essentially that of Sībawaihi as mediated through the likes of Saadia Gaon, Ibn Ezra, and David Ḳimḥi.[174] Crucially though, by the time comparative studies of Semitic languages were undertaken in secular European academies, the proliferation of Hebrew grammar by those eager to put to it use for biblical exegesis and text-criticism meant that the understanding of the Hebrew D-stem, itself resting upon the Arabic interpretation of the form,[175] came to overshadow any attempt at elucidating the meaning of the stem in every other Semitic language.[176] Kouwenberg underscores this situation with respect to Akkadian when he says that, "The description of the D-stem in the older grammarians of Akkadian which date from before 1952 is largely based on the then current views about the corresponding verbal stem in other Semitic languages, which have a much longer tradition of grammatical and philological studies, notably Stem II in Arabic and Ethiopic, and the Pi'el in Hebrew."[177] Thus, in an attempt to circumscribe the pluractionality commonly adduced for the D-stem it is important to note the disproportionate influence of grammarians of Hebrew, working in Arabic and then later in Hebrew, were to have upon the topic.[178]

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174. On the influence of Ḳimḥi on Christian scholarship see Pick, *op. cit.,* 475.

175. This can be seen, for example, in Ḳimḥi who says of the Hebrew D-stem, "ונוטהם עומדים באים לחזק הפעולה," whereby the examples he adduces for this function clearly indicate that the "strengthening" (לחזק) in view is to be conceived in the pluractional sense first intimated by Sībawaihi (D. Ḳimḥi, ספר מכלול [Lyck: Fettsel, 1862], 61).

176. This point is summarized well by Goshen-Gottstein: "Up to the middle of the nineteenth century, there existed only two traditions of viewing the system of verbal stems: the Arabic and the Hebrew. While obviously different because of the very facts, these traditions were partly interconnected. On the one hand, medieval Hebrew grammar had been strongly influenced by the theories of Arab grammarians, and some of that influence had seeped through into the grammars of early Christian Hebraists.'" (Goshen-Gottstein, "The System of Verbal Stems in the Classical Semitic Languages," 72).

177. Kouwenberg, *Gemination in the Akkadian Verb*, 4. Kouwenberg chooses the year 1952 as a demarkation in the understanding of the Akkadian D-stem because it marks the publication of von Soden's grammar which cites Goetze's 1942 article that challenged the received tradition of the Akkadian D-stem being indicative of intensity (see W. von Soden, *Grundiss der Akkadischen Grammatik*, [Rome: Pontifical Biblical Institute, 1952], §88c, 116).

178. An additional point to mention here is that despite having made much of the influence of early Arabic linguistics upon the Hebrew grammatical tradition, the Syriac grammatical tradition too has had significant points of exchange with its Arabic counterpart. It is widely held that Arabic linguistics' reliance upon Greek philosophical categories for its descriptions was made possible by the translation of the latter into Syriac from Greek sources (see A. Merx, *Historia artis grammaticae apud Syros* [Leipzig, 1889]; R. Talmon, "The Establishment of Syriac Linguistics," in *History of the Language Sciences* Geschichte der Sprachwissenschaften *Histoire des Sciences du Langage, 1. Teilband: An International Handbook on the Evolution of the Study of Language from the Beginnings to the Present*, S. Auroux, E. F. K. Koerner, and HJ. Niederehe, eds. [Berlin: de Gruyter, 2000], 337–44; and King, "Elements of the Syriac Grammatical Tradition," 189–209).

5.2 Intensity, Pluractionality, and the Semitic D-Stem

The notion of "intensity" bequeathed to Western grammarians by the Arabic tradition was one that in "their examples clearly show that they mean by this an expansion of the scope of the action of the root, whether expansion in time (continuative/iterative) or expansion over a number of subjects or objects (plurative)."[179] Nevertheless, it is not uncommon to encounter a different understanding of this function as the Semitic grammatical tradition continued to develop in Europe, particularly in Germany.[180] In fact, Gesenius' initial foray into the systematization of Hebrew grammar of 1813, *Hebräische Grammatik,* notes the causative function of the D-stem (what will later be known as the "factitive"), but makes no mention at all of an intensive meaning. In his greatly expanded *Ausführliches Grammatisch-kritisches Lehrgebäude der Hebräischen Sprache mit Vergleichung der Verwandten Dialekte* which followed four years later, he repeats his original treatment of the D-stem almost verbatim but adds simply, "Ferner verstärkt es die Bedeutung von *Kal*, und bildet Iterative."[181] As a result, it was clear which of the two functions of the D-stem Gesenius thought primary and notably, when he did speak of an "intensive" function (*verstärkt*) he defines it as the repeated action of the iterative. Nevertheless, in Kautzsch's revised 1909 version of Gesenius we encounter a discernible shift with respect to the "intensive" function of the stem:

> Der Grundbegriff des *Pi'ēl*, auf welchen alle die mannigfaltigen Nuancierungen in der Bedeutung dieser Konjug zurückgeführt werden können, ist: *sich angelegentlich* mit der im Stammbegriff enthaltenen Handlung *beschäftigen*. Im einzelnen stellt sich diese

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179. Ryder II, *The D-stem in Western Semitic*, 14.

180. While it has already been shown by what means the history of the understanding of the Semitic D-stem resulted in a disproportionate appeal to the Hebrew D-stem, the mid-19th and early 20th Centuries did see a spate of Syriac grammars produced in Europe, particularly in Germany. These did attempt to demarcate some functional nuances for the Syriac D-stem, but typically did little more than what Nöldeke offers: "den zunächst zur Bezeichnung der Intensität" (Th. Nöldeke, *Kurzgefasste Syrische Grammatik*, §159; see also the similarly brief outline of Uhlemann: "Die Bedeutung des *Pa.* ist a) *causitiv*, z. B. ܕܰܚܠ *Furcht einflössen* v. ܕܚܠ *fürchten;* b) *intensiv*, z. B. ܡܛܰܒ, *versenken* v. ܛܒ *eindrücken* [F. G. Uhlemann, *Grammatik der Syrischen Sprache* (Berlin: Jonas Verlagsbuchhandlung, 1857), §22, 41]; and Cowper's translation and abridgment of Hoffman's *Grammaticae Syriacae* gives only "when Pe. is transitive, Pa. either intensifies the meaning, or has a causative signification" (A. G. Hoffman, *The Principles of Syriac Grammar: Translated and Abridged*, B. H. Cowper, trans. [London: Williams and Northgate], §93, 44).

Remarkably, the functions listed by Duval are headed by two indicating pluractionality: "Pa'el indique le répétition par de l'action exprimée par p'al," and secondly, "il embrasse plusieurs choses" (i.e., "includes several objects"). It is not until the penultimate function listed is any notion of intensity encountered, and even here the description is quite distinct from Duval's German counterparts, "Pa'el peut avoir un sens neuter, comme intensif de p'al" (Duval, *Traité de Grammaire Syriaque*, §192, 179).

181. W. Gesenius, *Ausführliches Grammatisch-kritisches Lehrgebäude der Hebräischen Sprache mit Vergleichung der Verwandten Dialekte* (Leipzig: Vogel, 1817), §69.2, 241.

> Steigerung des Stammbegriffs, die äußerlich durch die Verstärkung des 2. Radikalen ausgedrückt wird, dar als a) *Verstärkung* und *Wiederholung* der Handlung.[182]

While the classic notion of pluractionality remains in Kautzsch's expansive revision, it is relegated in deference to the notion of a "reinforcement" (*Verstärkung*) of the verbal idea, and this in a manner different than Gesenius' original account. Far from being a singular idiosyncrasy introduced by Kautzsch, he seemed to be capturing the view *en vogue* at the time for in the year immediately prior Brockelmann stated similarly, "Die durch den stamm Intensität kann sich auf sehr verschiedene Seiten der Tätigkeit beziehn, auf ein besondere physische Kraftentfaltung"[183] and this is echoed nearly a decade later by Bauer-Leander in 1922 who state "Intensivstämme herausgebildet…Formen, die eine größere Intensität, Energie bei der Ausführung der Handlung ausdrücken."[184] The shift in the understanding of the nature of the "intensity" marked by the D-stem was not just restricted to Hebrew for Wright's words, from roughly the same period, suggest this was a sentiment thought to be applicable beyond the Hebrew language: "In seeking to modify these simple forms, so as to make them express greater extension or greater energy, the Semites adopted one of two methods; they either *lengthened a vowel*, or they *doubled a consonant*."[185] As a result, what to the early Arabic grammarians, whose understanding of their own D-stem provided the interpretive lens for the Hebrew understanding of the form, was an "intensity" defined by a plural verbal event had come to be understood by their Western counterparts as in increase in the amplitude of the force or energy denoted by the verb.[186] This is apparently owed to the fact that Sībawaihi's original functional descriptors of the stem were derivations of كثر, meaning "to be numerous" or "abundant,"[187] but later came to be understood primarily as the degree of force used

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182. Gesenius, *Hebräische Grammatik Völlig Umgearbeitet von E. Kautzsch*, 148; §52.*f*2.

183. C. Brockelmann, *Grundiss der Verleigchenden Grammatik der Semitischen Sprachen*, 508.

184. Bauer and Leander, *Historische Grammatik*, §38*g,* 281.

185. Wright, *Lectures on the Comparative Grammar of the Semitic Languages*, 161; original emphasis.

186. While only selective, representative examples that demonstrate this shift have been listed these could be multiplied many times over. For example, see W. R. Harper, *Elements of Hebrew by Inductive Method*, revised by J. M. P. Smith (Scribner's Sons., 1921), 85.

187. E. W. Lane, *An Arabic-English Lexicon* (Beirut, Lebanon: Librairie du Liban, 1968), s.v. كثر, 2593. See also Derenbourg, *La Livre de Sibawaihi*, vol 2, §444, 247–51 and §445, 251ff. It is also noteworthy that Ryder, in his assessment of the meaning of the Arabic grammarians' use of كثر to describe the D-stem's function of marking "more of an activity," he uses the examples *kasartu-kassartu* from the root كسر with the translations "I broke"-"I continued breaking," to show that they did not mean a heightened or intensified degree of effort, but rather pluractionality (Ryder, *The D-stem in Western Semitic*, 13). Wood, too, references Cowell's Arabic grammar in citing "kasar" versus "kassar" as an example of an achievement verb with an event-internal pluractional meaning (Wood, *The Semantic Typology of Pluractionality*, 74), and Cowell himself illustrates the point wonderfully with the achievement verb قطف, *"to pick, pluck"* when he states: "One may say, for example, *lā ṭəʔṭof haz-zhūr* 'Don't pick those flowers' or, with the augmentative *lā ṭʔaṭṭef haz-zhūr*. But in reference to a single flower, the simple verb only may be used: *lā ṭəʔṭof haz-zahra* 'don't pick that flower'" (M. W. Cowell, *A Reference Grammar of Syrian Arabic*

to effect an event rather than the verbal plurality that was clearly intended by Sībawaihi in his representative examples.[188]

This shift in the original understanding of the nature of the intensity associated with the D-stem did not go wholly unchallenged by subsequent scholarship and its dissatisfaction was given a now classic articulation by Goetze:

> It is an undeniable fact that the meaning of the so-called intensive is ill defined. All Semitists agree that the form may have other than intensive meaning. But one assumes that such meanings are secondary and derived from the intensive meaning which is considered the original one. In the last analysis, this assumption rests on the romantic notion that the doubling of the middle radical which characterizes the pi'el over against the qal, i.e., its intensification, symbolizes a corresponding intensification in the force of the form.[189]

This criticism of the intensive function of the D-stem as it had been described by grammarians in the late 19th and early 20th Centuries by Goetze gave energy to a pendulum that saw the complete disavowal of any type of "increase" denoted by the stem. Based largely upon Goetze, a series of influential studies in the mid-20th Century subsequently argued for the exclusivity of the D-stem's other original function traceable to the early Arabic grammarians, viz., a particular sub-species of the causative.[190] While a corrective to the understanding of the intensive function as it had evolved within the Western grammatical tradition might have been in order, to do so in a manner that would cast aside a longstanding feature ascribed to the D-stem was an extreme measure. Even Poebel, who Goetze cites in support of his rejection of the intensive feature of the D-stem,[191] is

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[Washington, DC: Georgetown University Press, 1964], 253. Cowell's transliterations reflect the Levantine urban phonology of pronouncing *qāf* as the glottal stop ʔ).

The erroneous notion that the D-stem marks an increased level or amplitude of force can be illustrated with English equivalents of the G- versus D-stem of שׁבר, which are often used to illustrate the alleged "intensive" function of the D-stem. The G-stem of שׁבר is purported to mean simply "to break," while its D-stem counterpart means "to shatter," with the difference between the two being that the latter is an "intensified" complement of the former. Yet, in (1) and (2) below, it is clearly the case that the difference in the two events is not a different level of force being applied to the grammatical object:

(1) Peter *broke* the mug by knocking it off the counter.

(2) Peter *shattered* the mug by knocking it off the counter.

It is the case that the G-stem of שׁבר would be used for (1) and the D-stem for (2), but the D-stem in (2) is marking the higher transitivity of sentence that results from a highly affected PATIENT.

188. See Kaufman statement on this point in, "Semitics: Directions and Re-Directions," 280.

189. Goetze, "The So-Called Intensive of the Semitic Languages," 2.

190. As will be discussed in more detail below, this was especially the case with the work of Ernest Jenni and his subsequent influence on those such as Waltke-O'Connor who incorporate his conclusions almost in their entirety.

191. Goetze says of the following words of Poebel, "In this I fully agree" (*op. cit*., 2n26): "it is important to draw attention to the fact that the universal opinion that the pi'el formation basically denotes intensity is quite erroneous. Indeed, not one single case where the pi'el unmistakably has this meaning is to be found in any of the

criticized by the latter for seeking to retain the original pluractional understanding of intensity. For example, Poebel's assessment that "As far as I can see, the rule that in Akkadian as well as in other Semitic languages the pi'el II 1 of transitive verbs expresses plurality, that of intransitive verbs however has a transitive causative meaning,"[192] is explicitly referenced and subsequently dismissed by Goetze as "based upon a priori [*sic*], and not on a survey of the actual occurrences of the form."[193]

Despite the rare exception,[194] it took the observation of linguists working in North American aboriginal languages that verbal pluractionality was a standard feature of many of these tongues, and critically that this was largely expressed by partial reduplication,[195] to renew an interest in an intensifying function of the Semitic D-stem as originally articulated by Sībawaihi. The first to adopt categories parallel to the plurative character of these Native American verbs relative to an Afro-Asiatic tongue was Newman who coined the term "pluractional"[196] to describe

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Semitic languages" (Poebel, *Studies in Akkadian Grammar*, 65).

192. Ibid., 5n1.

193. Goetze, *op cit,* n.26.

194. For example, Lambdin's elementary Hebrew grammar lists as one of the functions of the Hebrew D-stem the "intensive," but defines this in a manner very similar to its Medieval description: "In several instances the Piel denotes a pluralization of the action named in the Qal. This may take on the nuance of the intensive, but the intensive force is difficult to discern in most cases" (T. O. Lambdin, *Introduction to Biblical Hebrew* [New York: Scribner's Sons, 1971], 194). Lambdin's statement is remarkable not only in its affirmation of the pluractional reading of the D-stem but also the simultaneous doubts expressed with respect to the "increased energy" interpretation of the stem. A similar exception to the shift in the understanding in the D-stem can be found in brief examples amongst Syriac grammarians as welll. Duval is unique amongst Syriac grammarians by providing a highly nuanced interpretation of the Syriac D-stem where he lists at least eight different functions of the form, one of which being pluractionality (see R. Duval, *Traité de Grammaire Syriaque* [Paris: F. Vieweg, Libraire-Éditeur, 1881], §192, 179), but mention must also be made of Costaz whose description of the stem, while brief, insightfully anticipates observations of the Semitic D-stem that came to light much after the publication of his grammar. His list of functions for the Syriac D-stem deserve quotation in full (Costaz, *Grammaire Syriaque,* 78, formatting original):

> 1º a souvent le sens *intensif*, indiquant une action plus forte ou répétée
> 2º souvent aussi ne fait que doubler le Pe'al ou y supplée
> 3º est parfois le "*factitif*" ou le transitif d'un Pe'al intransitif:
> 4º forme enfin d'innombrables verbs *dénominatifs*

Despite Costaz's reference to "une action plus forte," his other points can be found among the conclusions of future Semitic linguists resulting from monograph length treatments incorporating data from large corpora.

195. On this point Cusic's landmark doctoral dissertation states, "The most common means of forming these 'plural verbs' are reduplication, affixation, and suppletion," and later speaking to instances of pluractionality in a wide swath of languages, "Most of the examples use reduplication, since this helps to give formal identity to the diversity of meanings illustrated. This is not intended as a survey of the uses of reduplication as such, although reduplication is aways closely associated with the meanings I am including in the domain of plurality" (D. Cusic, "Verbal Plurality and Aspect," PhD Dissertation, Stanford University [1981]: 72, 75, respectively).

196. The term "pluractional" was used by Newman to described Swadesh's "occurrence number."

"the formation of intensive ('pluractional') verbs by internal consonant gemination"[197] in Chadic.[198] On this phenomena Newman states, "In the realm of morphosyntax, Chadic languages typically have pluractional verb stems (formerly called 'intensives') that indicate the plurality of action."[199] In a publication co-authored with Newman, Salim paraphrases Newman, saying, "Instead of the misleading term 'intensive', which is normally used in the Hausa linguistic literature, [Newman] has proposed the neologism 'pluractional' verbs…'pluractional' is semantically a more accurate label for this verb form."[200] Thus in Newman, one finds a discomfort with the notion of "intensity" for the D-stem but nevertheless a need to elucidate a verbal function denoting multiple event occurrences typically marked by partial reduplication (i.e., consonant doubling) and thus a concrete manifestation of the "romantic notion" Goetze dismissed and that Kaufman disparages as "pseudo-psycholinguistic sophistication."[201] In so doing, Newman unwittingly gave articulation to the conceptual framework of the earliest notions of "intensity/strengthening" in the Semitic grammatical tradition in contradistinction to the "heightened experience" interpretation it had evolved into. Nevertheless, it was Greenberg who was the first in modern times to make this link explicit:

> It is proposed here that the Arabic second form of the verb, the Hebrew Piel and its congeners of other Semitic languages, a verb form which appears to be a Semitic innovation within Afroasiatic, has in addition to other functions, basic characteristics of verbal plurality similar to those found in languages hitherto considered to exhibit verbal plurality [i.e., North American aboriginal languages]. These consist of partial reduplication, as indicated by gemination of the second radical of the verb, temporal repetition, spatial dispersion and natural ergativity.[202]

The similarity in the form-function nexus between the partial reduplication exhibited in Semitic D-stem forms with verbs of an ever increasing number of the world's languages known to

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197. Newman, *The Classification of Chadic within Afroasiatic*, 13.

198. It is interesting to note that the one of the characteristics of Chadic used as a basis for its relationship with the Semitic family of languages is this very feature of its verbal morphology. For example, "Verb morphology shows striking similarities again between"pluractional" verb stem formation in Chadic and Semitic verb stem formations of the *qattala* and *qātala* type" (H. E. Wolff, "Semitic-Chadic Relations," in *The Semitic Languages: An International Handbook*, 27).

199. P. Newman, "Hausa and the Chadic Languages," in *The World's Major Languages*, B. Comrie, ed. (London: Routledge, 2009), 620. For the pan-linguistic character of what linguists at times refer to as "intensity" in reality better described as pluractionality see the collection of quotations amassed by Lasersohn in *Plurality, Conjunction and Events,* (Dordrecht: Kluwer, 1995), 239–40.

200. P. Newman and B. A. Salim, "Hausa Diphthongs," *Lingua* 55 [1981]: 110n14.

201. Kaufman, "Semitics: Directions and Re-Directions," 280. Kaufman's disparaging remarks on this topic are an echo of those of Ryder who, on the semantic independence often found between G- and D-stems, states, "This semantic independence would obviate the need for the pseudopsychological correlation of 'strengthening' between form and meaning" (Ryder II, "The Semitic D-Stem in Western Semitic," 3; cf., Ibid., 24, 32, 38, and 250).

202. Greenberg, "The Semitic 'Intensive' as Verbal Plurality," 578ff.

express pluractionality was taken furthest by Kouwenberg's work on Akkadian.[203] In his *Gemination in the Akkadian Verb* Kouwenberg argues for a "rehabilitation" of the intensifying function of the D-stem that had been severed from its interpretation by Goetze, and in fact, far from being illusory, Kouwenberg's conviction is that intensity represents the key unifying feature of the spectrum of functions often adduced for the D-stem in the Semitic languages:

> ...although the use of gemination for intensity is difficult to prove and marginal at the most, there is a clear association between gemination and nominal and verbal plurality (habituality, durativity, plurality of subject and object, etc.) in Akkadian. This suggests that there is an *iconic* [*sic*] relationship between form and function of gemination; in other words, the presence of a geminate in a motivated word reflects, or used to reflect, some kind of extension in its meaning compared to the meaning of the corresponding word without gemination; this extension is usually realized as an increase in number (plurality), in duration (permanence, habituality) or in salience.[204]

Thus the principal manifestation of the "intensity" Kouwenberg finds in the D-stem is verbal plurality (Newman's "pluractionality")[205] and the reason the latter is so often paired with partial reduplication not only in the Semitic languages (as a geminated second radical in Semitic) but also in a great many others of the world is due to its diagramic iconicity:[206] "that linguistic forms are frequently the way they are because, like diagrams, they resemble the conceptual structures they

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203. Although the primary locus of Kouwenberg's work is on Akkadian, his conclusions are germane here on the relationship between G- and D-stems of Hebrew and Syriac, respectively, for a number of reasons. Firstly, it was the work on the Akkadian D-stem by Goetze that set the direction for much of the subsequent understandings of the theme in a wide swath of Semitic languages, but in particular Hebrew (see the work of Jenni, Ryder, and Waltke-O'Connor for notable examples). Secondly, given the diachronic relationship between Akkadian and its North-West Semitic cousins such as Hebrew and Aramaic, Beckman notes, "Because Kouwenberg hypothesizes that all stages of the [development of the semantics of the D-stem] had been reached by the the earliest historical stages of Akkadian (Kouwenberg 1997, 432–3), and because the various meanings are expected to be layered on top of one another, his hypothesis leads us to expect all of these uses to occur with the Hebrew D stem" (Beckman, "The Biblical Hebrew Piel Stem," 211). Thirdly, Kouwenberg will often turn to examples from Biblical Hebrew as evidence for his conclusions. Finally, it is the opinion of at least Joosten, as a result of his own work on the Hebrew D-stem, that Kouwenberg's work in Akkadian makes accurate predications about his own findings with regard to the Hebrew (see J. Joosten, "The Functions of the Semitic D stem: Biblical Hebrew Materials for a Comparative-Historical Approach," *Orientalia* 67.2 [1998], 204; and especially, 216–218).

204. Kouwenberg, *Gemination in the Akkadian Verb*, 15.

205. This is also the conviction of Kaufman: "The correct solution to the problem of the D stem requires of the Semitist an awareness of modern ideas regarding predicate frames and comparative linguistic evidence for languages that have plural verbs as well as plural nouns. As anyone familiar with the Chadic and Cushite branches of the Afro-Asiatic languages knows intuitively, the D stem is a pluralitive for action verbs (and like other languages where plurative verbs are known, generally quasi-ergative: it is a marked form that indicates plural object for transitives, plural [that is, repeated] action for intransitives)" (Kaufman, "Semitics: Directions and Re-Directions," 282).

206. For an overview of linguistic iconicity and its related naturalness see K. Willems and L. de Cuypere, eds., *Naturalness and Iconicity in Language* (Amsterdam: John Benjamins, 2008), especially the introduction 1–24.

are used to convey."[207] In other words, the partial reduplication that so often characterizes pluractional verbs of languages of all stripes is a formal, or iconic, representation of the increase and extension denoted by the verb.[208] Crucially though, the increase conceived of by Kouwenberg is one of event plurality and not a "subjective heightening"[209] of effort or force related to the action of the verb and in so doing he reestablishes for the D-stem an understanding of intensity extraordinarily similar to that comprehended by the Medieval grammarians of both Arabic and Hebrew.

5.2.1 *Event versus Verbal Pluractionality*

While it is clear that pluractionality has been associated with the Semitic D-stem since the inception of Semitic grammatical description, in order to test the instances of $S : T_D$ in the sample corpus for pluractionality, the nature and type of the plural action potentially understood to have been present in the Hebrew clauses governed by G-stem verbs and translated with the Syriac D-stem must be tightly delineated. The first and perhaps most important point to make with respect to pluractionality is that it refers to a linguistic phenomenon that is wholly intrinsic to the lexico-semantics of verb and therefore should not be conflated with the inflectional features of argument marking or number agreement. On this point Greenberg cautions that "The phenomenon of occurrence number [Swadesh's terminology] in the verb itself should be carefully distinguished from agreement in number with subject and/or object."[210] Despite the regular practice of referring to a verb which has been inflected in its morphology for a plural subject as a "plural verb," this is an altogether different notion than pluractionality — the mere presence of a plural verbal argument, whether internal or external to VP (i.e., grammatical object or subject, respectively), does not

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207. J. Haiman, "Introduction," in *Iconicity in Syntax: Proceedings of a Symposium on Iconicity in Syntax, Stanford, June 24–26, 1983*, J. Haiman, ed. (Amsterdam: John Benjamins, 1985), 1.

208. Inkelas agrees with Kouwenberg noting: "reduplication is perhaps most commonly found as an exponent of plurality in nouns (…) and of pluractionality, in verbs. In verbs, pluractional reduplication is associated with actor number as well as event pluralization" (S. Inkelas, "Non-Concatenative Derivation: Reduplication" in *The Oxford Handbook of Derivational Morphology*, R. Lieber and P. Štekauer, eds. [Oxford: Oxford University Press, 2014], 173).

209. This is the language used by Ryder II, *The D-stem in Western Semitic*, 14.

210. Greenberg, "The Semitic 'Intensive' as Verbal Plurality," 578. What is meant here is not that verbal pluractionality has no interaction with the syntax of a language, but rather that a verb's status as a pluractional is not dependent upon the syntax. As will be seen, the effects of a verb's pluractionality may be manifested in the syntax, but the converse is not true. Durie was the first to demonstrate via data from a wide array of languages that a suppletive form marking pluractionality, "is not triggered by a surface syntactic relation; rather it selects for the number of a particular semantic role of the verb" (Durie, "The Grammaticalization of Number as a Verbal Category," *Proceedings of the Twelfth Annual Meeting of the Berkeley Linguistics Society* [1986]: 357).

(necessarily) denote a plural event.[211] Furthermore, in making the observation that pluractionality is a function intrinsic to the semantics of the verb itself rather than a reflex of the inflectional morphology of a language, it is predicted that the marking of such a verbal feature would be accomplished via the stem patterns characteristic of Semitic verbal morphology since they are universally considered to be derivational rather than inflectional in nature.[212] This is critical to our purposes here because as a derivational and hence lexical phenomenon, not only are we justified in looking to the morphology of a Semitic verbal stem as the site of pluractional marking, but the lexical nature of derivational morphology also offers a fitting context from which a pluractional relation *R* can sought amongst those instances where the Syriac translators utilized a D-stem form for the Hebrew G-stem in *P*-Pss 1–30. The reason for this is that languages utilize a variety of means to denote a plural event. This has led linguists to regularly distinguish between so-called "event plurality" from "verbal plurality:"

> We consider under the general term EVENT PLURALITY any linguistic means of expressing a multiplicity of events, be they verbal markers (***re**-read*), adverbials (*twice, often, always, again*), or adnominal markers (*John lived in **different** countries, **each** boy built a canoe, John repaired **several** bicycles*). We use the term VERBAL PLURALITY more

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[211] Although Durie makes the case that is is possible for pluractional verbs to select plural arguments, particularly the grammatical object (Durie, *op. cit.* 355–68). For more on this see the section on pluractional distributivity below in §5.2.3.

[212] As with most definitions within linguistics, a precise delineation of the two parallel morphological domains of inflection and derivation proves illusory, but it is generally agreed that "inflection is the morphological realization of syntax, while derivation is the morphological realization of lexeme formation" (Aronoff, *Morphology by Itself*, 126). To state this another way, it might be said that inflectional morphology refers to the alterations a lexeme undergoes to mark grammatical and syntactical relations such as the agreement features of person, gender, ands number or the tense-aspect-modality complex of verbs, while derivational morphology concerns the alterations a lexeme undergoes in the production of another lexeme (e.g., write > writer, תורה < ירה). As a result then, it is generally thought that the declination of Semitic verbs into the various conjugations belongs to the domain of inflection, while the system of verbal stems is derivational in nature (Waltke-O'Connor bluntly state that the stems are "a system of derivational morphology" [*IHBS*, 350]). The obligatory nature of the Semitic verbal stems complicates what at first may seem a rather simple account of the conjugations and stems, since it is often supposed that "inflection is obligatory; derivation is optional" (Haspelmath, *Understanding Morphology*, 72). However, Aronoff concludes that, "the gaps and differences in productivity among the binyanim that we find are characteristic of a derivational system as opposed to an inflectional one. Semantics too would seem to support a derivational treatment of the binyanim…" (Aronoff, *Morphology by Itself*, 125). The debate around the precise nature of inflectional and derivational morphology, especially as it relates to the Semitic verbal system, has spawned a vast volume of literature, the finer details of which are not possible to explore here. Nevertheless, the general consensus that has emerged, while nevertheless displaying a certain degree of variability and nuance, is that the Semitic conjugations are inflectional in nature while system of verbal stems is derivational. For the state of the art on such notions, see, in addition to those works just quoted, R. A. Berman with S. Bolozky, *Modern Hebrew Structure*; R. Beard, "Derivation," in *The Handbook of Morphology*, A. Spencer and A. M. Zwicky, eds. [Oxford: Blackwell Publishing, 1998], 44–65; Stump, "Inflection," in *op. cit.,* 13–43; and Arad, *Roots and Patterns*.

> narrowly for event plurality marked on the verb. Following the usage in the literature we refer to markers of verbal plurality as PLURACTIONAL MARKERS.[213]

As this distinction makes clear, morphological mechanisms (in the case of the Semitic D-stem marked by a partial reduplication via doubled second radical) are not the only means available to a language to indicate pluractionality. It could be the case that in translating a Hebrew G-stem with the D-stem that Syriac translators were being sensitive to an instance of "event plurality" expressed in a Hebrew clause but captured this via the "verbal plurality" inherent to the D-stem. It may further be the case that the Syriac language is more sensitive to verbal pluractionality than is Hebrew which, for certain plural situations,[214] the basic stem was seen as sufficient, but for their translation into Syriac the heavier marking of the D-stem was required. Thus, a first step in ascertaining whether a pluractional function of the Syriac D-stem is responsible for its use for Hebrew G-stem verbs in our sample corpus it will be important to ascertain if any morphologically unmarked pluractionality within a given clause containing a Hebrew G-stem verb motivated the Syriac's choice of the D-stem. If it can be shown that a significant proportion of the Hebrew G-stem verbs in the sample corpus that were translated with a Syriac D-stem to denote plural events, then it would be possible to describe the nature of pluractionality that is marked by the Syriac D-stem.

However, this task is complicated by the fact that the Semitic verbal systems utilizes various morphological means to denote different sub-species of event pluractionality. Thus, it is necessary to circumscribe the nature and type of pluractionality that is capable of being denoted by the Semitic D-stem by first delving into some of the broader considerations of Semitic morphology and its integration into general linguistic theory.

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213. P. Cabredo Hofherr and B. Laca, "Introduction – Event Plurality, Verbal Plurality and Distributivity," in *Verbal Plurality and Distributivity*, Cabredo Hofherr and Laca, eds. [Berlin: De Gruyter, 2012], 1; formatting original.

214. The ubiquity and importance of the nomenclature "situation" and "event" for various types of predication in linguistic literature demands their careful delineation here. It is typical for the term "situation" to be used as it is defined by Lyons: "There is, unfortunately, no satisfactory term that will cover states on the one hand, and events, processes and actions, on the other. We will use the term situation for this purpose" (Lyons, *Semantics*, Vol. 2, 483), and more summarily, a situation is "Whatever it is that a sentence may describe" (Matthews, *The Concise Oxford Dictionary of Linguistics,* s.v. "situation"). Thus, the term "situation" will be used to refer to any type of predication, whether a state or non-state, verbal or non-verbal, hereafter. The meaning of the term "event" on the other hand will be that typified by Smith who contrasts "events" with "states," and utilizes the term for all non-stative situations, a practice that will be adopted here (Smith, *The Parameter of Aspect*, 19).

5.2.2 *Verbal Pluractionality: Nature and Type*

In order to test whether the Syriac translators drew upon a pluractional function of their D-stem when translating the Hebrew G-stem in the sample corpus first requires an understanding of the various ways an event can be plural and the means by which the Semitic languages mark such denotations. This is critical to our task because not every species of plural action that may be present in the clauses where the $S : T_D$ analogies obtain are eligible for marking with the D-stem.

One of the most influential observations to arise from the history of research on verbal pluractionality is the distinction drawn by Cusic that "action can be multiple in three general ways: there can be plurality OF events (EXTERNAL PLURALITY or iterativity in the sense of a series of perfective or imperfective actions); plurality IN events (INTERNAL PLURALITY or imperfectivity in the sense of internal structure of the event); and both of these combined."[215] To explicate the notions of pluactionality *in* an event versus that *of* an event, Cusic conceives of situations as being plural at any one of three hierarchical levels — the phase, the event, and the occasion:

> a. Plurality is internal to an event if a single event on a single occasion consists of internal phases;
>
> b. plurality is external to an event but internal to an occasion if a single bounded event (internally plural or not) is repeated on a single occasion;
>
> c. plurality is external to event and occasion if a single bounded event is repeated on separate occasions.[216]

Thus plurality *in* an event (Cusic's point [a.]) is a situation that is pluractional at the level of the phase and can be exemplified by English verbs such as "gnaw," "nibble," or "scratch," which are all internally complex inasmuch as they are comprised of multiple sub-phases that are not tokens of the type of the matrix verb itself. An event of "nibbling" for example, is "a single bounded event with internal phases (NIBBLE = "to take little bites"),"[217] whereby all of the "small bites" taken together as a set comprise an event of "nibbling" proper, but nevertheless the "small bites" that comprise a "nibbling" event are not, in fact, events of "nibbling." In other words, if the resolution of an event of "nibbling" is increased enough, what results is a single "bite" rather than a single "nibble." Thus, the set of individual sub-phases of a "nibbling" event is an altogether different one than a single instance one of its internal phases. More formally, Lasersohn explicates the nature of phase-level, or event-internal, pluractionality by comparing it to that of the level of the event:

> The fundamental difference between repetitive [i.e., phase level] and repeated [i.e., event and/or occasion level] action, in this technical sense, is apparently that repeated action

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215. Cusic, "Verbal Plurality and Aspect," 61; emphases, capitalization, and parenthetical comments are original.

216. Ibid., 67.

217. Ibid., 61; formatting original.

> involves a [*sic*] multiple events of the type denoted by the verb, while repetitive action involves multiple events of a different type, but which sum up to form a single token of the event type corresponding to the verb.[218]

The verb "scratch" on its own, like "nibble," is an example of internal pluractionality and displays Cusic's plurality *in* an event and can thus be termed "event-internal pluractionality." However, in a sentence such as (1) below, the pluractionality of "scratch" takes on an additional connotation, this time what Cusic terms event-external plurality or the plurality *of* an event (Cusic's point [b.]).

(1) Paul scratched his rash all day long.

Here, despite "scratch" being a verb decomposable into internal phases of the type described above, the pragmatic implicature of (1) is that numerous, bounded "scratching" events took place throughout a certain day — it is clearly not that case that Paul partook in one continual, uninterrupted "scratching" event for the entire duration of "a day." Furthermore, it was previously remarked that a hallmark of event-internal pluractionality is that the sub-phases of such an event are of a different type than the event itself. However, with event-external pluractionality, every iteration of the event is *the same as* the event denoted by the verb. As such, the salient plural feature of "scratch" in (1) is not the internal phases the set of which comprise a single event of "scratching," but rather a countable, atomic repetition of a "scratching" event. Therefore, in order to arrive at a felicitous reading of (1), the multiple events of "scratching" must be viewed not from the perspective of their internal, unbounded phases, but rather externally, with an emphasis on their outer bounds making these events atomized and thus countable.[219] For this reason, Cusic labels the type of pluractionality exhibited in (1) as "event-external."

While the type of pluractionality in (1) is event-external for the reasons just enumerated, each iteration of that "scratching" event nevertheless takes place on a single *occasion* delimited by the temporal adverbial "all day long," whereby an "occasion" is a specific, singular, pragmatically defined spatio-temporal context.[220] However, events can also be plural in a such a way that they

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218. Lasersohn, *Plurality, Conjunction and Events*, 244.

219. The notion of "boundedness" is derived from Bloomfield's attempt to classify nouns in their capacity to be determined and counted (see Bloomfield, *Language*, 205ff). The criteria of countability is important here because only count nouns refer to things that posses the outer bounds necessary to individuate them. Mass nouns on the other hand, are "unbounded" in Bloomfield's terms, and are therefore unable to be counted as individual atoms and therefore cannot be pluralized, e.g., "salt." See also Carlson's application of Noreen's "partitive" principle to situations in Carlson, "Aspect and Quantification," in *Syntax and Semantics, Vol 14: Tense and Aspect*, P. Tedeschi and A. Zaenene, eds. (New York: Academic Press, 1981), 47ff.

220. "Occasion" is defined by Mattiola as "a specific time frame in which a situation (i.e., a state or an event) occurs in a (specific) place involving particular participants" (S. Mattiola, "Typology of Pluractional Constructions in the Languages of the World," PhD Dissertation, University of Bergamo [2015]: 27).

transcend a single occasion. Pluractionality of this type takes place at the uppermost rung of the hierarchy of situations Cusic establishes (his point [c.]). Therefore, event-external pluractionality can also take place on numerous occasions such as (2):

(2) Every time Paul has an apple for lunch he gnaws on the core.

In the case of (2), the pluractionality is not restricted to a single occasion, but is rather distributed over multiple occasions. The distinction between (1) and (2) may be conceived as the difference between multiple events occurring on a single occasion and a singular event taking place on multiple occasions. Thus, there are two manifestations of event-external pluractionality, either within a single occasion comprised of multiple events (Cusic's point [b.]) or over multiple occasions comprised of a single event or of multiple events (Cusic's point [c.]).

What is particularly interesting about the case of (2) is that while the clear connotation is that the action of "gnawing" takes place over multiple occasions, the event that is distributed across these spatio-temporal frames is itself comprised of internal phases. Thus the levels of the phase, event, and occasion hierarchy of Cusic are combinatorial in that the verbal pluractionality of a situation can be realized either at a parallel, subordinate, or superordinate level. While (2) provided an example of an event comprised of a situation with internal phases, this event-internal pluractional was repeated over a multitude of occasions where as (1) also denoted an event-internal situation, but one that exhibited pluractionality that was restricted to a single event and occasion. Nevertheless, even more combinations along the phase, event, occasion hierarchy are possible. While pluractionality at the level of the occasion requires that at least one event be iterated across several occasions, there can certainly be more as in (3):

(3) In the Fall of 2022, Ruth taught four classes on Fridays.

Here, "on Fridays" serves as an occasion-frequency adverbial specifying that the "teaching" events in (3) transcend a single occasion, but at the same time, that "four classes" were taught on each occasion denotes multiple events taking place on each of these occasions. As such, in (3) we encounter a situation that spans multiple occasions with an iterated event taking place within each of them.

Such examples from English serve to show that there is the potential for combinatorial complexity within the hierarchical structure of event pluractionality, yet Cusic finds that all of these can be subsumed under two broad cross-sectional headings roughly analogous to the mass/count distinction in the nominal domain. Firstly, he identifies what he terms "repetitive action," by which he means that "units of action are conceived of as confined to a single occasion, *and* to a

single event on that occasion."[221] This type of plurality is synonymous with the "event-internal" pluractionality identified above as internally complex and decomposable into phases that are tightly connected and unbounded, resembling the uncountability of the denotations of mass nouns whose internal structure is perceivable, but obscured in deference to the whole of the part/whole relation.[222] All other combinations of plurality at the event and occasion levels pattern together in what Cusic calls "repeated action,"[223] where "the units of action are potentially distributable, though not necessarily distributed, over multiple occasions. That is, repeated action classes together the event-external/occasion-internal and event-external/occasion-external plurality."[224] Unlike the repetitive action class that is comprised of a mass-like quantification of iterated internal phases, repeated, event-external iterations are typified by a perceivable discontinuity and as such are explicitly bounded.

Cusic's relation of pluractionality to the mass/count distinction in the nominal domain whereby action is viewed either as a contiguous, internally complex whole or as a set of discontinuous, countable atomic events has tremendous import for whether a Syriac D-stem verb utilized for a G-stem verb in the Hebrew text was meant to indicate a pluractional function. This is because of the two types of plural action explicated by Cusic, namely "repetitive" or "event-internal" pluractionality and "repeated" or "event-external" pluractionality, it will be shown that it is only the former that is eligible for marking by the Semitic D-stem, while the latter is licensed by the conjugations in the Semitic verbal system.

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221. Cusic, "Verbal Plurality and Aspect," 78; emphasis mine.

222. The relationship between the internal structure of a repetitive event to the macro situation is similar to the part/whole relation described by Langacker that obtains between mass nouns and their particulate:

> It is not precluded that a nonplural mass might have discernible particles— we know, for instance, that *sand* consists of particles, and we even have a name for them (*grains*). The point is rather that nouns of this sort foreground the perceived continuity of the mass at the expense of constitutive entities. It does so by naming the mass directly, as an undifferentiated whole, whereas a plural is based on the term for an individual particle" (R. W. Langacker, *Cognitive Grammar: A Basic Introduction* [Oxford: Oxford University Press, 2008], 131).

223. Wood explains that the collapse of all event-external pluractionals into one class termed "repeated events" is due to the fact that "event-level and occasion-level repetition are commonly expressed by the same grammatical categories, but that there is a grammatically significant distinction between phase-level repetition (plurality ***within*** events) and event-level repetition (plurality ***of*** events), whether on a single occasion or multiple occasions" (Wood, "The Semantic Typology of Pluractionality," 16). In this statement Wood makes explicit what Cusic alludes to when he states relative to repeated action, "This reduction of the two distinguishable event/occasion relations in event plurality to one category in plural verbs is justified by the fact that, in general, the two meanings are available as interpretations of a single form" (Cusic, "Verbal Plurality and Aspect," 79).

224. Cusic, *op. cit.,* 78.

5.2.2.1 *Repeated Action and the Semitic Conjugations*

Based upon the previous discussion, it is not difficult to notice the congruency of the various species of Cusic's event-external pluractionality with the standard grammatical conceptions of iterativity, habituality, and frequentativity for situations that are of the repeated type. For example, the definitions offered for the former by Bybee, Perkins, and Pagliuca, arising as they did out of an examination of seventy-six "genetically stratified" languages of the world, share a tight conceptual affinity with the repeated, event-external pluractional class of Cusic and differ precisely in how the repetitions of an event are construed relative to an occasion.

According to Bybee, Perkins, and Pagliuca an iterative event, when properly conceived, is external to an event, but internal to an occasion: "**Iterative** describes an event that is repeated on a particular occasion. The notion of iteration is particularly relevant to telic predicates—those that have a well-defined end point."[225] On the other hand, habitual and frequentative situations, while also being event-external, range across occasions. Before adopting Comrie's definition of habituality by quoting it verbatim, Bybee, Perkins, and Pagliuca state that "**Habitual** situations are customarily repeated on different occasions,"[226] and embed this notion within frequentativity: "**Frequentativity** includes habitual meaning—that a situation is characteristic of a period of time—but additionally specifies that it be frequent during that period of time."[227] The conceptual similarities between two of the repeated action types, iterativity and frequentativity, with Cusic's notions of pluractionality are made explicit by Mattiola who defines iterativity "as the case in which the situation occurs multiple times, but on *a single and same occasion*, that is, the situation is repeated more than once on a time frame that is relatively restricted,"[228] while "frequentativity" is "the repetition of a specific situation [that] occurs *on multiple and different occasions*, that is, each occurrence of the situation is repeated over a long time frame that involves multiple occasions."[229] Beyond the realization that the more traditional notions of repeated action can be easily cast in the "event-ratio" parameter of Cusic, this observation also serves as a point of contact

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225. Bybee, Perkins, and Pagliuca, *The Evolution of Grammar*, 127; original emphasis.

226. Ibid., original formatting. The definition of habituality from Comrie quoted by Bybee, Perkins and Pagliuca is as follows: "[Habituals] describe a situation which is characteristic of an extended period of time, so extended in fact that the situation referred to is viewed no as an incidental property of the moment but, precisely, as a characteristic feature of a whole period" [Comrie, *Aspect,* 27ff; Bybee, Perkins, and Pagliuca, *op. cit.*).

227. Ibid., original emphasis.

228. Mattiola, "Typology of Pluractional Constructions," 31; original italics.

229. Ibid., 32; original emphasis.

for the only categories of repeated action typically discussed in grammars of the Semitic languages.

Grammars of the Semitic languages tend to deal exclusively in the realm of event-external pluractionality and moreover do so only within their descriptions of the functions of the conjugations. This is important to note because if the D-stem in Semitic (a derivational phenomenon) has been associated with a pluractional function since the very beginning of systematic attempts to describe these languages, but modern grammars tend to only discuss plural action in the context of the conjugations (an inflectional category), then it remains unclear what kind of pluractionality should be sought out as a function of the Syriac D-stem in translation the Hebrew G-stem in *P*-Pss 1–30.

5.2.2.1.1 The Exclusion of Event-External Pluractionality as a Function of the Syriac D-stem

The event-internal versus -external opposition is an important distinction when considering the morphological forms that license pluractional readings in the Semitic languages generally, but the Northwest branch in particular. As mentioned above, standard grammars are unanimous in assigning Cusic's event-external pluractionality, which subsumes the notions of iterativity, habituality, and frequentativity, to the inflectional rather than derivational domain of Semitic morphology by means of the conjugations. The reason for this is the conjugations' role in marking a particular nuance of verbal aspect, what Agrell first termed *Aspekt* and what Smith refers to as *"viewpoint aspect*:"[230] "Aspectual viewpoints present situations with a particular perspective or focus, rather like the focus of a camera lens. Viewpoint gives a full or partial view of the situation talked about."[231] According to Smith's analogy of a lens, viewpoint aspect thus entails whether an event is portrayed as a whole, akin to what one would see through a wide-angle lens, or in part as through a zoom lens where the end-points of the action fall outside of the field of view.[232] It is this type of event construal that even the most tense-centric theories of the Semitic verbal system

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230. In fact, the English grammatical term "aspect" is simply a calque of the German *Aspekt* introduced into Indo-European linguistics from Slavic grammar by Agrell in 1908 (S. Agrell, *Aspektänderung und Aktionsartbildung beim polnischen Zeitworte. Ein Beitrag zum Studium der indogermanischen Präverbia und ihrer Bedeutungsfunktionen* [Lund: H. Ohlsson, 1908], 78). Agrell's use of the term is borrowed from the Russian вид (*vid*) meaning "air, look; appearance; aspect" (*Oxford Russian Dictionary*, M. Wheeler, B. Unbegaun, and P. Falla, eds., D. Thompson, rev. [Oxford: Oxford University Press, 2000], s.v. "вид," 66ff) and thus giving rise to Smith's circumlocution, "viewpoint aspect."

231. Smith, *The Parameter of Aspect*, 2 (cf., *IBHS*, 61–92).

232. The addition of the "wide angle" versus "zoom" lens analogy to Smith's explanation of viewpoint aspect was first used by Cook in Cook, *Time and the Biblical Hebrew Verb*, 27.

universally recognize as one of the primary denotations of the conjugations,[233] and yet despite a great amount of terminological confusion related to this conception of aspect (*Aspekt*), most theories converge on the general conclusion that: "Verbs (and expressions containing them) can refer to events as wholes or to phases (or sets of phases) within them."[234] These two broad means of event construals are the respective basis of the *perfective : imperfective* contrast so widely recognized as a fundamental[235] opposition within the inflection systems of Northwest Semitic verbs.[236] Since the "imperfective situation may be one viewed as in progress at a particular reference point, either in the past or present, or one viewed as characteristic of a period of time that includes the reference time, that is, a habitual form,"[237] it is not surprising that verbal clauses

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233. For example, even Joüon, whose explanation of the Hebrew conjugations is often seen as the prototypical tensual interpretation of the system, admits to an aspectual nuance for the *yiqtol*: "The yiqtol is used in the domain of the future with a time value, in the sphere of the present with a time value and an aspect value, in the sphere of the past with an aspect value" (Joüon, *A Grammar of Biblical Hebrew*, §113, 366). Even more specific to the issue at stake here, Blau offers a similar sentiment, "the simple prefix-tense (…) may not only be used for marking present/future but also **iterative** or **continuous past** [*sic*], thus reflecting a combination of tense and (imperfect) aspect, which describes the situation as still continuing" (Blau, *Phonology and Morphology of Biblical Hebrew*, 192), and this in spite of his disavowal of the aspectual approaches of Ewald and Driver (Ibid., 202; cf., Ewald, *Syntax of the Hebrew Language*; Driver, *A Treatise on the Use of the Tenses*). While Blau seems to reluctantly admit of an aspectual nuance involved in the Biblical Hebrew conjugations, Lipiński is not so circumspect: "Except for the imperative, the preterite, and certain modern innovations, Semitic languages have no tenses properly speaking, but only aspects" (Lipiński, *op. cit.*, 335). For further confirmation of the universality of aspect in the denotational portfolio of the verbal systems of the Northwest Semitic languages in particular see Gzella, "Northwest Semitic in General," §4.3, 441–45 and McFall, *The Enigma of the Hebrew Verbal System*, 43–55.

234. R. I. Binnick, *Time and the Verb: A Guide to Tense and Aspect* (Oxford: Oxford University Press, 1991), 207. It is important to note that the "phases" referenced here by Binnick should not be confused with those described by Cusic and discussed as part of the pluractional hierarchy above.

235. For many grammarians the *perfective* : *imperfective* opposition is *the* fundamental opposition of the TAM system of Biblical Hebrew. See, for example, Cook, *Time and the Biblical Hebrew Verb*, 200; Ewald, *Syntax of the Hebrew Language*; and McFall, *The Enigma of the Hebrew Verbal System*, 43–55.

236. Even outside of Northwest Semitic in the broader Afroasiatic family this has been shown to be the case as in Hausa, which prohibits the use of the derivational pluractional marker for the licensing of events of the repeated action type such as iterativity, frequentivity, and habituality: "Perhaps surprisingly, iteration of any other type than the one just described [i.e., repetitive action] cannot be expressed using a pluractional in Hausa" (K. Součková, "Pluractionality in Hausa," PhD Thesis, University of Leiden [2011]: 107).

237. Bybee, Perkins, and Pagliuca, *The Evolution of Grammar*, 125ff. It is for this reason that Comrie conceives "habituality" as a sub-species of imperfectivity, saying that both iterative and habitual action "describe a situation which is characteristic of an extended period of time, so extended in fact that the situation referred to is viewed not as an incidental property of the moment but, precisely as a characteristic feature of the whole period" (Comrie, *Aspect*, 27ff). That the imperfect, when a language possesses the morphological devices to overtly mark it on a verb, is the preferred for event-external pluractionality is echoed by Bertinetto and Lenci: "And since the dedicated imperfective morphology often does not distinguish between general imperfective, progressive and habitual, this indicates a strong link between habituality and imperfectivity" (P. M. Bertinetto and A. Lenci, "Habituality,

licensing Cusic's event-external pluractionality are often governed by the prefix conjugation[238] in Northwest Semitic.[239]

What these considerations show is that a Hebrew clause denoting event-external pluractionality would be predicated to have been marked through the inflectional system in Northwest Semitic and therefore not register an effect in the derivational morphology of which the system of verbal stems is a part.[240] Therefore, an instance of event-external pluractionality, marked

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Pluractionality, and Imperfectivity," in *The Oxford Handbook of Tense and Aspect*, R. I. Binnick, ed. [Oxford: Oxford University Press, 2012], 855).

238. Indeed, nearly all reference grammars agree with the statement of Ewald that, "It is implied in the meaning of many expressions, or in the relation subsisting between one action and another, that the imperfect may express the special idea of *duration*, *continuance*, or event (…) *repetition*; because that which endures is also incomplete,—[*sic*] always occurs again and again for an indefinite period" (original emphasis; Ewald, *Syntax of the Hebrew Language*, 9). In a similar way, Muraoka's footnote on the *yiqtol* in his translation of Joüon's grammar says, "Biblical Hebrew has no verb which corresponds to Lat. *solere*, *to be in the habit of*. The yiqtol is sufficient to express this notion. The Vulgate often emphasises the frequentative notion by adding *solere*: Ex 33.11; Nu 11.12; Dt 1.31; 29.29" (Joüon*, A Grammar of Biblical Hebrew*, 367, n.3; cf., See also the similar sentiments recorded above by Joüon-Muraoka and Blau in n.463.). This is also essentially the position of Hatav who states of the *yiqṭol*:

> Until the nineteenth century scholars regarded *yiqtol* and *wqatal* as indicating future tense statements (while *wayyiqtol* and *qatal* expressed past time). But although this observation is partially correct it does not reflect the whole picture, since these forms also function to indicate, *inter alia*, generics, habituals and other modals, and specifically, in these cases it can report past events. (G. Hatav, *Semantics of Aspect and Modality: Evidence from English and Biblical Hebrew* [Amsterdam: John Benjamins, 1997], 143).

Alongside the various repeated action meanings of the imperfect mention should also be made of the participle, for "the Participle when used predicatively overlaps semantically with *yiqtol*" (J. A. Cook, *Time and the Biblical Hebrew Verb,* 224). Thus, the participle too is able to license event-external pluractionality, for as Driver states, "The participle is in form a noun, but one partaking at the same time of the nature of the verb, inasmuch as it declares not the fixed and settled embodiment of an attribute in an individual object, but the *continuous manifestation* [*sic*], actively or passively, as the case may be, of the idea expressed by the root (S. R. Driver, *A Treatise on the Use of the Tenses in Hebrew*, 165).

239. Syriac exhibits a slight variation to the *Tendenz* within the Northwest Semitic group in expressing repeated action through the use of the conjugations. Repeated, habitual action in the past is often expressed in Syriac by means of an analytical structure comprised of the active participle as the predicate complement of a shortened (often referred to as "enclitic") form of the perfect of ܗܘܐ (i.e., ܗ̰ܘ̰ܐ ܠܵܐ̰; see Muraoka, *Classical Syriac*, §86; *Idem*., *Classical Syriac for Hebraists*, §71; Nöldeke, *Compendious Syriac Grammar*, §§277, 299; J. Joosten, *The Syriac Language of the Peshitta and Old Syriac Versions of Matthew* (Leiden: Brill, 1996), 116–9; L. Van Rompay, "Some Reflections on the Use of the Post-Predicative *hwā* in Classical Syriac," in *Studies in Hebrew and Aramaic Syntax: Presented to Professor J. Hoftijzer on the Occasion of his Sixty-Fifth Birthday*, K. Jongeling, H. Murre-van den Berg, and L. van Rompay, eds. [Leiden: Brill, 1991], 210–9; W. Th. van Peursen, *Language and Interpretation in the Syriac Text of Ben Sira* [Leiden: Brill, 2007], 357ff; and G. Goldenberg, *Semitic Languages: Features, Structures, Relations, Processes* [Oxford: Oxford University Press, 2013], §13.4). What is interesting is that in *P*-Pss 1–30 there are no instances where an inflected or enclitic ܗܘܐ is used in a compound tense.

240. In their works on the Hebrew Dt-stem Speiser, Dombrowski, and Boyd attribute an "iterative" nuance to the stem, an opinion, if true, contravenes the position being advocated here (E. A. Speiser, "The Durative Hithpa'el: A *tan*-Form," *Journal of the American Oriental Society* 75.2 [1955]: 119; B. W. W. Dombrowski, "Some Remarks on the

and licensed by the conjugations within the inflectional morphological domain, is unlikely to have occasioned a reflex in the derivational morphology when being translated from one Northwest Semitic language to another. This means that the D-stem, despite having been associated with a pluractional function from the very inception of Semitic grammar by the like of Arabic grammarians and those of Hebrew that they influenced, will nevertheless not be used to mark the event-external, repeated pluractionality that the conjugations do.[241] Therefore, if it was event pluractionality in the clauses governed by Hebrew G-stem verbs that the Syriac translators meant to denote by their own D-stem in *P*-Pss 1–30, it would need to be of a type marked by the derivational morphology of the stems rather than inflectional conjugations.

To illustrate these points, each of the following examples contains a verb denoting event-external pluractionality that is either habitual or frequentative in nature, but nevertheless appears in a different stem. What these examples of event-external pluractionality show, which could be multiplied many times over, is that the plural action of these clauses is denoted by the inflectional morphology of the conjugations in a manner completely independent of each respective verb's derivational stem.

Gen. 2.6 וְאֵד יַעֲלֶה מִן־הָאָרֶץ וְהִשְׁקָה אֶת־כָּל־פְּנֵי־הָאֲדָמָה׃

"And a mist *would come up* (G-stem) from the land and water the whole surface of the ground."

Hebrew Hithpaʿel and Inversative -T- in the Semitic Languages," *Journal of Near Eastern Studies* 21.3 [1962]: 220–23; and S. W. Boyd, "A Synchronic Analysis of the Medio-Passive-Reflexive in Biblical Hebrew," cf., *IBHS*, 428). However, an investigation of the Hebrew examples they use to allege this event-external pluractional denotation owed to the Dt-stem reveals that nearly all appear in conjugations routinely employed to mark iterativity, viz., the prefix conjugation, the participle, and the imperative (Dombrowski's Arabic examples are not inflected and so it is not possible to comment on the role the conjugations may have played in any potential iterative meaning). Thus any "iterative," repeated action, adduced for individual attestations of the Dt-stem is more likely due to the viewpoint aspect of the verbal conjugations of the examples they cite rather than the derivational morphology of their stem itself. When they do appeal to iterative examples of the Hebrew Dt-stem in conjugations less likely to mark iterativity (i.e., the *qāṭal* of פקד in Judg 20.15 and of אבל in 1Sam 15.35; the infinitives construct of עטף in Jon 2.8, Ps 142.4, and Lam 2.12), the verbs in question clearly denote actions done to, or experienced in, oneself and thus pattern with the typical medio-reflexive function of the Dt-stem leaving any construal of repeated or habitual action to either their conjugations or context versus their stem. Much more could be said by way of critique of a so-called "iterative" function for the Dt-stem that space does not allow.

241. Throughout Lupu's analysis of the Syriac D-stem there are instances of event-external pluractionality that are claimed to have been marked by the D-stem. However, in every one of these the conjugation of the verb is of a type used to mark the event-external denotations of habituality, frequentativity, or iterativity (Lupu, "Semantic Patterns"). Some representative examples include those adduced for ܢܫܩ (Song 1.2, impf., p.200), ܠܩܛ (Lev. 19.10, impf.; Is. 7.15, ptcp.; Jer. 7.18, ܡܠܩܛ ܗܘܐ; Judg. 1.7, ܡܠܩܛ ܗܘܐ; p209ff), and ܕܒܚ (2Ki 12.4, ܡܠܩܛ ܗܘܐ; p222ff).

Gen. 29.2 וַיַּ֣רְא וְהִנֵּ֣ה בְאֵ֔ר בַּשָּׂדֶ֖ה וְהִנֵּה־שָׁ֑ם שְׁלֹשָׁ֥ה עֲדְרֵי־צֹ֖אן רֹבְצִ֥ים עָלֶ֛יהָ כִּ֥י מִן־הַבְּאֵ֖ר הַהִ֣וא יַשְׁקוּ֙ הָעֲדָרִ֔ים וְהָאֶ֥בֶן גְּדֹלָ֖ה עַל־פִּ֥י הַבְּאֵֽר׃

"And he looked and behold, there was a well in the field, and behold, there were three flocks of sheep by it for from that well they *would water* (H-stem) the flocks and a large stone was [put] over the mouth of the well."

Gen. 29.26 וַיֹּ֣אמֶר לָבָ֔ן לֹא־יֵעָשֶׂ֥ה כֵ֖ן בִּמְקוֹמֵ֑נוּ לָתֵ֥ת הַצְּעִירָ֖ה לִפְנֵ֥י הַבְּכִירָֽה׃

"And Laban said, 'to give a young girl before the firstborn daughter *is not done* (N-stem) in this place.'"

Gen. 44.5 הֲלוֹא֩ זֶ֨ה אֲשֶׁר־יִשְׁתֶּ֤ה אֲדֹנִי֙ בּ֣וֹ וְה֣וּא נַחֵ֣שׁ יְנַחֵ֔שׁ בּ֖וֹ הֲרֵעֹתֶ֑ם אֲשֶׁ֥ר עֲשִׂיתֶ֖ם׃

"Is this not that which my master *drinks* (G-stem) with and he most *certainly practices sorcery* (D-stem) with? You have done evil with that which you have done."

Conversely, in the following set of examples appears verbs from the same root in the G- and D-stems. In each case the G-stem denotes a simple, uni-phasal event while the D-stem denotes a single, yet internally complex event, and this irrespective of the inflection of the verb into the various conjugations.

Gen. 29.26 וַיִּקַּ֥ח־לוֹ֙ אֶת־כָּל־אֵ֣לֶּה וַיְבַתֵּ֔ר אֹתָ֖ם בַּתָּ֑וֶךְ וַיִּתֵּ֣ן אִישׁ־בִּתְרוֹ֔ לִקְרַ֖את רֵעֵ֑הוּ וְאֶת־הַצִּפֹּ֖ר לֹא בָתָֽר׃

"And he brought to Him all of these and he *cut* (D-stem) them down the middle and placed its each part opposite its counterpart but the bird he did not *cut* (G-stem)."[242]

Gen. 24.55-56 וַיֹּ֤אמֶר אָחִיהָ֙ וְאִמָּ֔הּ תֵּשֶׁ֥ב הַנַּעֲרָ֛ אִתָּ֖נוּ יָמִ֣ים אוֹ֑ עָשׂ֣וֹר אַחַ֔ר תֵּלֵֽךְ׃ וַיֹּ֥אמֶר אֲלֵהֶ֖ם אַל־תְּאַחֲרוּ֙ אֹתִ֔י וַיהוָ֥ה הִצְלִ֖יחַ דַּרְכִּ֑י שַׁלְּחוּנִי֙ וְאֵלְכָ֣ה לַאדֹנִֽי׃

"And her brother and her mother said, 'Let the young woman remain with us for ten days or so, after she *may depart* (G-stem).' And he said to them, 'Do not cause me delay for the LORD has caused my way to be successful, send me away that I *may depart* (G-stem) to my master.'"[243]

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242. Here the pluractionality entails either that the larger animals required many slices to cut them in two while the bird needed only a single cut or that single or multiple cuts were applied distributively over many animals while there was only a single bird to be cleaved in half. In either case, pluracationality is clearly denoted by the verb in the D-stem where a singular, uni-phase event is intended by the G-stem.

243. There are many such examples where the G-stem form of הלך means something closer to "to leave, depart" rather than "walk" (see *HALOT*, s.v. 1:247 ,הלך). However, a great many of these are in the *wayyiqṭol* conjugation where it might be supposed that the past narratival tensual profile of that form contributes to the singularity of the action of the G-stem as opposed to the pluractionality of the D-stem. In this example, both G-stem forms of הלך are in the *yiqtol* mitigating any influence a past tense orientation might have had on the aspectual features related to the semantics of "leave, depart" and simultaneously matches the conjugation of the clear pluractionality of the D-stem in 1Ki 21.27.

1Ki. 21.27 וַיְהִי כִשְׁמֹעַ אַחְאָב אֶת־הַדְּבָרִים הָאֵלֶּה וַיִּקְרַע בְּגָדָיו וַיָּשֶׂם־שַׂק עַל־בְּשָׂרוֹ וַיָּצוֹם
וַיִּשְׁכַּב בַּשָּׂק וַיְהַלֵּךְ אַט׃

"And it happened when Ahab heard these words he tore his clothes and placed sackcloth over his flesh and fasted, and he lay down in sackcloth and *walked about* (D-stem) dejected."

1Ki. 20.1a וּבֶן־הֲדַד מֶלֶךְ־אֲרָם קָבַץ אֶת־כָּל־חֵילוֹ...

"And Ben-Hadad, King of Aram, *gathered* (G-stem) his entire army..."

Is. 40.11a כְּרֹעֶה עֶדְרוֹ יִרְעֶה בִּזְרֹעוֹ יְקַבֵּץ טְלָאִים...

"As a shepherd he shepherds his flock, in his arm he *gathers* (D-stem) lambs..."

Ex. 12.46 בְּבַיִת אֶחָד יֵאָכֵל לֹא־תוֹצִיא מִן־הַבַּיִת מִן־הַבָּשָׂר חוּצָה וְעֶצֶם לֹא תְשַׁבְּרוּ־בוֹ׃

"In one house it shall be eaten and you are not to take meat from it outside the house and you shall not *break* (G-stem) a bone of it."

2Ki. 18.4a הוּא הֵסִיר אֶת־הַבָּמוֹת וְשִׁבַּר אֶת־הַמַּצֵּבֹת

"He removed the high places and *smashed* (D-stem) the pillars."

Job 37.1 אַף־לְזֹאת יֶחֱרַד לִבִּי וְיִתַּר מִמְּקוֹמוֹ׃

"Also, at this my heart will tremble and *jump* (G-stem) in its place."

Lev 11.21 אַךְ אֶת־זֶה תֹּאכְלוּ מִכֹּל שֶׁרֶץ הָעוֹף הַהֹלֵךְ עַל־אַרְבַּע אֲשֶׁר־לֹא כְרָעַיִם מִמַּעַל לְרַגְלָיו
לְנַתֵּר עַל־הָאָרֶץ׃

"Only, you may eat this thing from amongst all the winged insects that walk upon all fours which have joints above the feet in order *to hop* (D-stem) upon the earth."

What these two sets of examples illustrate is the difference in the conventions used to mark pluractionality of the event-external versus -internal sub-types in the Semitic languages. Both types of plural action are realized morphologically, with Cusic's event-external pluractionality marked with the inflectional system of the conjugations and the event-internal class with the derivational morphology of the verbal stems.

5.2.3 *Event-Internal Pluractionality and Semitic Derivational Morphology*

It was shown above that the viewpoint aspect of a situation — whether a situation is to be conceived as a complete,[244] bounded whole (the perfective) or as some portion therein (the imperfective) — is the verbal domain in which event-external pluractionality is realized in the Semitic languages. Furthermore, it should also be recalled that this nuance of aspect is marked in the Northwest Semitic languages by the conjugations and thus belongs to the domain of inflectional morphology. An important implication of these facts is that since the stems belong to the derivational system of Semitic morphology, they would not be expected to share the same spectrum of functionality licensed by the conjugations.[245] Rather, the Semitic stems have typically been associated with another set of features related to, but distinct from, the viewpoint aspect (Aspekt) described above: "the Semitic languages have well developed expressions of *both* systems, in that they formally distinguish *Aspekt* through the conjugations and *Aktionsart* by the stems."[246] What Waltke-O'Connor term *Aktionsart* has often been erroneously conflated with viewpoint aspect (their *Aspekt*), but has been recognized at least as far back as Aristotle who differentiated between predications which he designated as ἐνέργεια ("actualities") and κίνησις ("movements"),[247] and later became known variously as situation aspect,[248] lexical aspect,[249] Aristotelian aspect,[250] or simply *Aktionsart* (e.g., as per IBHS).[251]

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244. "Complete" action needs to be carefully distinguished from "completed" action. The former denotes a situation in its entirety, without reference to its beginning, middle, or end—the "full view" in the parlance of Smith—while the latter refers to a situation that has occurred in the past with respect to the time of utterance (Smith, *The Parameter of Aspect*, 5).

245. Not only is the base assumption of Jenni's work on the *Hebrew D-stem* (see the introduction in *Das Hebräische Pi'el*, 15–19), but it also the basis of Waltke and O'Connor's criticism of descriptions of the various stems that fail to define them relative to the overall system. On this they say that such an "atomistic approach often fails to take adequate note of the fact that the verbal stems constitute a system, a system of clearly differentiated morphemes, which, by definition, invovles both form and function" (*IBHS*, 353).

246. *IBHS*, 346; italics original.

247. Aristotle, *The Metaphysics*, W. D. Ross, trans. (Oxford: Clarendon Press, 1924), 1048b.18–36. The translations for κίνησις/ἐνέργεια are from D. Graham, "States and Performances: Aristotle's Test," *Philosophical Quarterly* 30 (1980): 117.

248. Smith, *The Parameter of Aspect*.

249. Olsen, "A Semantic and Pragmatic Model of Lexical and Grammatical Aspect," PhD Dissertation, Northwestern University (1994); Ö. Dahl, "Aspect," in *The Encyclopedia of Language and Linguistics*, Asher, ed. (Oxford: Pergamon Press, 1994), 240–47.

250. Binnick, *Time and the Verb*.

251. *IBHS*, 348; S. A. Creason, "Semantic Classes of Hebrew Verbs: A Study of *Aktionsart* in the Hebrew Verbal System," PhD Dissertation, University of Chicago (1995): 12; and Comrie, *Aspect,* 6n4.

What Aristotle meant by this distinction remains a matter of debate, but has nevertheless been the subject of rigorous development most thoroughly and iconically by the philosophers Ryle,[252] Vendler,[253] Kenny,[254] Dowty,[255] and Bach,[256] who conclude that what Aristotle was attempting to capture was the inherent temporal properties of a situation independent of any viewpoint of that situation. That the properties implicated in this domain of verbal aspect are "inherent" to the semantics of the verb follows from the fact that they arise not from a particular perspective or frame of reference relative to the bounds of an event, but result from the "type of situation"[257] conveyed through the semantics of the lexical-semantics of the verb. Thus, the verbs Aristotle includes in his ἐνέργεια category are roughly analogous to the familiar "stative" verb class[258] whose "inherent temporal property" is a lack of change over time,[259] and this independent of a verb independent of the verb's perfective or imperfective status. Stative situations simply hold over a temporal interval without change — any point along a given temporal interval during which a state holds is exactly the same as every and any other point in that interval,[260] and it is for this reason that they are considered internal and so given the feature [+DURATIVE] in the literature. It is this relationship between the denotation of a situation and how it "unfolds in time"[261] that determines a lexical item's "situation aspect" (*Aktionsart*), in contradistinction to "viewpoint aspect" (*Aspekt*) that encodes information about whether a situation is perceived in full or in part.

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252. G. Ryle, ***The Concept of Mind, 2nd ed.*** (London: Routledge, 2009).

253. Z. Vendler, "Verbs and Times," *The Philosophical Review* 66 (1957): 143–60.

254. A. Kenny, *Action, Emotion, and Will,* 2nd ed. (London: Routledge, 2003).

255. D. R. Dowty, *Word Meaning and Montague Grammar* (Dordrecht: D. Reidel, 1979).

256. Bach, "The Algebra of Events," 5–16.

257. "Type of action" or "mode of action" is a close English approximation of *Aktionsart*(*en*) first coined by Agrell in 1908. Here he draws a distinction between viewpoint aspect, referring to the *perfective : imperfective* contrast, which he terms *Aspekt*, and *Aktionsart*, how the action of the verb is accomplished (see Agrell, *Aspektänderung und Aktionsartbildung*, 78).

258. It has been argued, especially by Kenny (*op. cit.*) that Aristotle's ἐνὲργεια includes verbs types beyond states (see also, for instance, Dowty's use of ἐνέργεια for "activities" and κίνησις for accomplishments/achievements in D. Dowty, "The Effects of Aspectual Class on the Temporal Structure of Discourse: Semantics or Pragmatics?" *Linguistics and Philosophy* 9 [1986]: 42), but this view has been decisively demonstrated by Graham to be erroneously based upon a mistranslation of Aristotle's original Greek (see D. Graham, "States and Performances: Aristotle's Test," *Philosophical Quarterly* 30 [1980]: 117–30). Graham's conclusions have been subsequently confirmed by Mourelatos (A. P. D. Mourelatos, "Aristotle's Kinêsis/Energeia Distinction: A Marginal Note on Kathleen Gill's Paper," *Canadian Journal of Philosophy* 23.3 [1993]: 385–88).

259. In the words of Binnick, "states have no phasic structure" (Binnick, *Time and the Verb*, 187).

260. Dowty formalizes this character of statives by paraphrasing Taylor's postulate that: "If α is a *stative* predicate, then $\alpha(x)$ is true at an interval I just in case $\alpha(x)$ is true at all moments within I" (Dowty, *Word Meaning and Montague Grammar*, 166; B. Taylor, "Tense and Continuity," *Linguistics and Philosophy* 1.2 [1977]: 207).

261. Smith, *op. cit.*, xiii.

Conversely, verbs of Aristotle's κίνησις group, variously termed "eventive," "process," or "fientive" verbs,[262] are dynamic with respect to an interval of time, "they consist of successive stages which occur at different moments,"[263] but crucially each of these successive stages involves some sort of change. Comrie explains that "if we say *John is running*, then different phases of the situation will be very different: at one moment John will have one foot on the ground, at another moment neither foot will be on the ground, and so on…*run* involves necessarily change."[264] It is this characteristic of change over a temporal interval that gives rise to the convention of marking such verbs [+DYNAMIC][265] in addition to [+DURATIVE], thus providing the principal differentiating characteristic between Aristotle's κίνησις and ἐνέργεια classes. Smith succinctly paraphrases Taylor in saying that situations in the ἐνέργεια group simply obtain "in time" while those of the κίνησις group denote events "taking time."[266]

Building upon the basic *static : dynamic* opposition entailed by Aristotle's original ἐνέργεια versus κίνησις classes, linguists and philosophers have observed an additional feature inherent to the semantics of verbs that has implications for the proper identification of their lexical aspect. This feature, which has come to be known as telicity, refers to whether a given verb encodes for a situation entailing an intrinsic *terminus* that culminates in the attainment of a lexically defined "consequent state."[267] For example, the verb "arrive" is [+TELIC] because it denotes a change undergone by some entity from being in a state of "not here" to one of being "here."

This telicity feature can then be variously combined with durativity and dynamicity to describe the subtle nuances of predication differentiating additional situation types. For example,

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262. On these two labels for a non-static situation see A. P. D. Mourelatos, "Events, Processes and States," *Linguistics and Philosophy* 2 (1978): 415–34, esp. 423; see also T. Parsons, *Events in the Semantics of English: A Study of Subatomic Semantics* (Cambridge, MA: MIT Press, 1990) for a similar framework.

263. Ibid., 19.

264. Comrie, *Aspect,* 49; original formatting. Comrie's illustration is echoed closely by McClure helpfully adds: "If we watch someone swim, every step of the process is somewhat different. The configuration of the body is different or the location is different, but no step of a swimming if fundamentally better or more significant than any other. In particular, no step of a swimming is necessarily a final step. Both the change and the process then contrast with the state" (W. T. McClure, "Syntactic Projections of the Semantics of Aspect," PhD Dissertation, Cornell University [1994]: 1).

265. In the literature there has been a wide array of verbiage used to capture the features underlying the various classes of *Akionsart*, albeit with largely similar meanings. The feature set chosen here is that of Olsen, "A Semantic and Pragmatic Model of Lexical and Grammatical Aspect," 32.

266. See Smith, *The Parameter of Aspect*, 19, who quotes from Taylor, "Tense and Continuity," 206.

267. This is the language of M. Moens and M. Steedman, "Temporal Ontology and Temporal Reference," *Computational Linguistics: Special Issue on Tense and Aspect* 14.2 (1988): 16; see also the "culmination" of Parsons in *Events in the Semantics of English*, 23–4.

a verb such as "run" is both [+DYNAMIC] as well as [+DURATIVE] because it entails a change over time as well as a temporal interval, while "give," also being [+DYNAMIC] and [+DURATIVE], additionally encodes for the attainment of a consequent state making it [+TELIC]. Conversely, a verb such as "recognize" encodes for a natural *terminus* and a change, making it [+TELIC] and [+DYNAMIC], respectively, but a verb that lacks the [+DURATIVE] feature because its action is near instantaneous, being consummated nearly as soon as it begins.[268]

By organizing these three features of situation aspect first intimated by Aristotle into different combinatorial arrangements, Smith[269] was able to formalize Vendler's now canonical classes of situations types.[270] These are represented below in the privative feature geometry of Olsen[271] with the addition of Smith's "semelfactives:"[272]

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268. Philosophically, it is technically the case that any action whatsoever requires some degree of duration to obtain in the real world. Nevertheless, the intuition that the feature durativity is attempting to capture can be illustrated in the entailment patterns first articulated by Kenny (Kenny, *Action, Emotion, and Will*, 121ff) as manifested in the following two sentences:

(A) Paul read a book in an hour.

(B) Paul summited Denali in a day.

Sentence (A) entails that Paul engaged in a reading event at all times during the interval "in an hour," that is to say, Paul's reading activity spanned the entire interval indicated by the temporal prepositional phrase. Sentence (B) on the other hand cannot be taken to mean that Paul was reaching the summit of Denali at all times in the interval defined by "in a day," but rather that the summiting event occurred subsequent to the time interval "in a day." These entailments can be captured in Kenny's articulation that for any [+durative] situation φ, if *X* φ*-ed in <y time>* is true, then *X* φ*-ed at all times during <y time>* is also true. However, for a verb φ' unmarked for durativity, if *X* φ'*-ed in <y time>* is true, it is ***not*** *true* that *X* φ'*-ed at all times during <y time>*. What this formal logic illustrates is the fact that for any [+DURATIVE] verb such as "read" in (A) there is necessarily a time interval intrinsic to the semantics of the verb. For a verb lacking the [+durative] feature such as "summit," there is no interval requirement as illustrated in (B) — such events event denote the near-instantaneous inception of a new state whose truth conditions are not dependent upon a temporal interval.

269. Smith, *op. cit.*

270. Vendler, *op. cit.*

271. Olsen, "A Semantic and Pragmatic Model of Lexical and Grammatical Aspect," 32. See n.274 below for an explanation of the significance of a primitive rather than equipollent feature geometry.

272. "Semelfactive" situations, a category borrowed by Smith from Slavic grammar (the oldest representative usage in the *Oxford English Dictionary* is a quotation from a Russian grammar, "The semel-factive [*sic*] expresses the sudden and single occurrence of an action" [*OED Online* (Oxford: Oxford University Press, 2019), s.v. "semelfactive"), is a label derived from the Latin *semel*, meaning, "once, a single time" (C. T. Lewis and C. Short, *A Latin Dictionary* [Oxford: Clarendon Press, 1879], s.v. "semel"), and subsumes verbs such as *knock, cough,* and *hiccup* (Smith, *The Parameter of Aspect*, 29). Like Vendler's achievements, verbs of this class are unmarked for durativity, but are distinct from that class in that they do not culminate in a result state and so are unmarked for telicity.

The class of semelfactives has been included here for the sake of representing all possible lexical aspects, but since there are no semelfactives attested in the sample corpus, little mention of them will be made moving forward.

Situation Aspect	Dynamic	Telic	Durative	Example[273]
State			+	*know, have, be*
Activity	+		+	*run, swim*
Accomplishment	+	+	+	*build, knit*
Achievement	+	+		*notice, win*
Semelfactive	+			*knock, cough*

Table 5.1: The Lexical Aspects of Vendler/Olsen

What is important to note about this formalization of Vendler's situation types is that it arises from semantic features related to the nature of predication being denoted by the verb as defined by the lexicon independent of any syntactical realization.[274] That this is the case can be seen from the fact that verbal functions typically marked by the inflectional systems of a language such as tense, viewpoint aspect, and modality; or agreement features such as number and gender, do not affect the presence or absence of lexical features just described. It is for this reason that Olsen terms viewpoint aspect (*Aspekt*) "grammatical aspect" and Aristotelian aspect (in the

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273. For examples of these situation aspects in Biblical Hebrew along with extended discussion see Creason, "Semantic Classes of Hebrew Verbs."

274. To say that these aspectual classes exist independent of the syntax is not to posit that the syntax does not interact with them because it very much does and this is precisely the reason Olsen opts for the primitive as opposed to equipollent feature geometry presented in table 5.1. Sentences (A) and (B) below represent an example of the phenomenon known as "type-shifting," where (A) denotes a standard activity and (B), while using the same verb, denotes an accomplishment (see Dowty, *Word Meaning and Montague Grammar*, §2.2.5; E. Bach, "The Algebra of Events," 10ff.; H. Verkuyl, *On the Compositional Nature of the Aspects* [Dordrecht: D. Reidel Publishing, 1972]; *Idem*., *A Theory of Aspectuality* [Cambridge: Cambridge University Press, 1993], and J. Pustejovsky, 'The Syntax of Event Structure', *Cognition* 41 [1991]: 37):

(A) Joseph ran.

(B) Joseph ran to the store.

Sentence (A) denotes a straightforward Vendlerian activity that is marked for the features [+dynamic] and [+durative], but in (B) the addition of the indirect object "to the store" has seemingly introduced the [+telic] feature because the "running" event being denoted now has a natural *terminus* in the form of a consequent (locative) state, i.e., the "store" has been reached. The reason for this, according to Olsen, is that since the feature telicity is underspecified in the activity class it is able to be added by means of the other constituents of the VP and thus denote a [+telic] situation by implicature: "marked features may not be lost or modified, but other constituents in a sentence may mark a feature unmarked on the verb" (Olsen, "A Semantic and Pragmatic Model of Lexical and Grammatical Aspect," 31). Olsen's preference for a privative as opposed to equipollent feature geometry for lexical aspect represents an elegant solution to the "verbal ambiguity" (see, "type-shifting") above noted so often on the literature on the subject (the bibliography on works noting this type of semantic ambiguity is vast, but for a representative and particularly influential example see, Dowty, *Word Meaning and Montague Grammar*, 60–64).

Thus, to say that lexical aspect exists "independent of the syntax" is to simply assert that verbs possess an underlying feature geometry that is defined by the lexicon whereby any underspecified semantic features may be added to the denotation of the verb by means of other constituents present in the clause it governs.

terminology of Binnick)[275] or *Aktionsart* (per IBHS) as "lexical aspect,"[276] and also what led Binnick to conclude that "The Aristotelian categories are like the *Aktionsarten* in that they are purely lexical and nongrammatical, and also unsystematic."[277]

That the features determining the lexical aspect of individual verbs arise from the entailments of their semantics as defined in the lexicon rather than in the syntax has important implications for their encoding by the morphology of the Semitic languages. Recalling again that derivational morphology encodes for information relevant to the lexicon while inflectional morphology that of the syntax,[278] it would be predicted that languages that overtly mark lexical aspect would do so by means of their derivational morphology. This has been confirmed by Comrie's seminal work on verbal aspect, which explicitly states that the original point of departure between viewpoint and lexical aspects as it was first conceived within Slavic grammar involved the role of derivational morphology:

> The distinction between aspect and aktionsart…, which is that used by most Slavists, and often by scholars in Slavonic countries writing on other languages, is between aspect as grammaticalisation of the semantic distinction, and aktionsart as lexicalisation of the distinction provided that the lexicalisation is by means of derivational morphology.[279]

The reason why it is important to underscore the role of derivational morphology for the marking of a verb's lexical aspect is that in the Semitic languages the verbal stems are "a system of derivational morphology."[280] Accordingly, it is this lattice of verbal stems that would be expected to take up the duty of marking the distinctions in lexical aspect just described, and indeed, this is precisely the case. Rundgren was the first to express this view, now universally accepted, in stating that, "Gewisse Sprachen können nun Aktionsarten durch Hilfswörter oder ähnliche Mittel zum Ausdruck bringen, andere – wie die semitiscen – haben dafür besondere Formkategorien, wie sie das Semitische in seinen sog. abgeleiteten Stammformen ausgebildet hat."[281] More recently, Gzella makes a similar statement that wholly agrees with the conclusion of Rundgren stating,

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275. Binnick, *Time and the Verb,* 170–78.

276. *Olsen, op. cit.*, 1. While Olsen offers the more strident explication of the grammatical/lexical aspectual distinction, she is preceded in the nomenclature by Garey (H. Garey, "Verbal Aspect in French," *Language* 33.2 [1957]: 105).

277. Binnick, *op. cit.,* 171.

278. See n.212 on the marking of derivational versus inflectional morphology in the Semitic languages.

279. Comrie, *Aspect,* 6n4. See also the quotation from Wood to this end above in n.305.

280. *IHBS*, 350.

281. J. Rundgren, *Intensiv und Aspektkorrelation: Studien zur äthiopischen und akkadischen Verbalstammbildung* (Uppsala: Lundequistska Bokhandeln, 1959), 89.

"Derivational verbal stems as opposed to the unmarked G(round)-stem express modifications of Aktionsart and voice."[282]

The intersection of lexical aspect and its marking by the Semitic verbal stems is crucial for our purposes because the event-internal pluractionality shown above to have been attributed to the Semitic D-stem since antiquity also falls within the domain of lexical aspect or *Aktionsart*. This was the finding of Mattiola's typological study on pluractionality where he concludes: "in the majority of the situations event-internal pluractionality can be seen more as a specific trait of certain verbs that encodes a type of Aktionsart,"[283] and of the morphological mechanisms used to mark pluractionality Cusic says that "To the extent that they indicate singularity or plurality of events, they are an essential part of aktionsart."[284] These statements were confirmed by Wood's typological study of 43 disparate languages, the results of which "places pluractionals clearly in the category of Aktionsart,"[285] whereby, "pluractional categories are perhaps best understood as a type of Aktionsart."[286] Therefore, as a category of Aktionsart or lexical aspect, event-internal, repetitive pluractionality is immediately relevant for the verbal stems in the Semitic languages, particularly the D-stem. Indeed, Mattiola's cross-linguistic study on pluractionality based upon 241 languages hand-picked for their diversity found that of all the mechanisms used to mark event-internal pluractionality, "reduplication is probably the most wide-spread,"[287] and more specifically, "The most common type is undeniably partial reduplication."[288]

5.2.3.1 *Licensing of Event-Internal Pluractionality as a Functional* R *in the* S : T_D *Analogy*

A necessary entailment of event-internal pluractionality's place within the broader domain of lexical aspect is that not all lexical aspects (as listed in TABLE 5.1 above) are compatible with the type of pluractionality capable of being marked by the D-stem.[289] States, for instance, being marked only as [+DURATIVE] and thus underspecified for the features telicity and dynamicity,

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282. Gzella, "Northwest Semitic in General," 444; original italics.

283. Mattiola, "Typology of Pluractional Constructions," 46; original formatting.

284. Cusic, "Verbal Plurality and Aspect," 63.

285. Wood, "The Semantic Typology of Pluractionality," 12.

286. Ibid., 10.

287. Mattiola, "Typology of Pluractional Constructions," 88.

288. Ibid., 90.

289. Lupu's thesis on the Syriac D-stem also makes much use of the various lexical aspects, but there is no discussion on how a verb's semantics can preclude it from a pluractional interpretation. This, at times, leads to the misidentifying some verbs as pluractional. See nn.241, 292, 535, and p.132ff.

definitionally "have no phasic structure"[290] and so are logically precluded from denoting a situation with a repetition of internal phases due to their complete homogeneity — each internal segment of a state is identical to every other one.[291] Therefore, while it is eminently possible for the D-stem to be used in conjunction with a stative verb to denote a function other than pluractionality, states cannot be pluractional by definition. As a result, if a certain G-stem verb that is stative in the Hebrew Urtext were to be translated with a Syriac D-stem, then the marking of pluractionality is not a function that can satisfactorily explain the $S : T_{\text{D}}$ analogy in that instance.

Whereas stative verbs are precluded from repetitive, event-internal interpretations due to their internal homogeneity, Vendlerian accomplishments are prohibited[292] due to their being fully specified for all of the features that define situation aspect. In particular, that accomplishments are marked [+DYNAMIC], [+DURATIVE], as well as [+TELIC], means that each actualization of an accomplishment fully defines the temporal contour of a situation, leaving no room for any internal complexity by way of repetitive (i.e., event-internal) action. For example, in the sentence, "Deborah built a house," the verb "build" is a semantic unit fully specifying a "development portion"[293] of "house building" as well as the denotation of a resultant state in the form of a new house. Thus, it follows from the inherent [+TELIC] and [+DURATIVE] features specified in the semantics of an accomplishment that there is a final event boundary following an initial run-up process that renders any pluractionality involving "house building" a *de facto* event-external situation — a repeated accomplishment thus represents the repetition of an event rather than an type of repetition within an event. The presence of a durative run-up phase in conjunction with a final resultant state confers upon accomplishments an internal temporal complexity that precludes them from an event-interval construal. According to Wood, "It is this characteristic which I suggest makes them incompatible with event-internal pluractionals, since such an event

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290. Binnick, *Time and the Verb,* 187.

291. This is also the conclusion of Xrakovskij who says, "Verbs denoting permanent states and relations do not combine with the meanings of plurality" (Xrakovskij, "Semantic Types of the Plurality of Situations and Their Natural Classification," 19).

292. On this point Wood agrees, saying "Accomplishments, by contrast, do not appear to produce event-internal interpretations when repeated," and then commenting on the disparate languages she subjected to analysis, "No instances of repetition of accomplishments were obviously restricted to single occasions, or to have a single completion of the type found with repeated achievements" (Wood, "The Semantic Typology of Pluractionality," 82).

Despite this, in her group of pluractional Syriac D-stems, Lupu claims that "There are a few activities and accomplishment predicates," but despite having a pluractional group for "G stem achievement predicates" (166) and "G stem activity predicates" (203) does not seem to further indicate which verbs were taken as pluractional accomplishments (Lupu, ""Semantic Patterns in the D Stem in the Syriac Bible").

293. This is the language of Parsons (*Events in the Semantics of English,* 23–4) and echoed in Croft (W. Croft, "The Aspectual Structure of Events," in *Verbs: Aspect and Causal Structure* [Oxford: Oxford University Press, 2012], 48).

can neither form one of a series of rapidly repeated phases, nor can it be 'expanded' to produce a durative, continuous reading,"[294] and further, "This interaction with Aktionsart can be incorporated into the analyis discussed…by adding to the event-internal pluractional a requirement that the subparts of the complex event not be complex themselves."[295] Therefore, when repeated, Vendlerian accomplishments are members of Cusic's event-external pluractionality by definition, and so fail to denote the type of plural action congruent with the derivational marking of the D-stem.[296] As a result, Syriac D-stem verbs that are used in translation for Hebrew G-stem verbs that are members of the accomplishment class are unlikely to have been chosen for their ability to mark pluractionality.

Achievements on the other hand, while denoting an inherent *terminus* and so marked with the feature [+TELIC], do not include the initial development process entailed in the combination of the [+DYNAMIC] and [+DURATIVE] features of accomplishments.[297] As a result, achievements are interpreted as punctiliar situations where the resultant state arising from a combination of the [+DYNAMIC] and [+TELIC] features occurs in an instant rather than over an interval. Being underspecified in their feature geometry for durativity, achievements lack the internal complexity characteristic of Vendlerian accomplishments and can therefore denote a wider array of pluractionality. In particular, lacking the durativity features means that achievements meet Wood's non-complexity condition cited above and so are eligible for licensing event-internal pluractionality as demonstrated in the following examples.[298]

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294. Wood, "The Semantic Typology of Pluractionality," 133.

295. Ibid., 134.

296. Wood comes to a similar conclusion when she states, "I suggest that the relevant generalization here is that event-internal pluractionals pluralize single-phase events. Events which are internally complex (such as accomplishments, consisting of a process phase and a final change of state) must undergo some sort of coercion in order to conform to this requirement" (T. Wood, "Plurality of Events: Parallels Between Language and Perception," *Proceedings of the Thirty-Second Annual Meeting of the Berkeley Linguistics Society, February 10–12, 2006* [Ann Arbor: Sheridan Books, 2012], 433).

297. Various authors do hold out the possibility that certain achievements "allow or require preliminary stages" (Smith, *The Parameter of Aspect,* 31). Ryle terms the former class "lucky achievements" (Ryle, *The Concept of Mind*, 133) and Croft, "runup achievements" (Croft, "The Aspectual Structure of Events," 49). However, Olsen cautions that with these so-called "runup achievements" that "The distinction between preliminary states and the situation itself is difficult to pin down" (Olsen, "A Semantic and Pragmatic Model of Lexical and Grammatical Aspect," 216) and suggests instead that achievements can be interpreted with a preliminary phase only in certain pragmatically construed contexts not owed to the semantics of the verb itself. This can be seen in how durativity in such "runup achievements" is cancelable upon negation. For example, in "Stephen was summiting Everest when he fell and failed to reach the top," the preliminary "runup" stage of the achievement "summit" is cancelled, demonstrating its inherent absence in the fundamental semantics of the verb.

298. This is also the conclusion, *inter alia*, of Součková's work on Hausa (see Součková, "Pluractionality in Hausa,"

This can be illustrated in the way that the clause governed by the achievement in (1) is ungrammatical in (2) when combined with the temporal adverbial phrase "for an hour" because the latter forces a durative reading that does not exist in the semantics of "broke."

(1) Andrew broke the stick.

(2) *Andrew broke the stick *for an hour*.

However, in (3) below the identical achievement verb is now felicitous in conjunction with the very same durative adverbial phrase.

(3) Andrew broke the stick **into pieces** *for an hour*.

In (3) the addition of the indirect object "into pieces" coerces a pluractional interpretation because the achievement verb "break" repeatedly affects the same entity such that the multiple "breakings" are able to saturate the interval introduced by the temporal adverbial and so elicit a natural reading.[299] Crucial to note for our purposes is that the grammaticality of (3) is attained not through the addition of the [+DURATIVE] to the lexical semantics of the achievement verb "broke," but rather by serializing the instantaneous changes indicative of this verb class over the interval introduced by the adverbial. This thereby results in a redrawing of the event boundary between (1) and (3).[300] In (1) the "breaking" event is tightly circumscribed so as to be an event unto itself, but in (3) the situation involves a series of iterated "breakings" that constitute sub-phases of a larger macro-event. The effect of this redrawn event boundary is that achievements in such contexts pattern very closely with Vendlerian activities. Speaking to this phenomenon McClure states that "these predicates [i.e., Vendlerian achievements] would become activities if allowed to repeat indefinitely,"[301] and later, "processes [i.e., Vendlerian activities] are composed of achievements,"[302] while Wood says plainly, "a telic event repeated an infinite number of times produces an atelic activity interpretation."[303]

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180).

299. It is this phenomenon that lies behind Cook's statement that, "minimal activity events [i.e., achievements] cannot be expressed in combination with the imperfective aspect without being interpreted iteratively" (Cook, *Time and the Biblical Hebrew Verb,* 73), and also Henderson's comment that "The repeated events of an event-internal pluractional have a shared telos or take place in the same location" (R. Henderson, *Ways of Pluralizing Events*, PhD Dissertation, University of California, Santa Cruz [2012], 50).

300. For a similar approach to *for*-adverbials see V. Van Geenhoven, "*For*-Adverbials, Frequentative Aspect, and Pluractionality," *Natural Language Semantics* 12 (2004): 135–190.

301. McClure, "Syntactic Projections of the Semantics of Aspect," 42.

302. Ibid., 92.

303. Wood, "Semantic Typology of Pluractionality," 10.

Normally the iteration of a [+TELIC] event over a temporal interval would entail event-external pluractionality as each event of "breaking" constitute a discrete situation. However, the addition of the adpositional "into pieces" in (3) has the effect of aiming all of the repetitive changes of state denoted by the achievement verb at the same entity, thereby grouping all of the "breakings" into a single, albeit, internally complex event. Because all of the "breaking" micro-events are unified by a single PATIENT,[304] they can be construed as a single macro-event with internal phases and therefore be eligible for an event-internal pluractional interpretation. The availability of an event-internal reading with an iterated achievement verb is also consistent with the findings of Wood who, as a result of her extensive study of pluractionals found that in cases of the "repetition of an achievement,"[305] an event-internal pluractional interpretation is licensed when "the meaning of the pluractional form indicates that a single entity has undergone the change of state repeatedly."[306] Consequently, that each iteration of "breaking" in (3) happens to the same "stick," "the distinctness of iterated units of action is obscured, and something more like a durative state than a series of actions is represented. At the phase/event level, this durative state has the image of a single durative event."[307] In (3) then, the grouping of action around a single PATIENT led to an event-internal pluractional interpretation by blurring the boundaries between what would otherwise be atomic events.

Achievements then have the potential to reside within the functional domain of the D-stem when in contexts similar to those exhibited by (3) above. Not only is this the very behavior that lies behind the proclivity of early Semitic grammarians such as Sībawaihi and Saadia Gaon to utilize the achievement verb كسر and שִׁבֵּר, respectively, as exemplars for their "strengthening" or "increasing" function of the D-stem,[308] but also why grammarians of the Semitic languages have frequently drawn attention to the proclivity of the D-stem to govern plural objects.[309] Thus, while

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304. Syntactically, clausal arguments are defined according to their grammatical status in a clause such as "subject" or "object," while a PATIENT is a semantic role that Kroeger defines as the "entity which is acted upon, affected, or created; or of which a state or change of state is predicated" (Kroeger, *Analyzing Grammar: An Introduction*, 54; for a more protracted definition see T. Givón, *Syntax: A Functional-Typological Introduction*, Vol. I [Amsterdam: John Benjamins, 1984], 88). It is convention to render the grammatical roles such as "subject, object, indirect object," etc., in lower case and the semantic roles (e.g., AGENT, PATIENT, THEME, etc) in small capitals.

305. Wood, "The Semantic Typology of Pluractionality," 75.

306. Ibid.

307. Ibid., 99.

308. See the discussion n.187.

309. This is opposed to those who, like Fassberg, think that the D-stem in someway, "marks a plurality of objects," a notion with which Lupu seems to agree when stating that the "pluractional D stem effectively pluralizes arguments" (Fassberg, "Is Pael an Intensive/Plural Form of Peal in Syriac?" 428; Lupu, "Semantic Patterns in the D Stem in the Syriac Bible," 163).

Hebrew G-stem states and accomplishments could not have motivated a Syriac D-stem with an event-internal interpretation, achievements can be iterated in a way that is consistent with the stem. Thus, it will be important to test Hebrew Vendlerian achievements appearing in the G-stem for their potential to have motivated the use of the D-stem on the part of the Syriac translators.

The final lexical aspect to consider for its potential congruence with event-interval, repetitive pluractionality of the type capable of being marked with the D-stem is the Vendlerian activity. While both states and activities are marked for the feature [+DURATIVE] because they lexically encode a temporal interval, activities also possess the feature [+DYNAMIC] and therefore intrinsically denote some manner of change: "Simply put, a situation involves change if, at the end of the situation, one of the participants is different with respect to some physical property (…) or with respect to its location (…)."[310] Nevertheless, those changes intrinsic to an activity verb are not some random assemblage of transformations nor do they lead to a final resultant state such as is the case with accomplishments and achievements, but are rather "an unbounded sequence of linearly ordered changes of the same type."[311]

That activities encode for a "sequence" of changes "of the same type" necessarily entails the denotation of an action that is repeated for a pragmatically determined minimum number of iterations such that a failure to execute this minimum sequence of repetitions also means a failure of the macro-event to obtain.[312] This can be illustrated by paraphrasing Comrie's explanation of a "running" event quoted above.[313] An instance of "running" necessarily includes a lifting of one leg, its extension, and the bringing it back down, etc, only for this process to be repeated with the opposite leg, and so on; and it is this very set of repeated "linearly ordered changes of the same

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310. Creason, "Semantic Classes of Hebrew Verbs," 51. That change is the key distinguishing feature of activity verbs as opposed to statives is described in detail by Dowty (*Word Meaning and Montague Grammar*, 168-73), Rothstein (*Structuring Events,* 17-21), and Olsen ("A Semantic and Pragmatic Model of Lexical and Grammatical Aspect," 44ff).

311. McClure, "Syntactic Projections of the Semantics of Aspect," 93.

312. To once again quote McClure: "processes [Vendlerian activities] are characterized by a pragmatically determined subinterval property, meaning that only for a long enough interval of the process does there exist a piece of the process which has all of the properties of the complete predicate" (*Ibid.*, 92). See also Rothstein who similarly states: "while states are truly homogeneous, activities are only down to intervals of a minimal size" (Rothstein, *Structuring Events*, 18).

313. See p.101.

type" that properly constitutes an event of "running."[314] As a result, the action denoted by an activity verb necessarily entails a certain measure of pluractionality.[315]

However, languages differ in the extant to which they accord salience to the inherent pluractionality of activity verbs by varying the level of granularity[316] with which they portray the internal iterations of micro-events constituting a Vendlerian activity. This is true both in how a single language construes its various activity verbs as well as how a given situation is predicated by different languages.[317] In English, an event of "running" is construed as an activity verb whose subparts are all actions in and of themselves, but the denotation of a verb like "run" is not the atomic subintervals that comprise the activity, but rather the singular super-set of which they are a part. Therefore, despite being comprised of a plurality of internal repetitions discernible over a series of subintervals, "run" is not considered a pluractional verb in English. On the other hand, verbs such as "slice, "cut," or "wipe" can be equally construed as denoting a singular event or the set of subevents whose members are all denotations of the matrix verb.[318] For example, in "She sliced the

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314. Similarly, Parsons states, "My account of the difference between processes and events is that a process is actually a series or amalgam of events. A walking process is a bunch of overlapping walking events—small ones, large ones, and so on," and later, "A running is an event that typically consists of 'shorter' events that are also runnings by the same person" (Parsons, *Events in the Semantics of English*, 184).

315. On this point Wood states, "Activities often seem to receive a 'default' event-internal [repetitive] interpretation, since if they are repeated continuously they lack any inherent boundaries which would distinguish separate events" (Wood, "The Semantic Typology of Pluractionality," 89).

316. Croft defines the concept "granularity" with respect to events as the following:

> [Granularity] is the idea that there are different levels of precision in conceptualization, so that some concepts are conceptualized as irreducible at one level even if they are reducible at another, more "fine-grained" level. Thus, details and distinctions below the more "coarse-grained" level can be ignored at the level of granularity. However, one may shift one's attention to a more fine-grained level of granularity at which those details and distinctions become relevant. Likewise, one can shift one's attention to a sill more coarse-grained level at which one may ignore even more distinctions. (W. Croft, *Syntactic Categories and Grammatical Relations: The Cognitive Organization of Information* [Chicago: University of Chicago Press, 1991], 163ff).

317. For example, Schultze-Berndt has found that in the Northern Australian language of Jaminjung the method for indicating progressive aspect involves morphological marking for an event-internal iterative. As such, an event such as "running" in English is construed as a Vendlerian activity, but in Jaminjung it is an iterative meaning something akin to "take many strides" (E. Schultze-Berndt, "Pluractional Posing as Progressive: A Construction between Lexical and Grammatical Aspect," *Australian Journal of Linguistics* 32.1 [2012]: 7–39. I am grateful for email correspondence with Prof. Patricia Cabredo-Hofherr alerting me to this particular phenomenon in Jaminjung.).

318. Beavers describes this notion in a manner worthy of repeating in its entirety:

> We can view this in terms of “granularity”. For any mereological entity, different subparts may be important for different contexts. One could conceive of an event of eating a sandwich as consisting of a series of bites or a series of singular chewing events (movements of the jaw). A path from San Francisco to New York could be viewed in terms of each individual mile or else in terms of just city-to-city segments, for instance the various ways different airlines calculate frequent flyer miles. Each represents a different “take” on a particular entity, at different levels of granularity. Likewise, only certain subparts or granularities may be relevant for different grammatical phenomena. (J. Beavers, "Scalar Complexity and the Structure of Events," in *Event Structures in Linguistic Form and Interpretation*, J. Dölling, T. Heyde-Zybatow, and M. Schäfer, eds. [Berlin & New York: Mouton de Gruyter, 2008], 256).

bread in half" and "She sliced up the tomato" are two different construals of the verb "slice," the first non-complex and the second pluractional, yet the same verb-form is used for both senses. Thus, while English makes no formal distinction between the single and pluractional use of such verbs, other languages have morphological devices that distinguish these different construals. Therefore what for English may be conceptualized as a non-pluractional event due to the salience of the "whole" in the part-whole relation, might be realized in another language as a pluractional with an emphasis on the individual members of a singular set. A fitting analogy to the various construals of the granularity parameter of events can be adduced from the domain of substantives:

> In many cases there are alternative expressions for what appear to be the same entities that differ in their construal of structure…the count noun *leaves* vs. the mass noun *foliage*, is one case. *Foliage* construes the entity as a relatively substance, without clear boundaries (a mass of foliage can be borne on several trees). *Leaf* construes the entity as a bounded individual, which in turn is part of a single tree; *leaves* multiplies the individual, making it truth-conditionally comparable to *foliage* in the right contexts. Either construal is available through the lexicon of English. There is also a quantitative scalar adjustment involved: *leaves* evokes a more fine-grained construal than *foliage*.[319]

According to Wood, this very same phenomenon can be found in the construal of events: "Such contrasts [i.e., count vs. mass nouns] are paralleled in the domain of events, e.g. *to walk* versus *to take steps*, *to talk* versus *to say* (*multiple*) *things*."[320] Thus, the difference between "walk" versus "take steps" amounts to variation in the granularity with which the subintervals of a "walking" event are construed, with greater salience being accorded to the sub-eventual processes entailed in "taking steps" as opposed to the superset of which they are a part in the denotation of "walk."

It is just this contrast in the construal of "walking" events that differentiates the G-stem versus D-stem uses of הלך, which, along with other verbs of physical movement, have proven particularly irksome for grammarians of Tiberian Hebrew. Jenni sought to deal with the intransitive root הלך in the G- versus D-stems by proposing that the latter are underlyingly transitive in the deep structure of their syntax and mean something akin to "einen Gang tun"[321] prior to lexical insertion. By positing the existence of an unexpressed object in the surface structure, a so-called "Objekt zulassen,"[322] Jenni sought to explain such intransitive D-stem verbs of motion by forcing them into his transitive "resultative" class, a maneuver that Waltke-O'Connor dismissed as a "longwinded circumlocution"[323] and that Kaufman concludes was, "never

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319. W. Croft and D. A. Cruse, *Cognitive Linguistics* (Cambridge: Cambridge University Press, 2004), 64.

320. Wood, *op. cit.*, 95; original italics.

321. Jenni, *Das Hebräische Pi'el*, 151. For Jenni's broader discussion of הלך see §5.2.3.1.

322. Ibid., 151.

323. *IBHS*, 405.

demonstrated — it was simply claimed."[324] Rather, the difference between the G- and D-stems of such verbs is better interpreted as a variation in the level of granularity with which events denoted by הלך are construed along the lines of the "foliage" versus "leaves" quoted above. In the G-stem הלך is used for events whose internal structure is obscured in deference to their whole, whereas the D-stem marks a finer-grained event construal that accords salience to the internal complexity of the event.

This can be poignantly illustrated in the following examples containing the G-stem of הלך in Ps. 138.7a and 24.55–56 versus its D-stem counterpart in 1Ki 21.27.

G-Stem

Ps. 138.7a אִם־אֵלֵךְ בְּקֶרֶב צָרָה תְּחַיֵּנִי…

"If I *walk* (G-stem) in the midst of distress, you will preserve me…"

Gen. 24.55-56 וַיֹּאמֶר אָחִיהָ וְאִמָּהּ תֵּשֶׁב הַנַּעֲרָ אִתָּנוּ יָמִים אוֹ עָשׂוֹר אַחַר תֵּלֵךְ׃ וַיֹּאמֶר אֲלֵהֶם
אַל־תְּאַחֲרוּ אֹתִי וַיהוָה הִצְלִיחַ דַּרְכִּי שַׁלְּחוּנִי וְאֵלְכָה לַאדֹנִי׃

"And her brother and her mother said, 'Let the young woman remain with us for ten days or so, after she *may depart* (הלך, G-stem).' And he said to them, 'Do not cause me delay for the LORD has caused my way to be successful, send me away that I *may depart* (הלך, G-stem) to my master.'"

D-Stem

1Ki. 21.27 וַיְהִי כִשְׁמֹעַ אַחְאָב אֶת־הַדְּבָרִים הָאֵלֶּה וַיִּקְרַע בְּגָדָיו וַיָּשֶׂם־שַׂק עַל־בְּשָׂרוֹ וַיָּצוֹם
וַיִּשְׁכַּב בַּשָּׂק וַיְהַלֵּךְ אַט׃

"And it happened when Ahab heard these words he tore his clothes that he placed sackcloth over his flesh and fasted, then he lay down in sackcloth and *walked about* (הלך, D-stem) dejected."

The first observation to make about this set of examples is how Hebrew utilizes the G-stem of the root הלך to denote events with a fairly broad spectrum of construals — on the one hand are the familiar "walking" events as exemplified in Ps. 138.7a where, as a Vendlerian activity, it consists of a heterogeneous internal structure, yet it is the macro-event comprised of the individual steps of the subject that is evinced. On the other hand, the G-stem of הלך is also utilized for the [+TELIC] achievement meanings of "to depart; go" in Gen. 24.55–56 where a single, countable transformation is depicted. In using the G-stem for both of these meanings, Hebrew is showing itself to be fairly course-grained in its construal of the events within the denotation of הלך. Secondly, for the D-stem of הלך in 1Ki. 21.27, while still denoting a single event, the construal of the event in more fine-grained. Here, salience is accorded the internal structure of the situation

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[324] Kaufman, "Semitics: Directions and Re-Directions," 281.

such that the event is portrayed as a series of micro-iterations of "walking back and forth" where the plurality of the sub-phases comprising the macro-event is underscored. Thus the difference between the G- and D-stems of הלך is that the former denotes events which are construed as singular and undifferentiated, while the latter marks events that are internally complex and composed of a series of iterated micro-events.[325]

This same variability in the granularity parameter on display in the previous examples can also be seen in how these same events may be variously construed across languages. The following set of examples from the *Peshiṭta* contains the same verses that appeared above in Hebrew:

G-Stem

P-Ps. 138.7a ܐܢ ܐܗܠܟ ܒܐܘܠܨܢܐ ܬܐܚܝܢܝ.

> "If I *walk* (ܗܠܟ, D-stem) in oppression, you will preserve me..."

P-Gen. 24.55-56 ܘܐܡܪܘ ܠܗ ܐܚ̈ܝܗ ܘܐܡܗ. ܬܬܒ ܥܠܝܡܬܐ ܥܡܢ ܝܪܚ ܝܘܡ̈ܝܢ ܘܗܝܕܝܢ ܬܐܙܠ
ܐܡܪ ܠܗܘܢ ܠܐ ܬܥܘܩܘܢܢܝ. ܕܡܪܝܐ ܐܛܒ ܐܘܪܚܝ. ܫܪܘܢܝ ܘܐܙܠ ܠܘܬ ܡܪܝ.

> "And her brothers and his mother said to him, 'the young woman will stay with us a month of days then she *will depart* (ܐܙܠ, G-stem).' He said to them, 'you should not delay me, for the Lord has established my way. Send me and I *will depart* (ܐܙܠ, G-stem) to my master.'"

D-Stem

P-1Ki. 21.27 ܘܟܕ ܫܡܥ ܐܚܐܒ ܦܬܓܡܐ ܗܢܐ· ܨܪ, ܠܢܚ̈ܬܘܗܝ, ܘܐܬܟܣܝ ܣܩܐ ܥܠ ܒܣܪܗ
ܘܨܡ ܘܫܟܒ ܒܣܩܐ ܘܗܠܟ ܚܦܝ.

> "And when Ahab heard this word he tore his garments and covered himself with sackcloth upon his flesh and fasted, and lie down in sackcloth and *walked about* (ܗܠܟ, D-stem) barefoot."

These examples illustrate the differences with which Syriac construes the exact same events denoted by הלך in the previous set of examples. The [+TELIC] homogeneous "leaving, departing" nuance of הלך is denoted by an altogether different verb in Syriac, the G-stem of ܐܙܠ, while the D-stem of the cognate root ܗܠܟ is used for any "walking" event, irrespective of whether its denotation is the typical "walking" event of *P*-Ps 138.7a or the multi-phasal denotation of *P*-1Ki 21.27.

This behavior suggests that the two languages differ in the level of granularity with which they construe the three types of events just illustrated. Hebrew is the more course-grained of the

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[325] Ryder calls attention to a similar phenomenon when he translates Sībawaihi's examples of the G-/D-stem pair *yajûlu-yuwajjilu* as "'he wanders'-'he increases his wandering' (i.e. 'he wanders about')" (Ryder, *The D-stem in Western Semitic,* 13).

two, construing the events of "leaving, departing" and "walking" with a fairly low resolution by using the same lexeme and morphology to denote these two rather disparate types of events. The more marked D-stem form of הלך is reserved only for the pluractional "walking about/back and forth" events whose internal complexity is rather pronounced.

Syriac on the other hand is more fine-grained in its construal, viewing the internal complexity that is inherent to both "walking" and "walking about/back and forth" with a higher resolution than does Hebrew. Both "walking" and "walking about/back and forth" possess multiple phases of repeated micro-events and so receive the heavier marking of the D-stem in Syriac rather than just the explicit pluractionality of "walking about/back and forth" that Hebrew marks with the D-stem. For the monophasal event of "leaving, departing" that is also in the denotation of the G-stem of הלך, Syriac uses a discrete lexeme, the G-stem of ܐܙܠ, thus differentiating the countable achievement from the internally complex events of "walking" that Hebrew does not.[326] Whether Syriac sees the G-stem of ܐܙܠ and the D-stem of ܗܠܟ as analogous to the G-stem denotations of הלך is immaterial. The crucial point is that where Hebrew is content to use the same default verbal morphology for both the achievement meaning of "leaving, departing" as well as the internally complex activity of "walking," Syriac is not. Hebrew's course-grained construal of the different lexical aspects of these events leads to their denotation in the G-stem, while the finer-grained delineation of Syriac leads to a wider use of its D-stem. It is this type of variance in the conceptual structure exhibited by the two languages with respect to the latent pluractionality of Vendlerian activities that has the potential to lead to variance both at word level, in the choice of the lexeme employed, but also at the level of derivational morphology which is our current focus.

5.2.3.1.1 Event-Internal Pluractionality as Potential Functional Relation *R* in *S* : T_D: Conclusion

The preceding section has shown that not all lexical aspects exhibit the type of pluractionality that has been regularly associated with the Semitic D-stem. Vendlerian achievements may be marked by the D-stem for event-internal pluractional because they lack the [+DURATIVE] feature allowing the action denoted by such verbs to be iterated in such close succession on a single occasion that the repetitions take on the aspectual nuance of a single, albeit, internally complex event. In addition to achievements, Vendlerian activities are also eligible for an event-internal construal since they are by definition a linearly ordered sequence of repeated micro-events. It is for this

[326] That the root ܗܠܟ is only realized in the D-stem and is therefore likely to have been lexicalized in that stem does little to obviate the present point, for lexicalization properly construed is diachronic and arises from usage. This point was made above in §4.3 in on the possibility of lexicalized D-stem verbs having been used to translate the Hebrew G-stem.

reason that "Activities often seem to receive a 'default' event-internal interpretation, since if they are repeated continuously they lack any inherent boundaries which would distinguish separate events."[327]

It was further shown that many languages of the world possess morphological mechanisms for marking verbs that denote the event-internal pluractionality capable of being exhibited by achievements and activities. Nevertheless, languages differ with respect to the granularity with which they construe events capable of an event-internal pluractional interpretation, with some according salience to the internal complexity of such events and others their boundaries in a manner similar to the difference in construals between "taking steps" versus "walking." This is an important point for our purposes because Hebrew and Syriac have been shown to differ in the construal of at least some events in just this way. Thus, while Hebrew G-stem accomplishment and stative verbs can be dismissed outright as having elicited the pluractional marking of the D-stem by the Syriac translators, it may have been the case that various Hebrew achievements and activities are construed as pluractionals by Syriac leading the Peshiṭta translations to marks such forms with their D-stem.

5.2.3.1.2 Distributive Pluractionality as Possible Functional Relation R in the *Hebrew G-Stem* : *Syriac D-Stem* Analogy

In addition to considerations of lexical aspect, another source of event-internal pluractionality is related to event distributivity.[328] This brand of pluractionality involves the "application of a predicate to the members or subsets of a set, or to the parts of an entity,"[329] for which "a hallmark property is the fact that the plurality in question is defined *relative to another plurality* [*sic*] in the sentence or context."[330] There are various linguistic devices that have the potential to signal that "another plurality" has motivated pluractional predication including the presence of a quantifier (e.g., "all, some") and distributive determinatives (e.g., "each, any"), but one of the most common is plural verb arguments: "In pairing individual arguments with events, distributivity can control

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327. Wood, "The Semantic Typology of Pluractionality," 89.

328. There is a mass of literature on the finer points of distributivity in the field of semantics. What is meant here is a brief and operational overview that sets the stage for a type of pluractionality potentially denoted by the D-stem. For more detailed accounts on distributive formal meta-language and attendant theory see esp. the works of Champollion cited below.

329. L. Champollion, "Distributivity, Collectivity, and Cumulativity," in *Blackwell Companion to Semantics,* L. Matthewson, C. Meier, H. Rullmann, and T. E. Zimmermann, eds. (Hoboken, NJ: Wiley-Blackwell, forthcoming), 3. Prepublication draft at http://lingbuzz/002133.

330. J. Kuhn, "Pluractionality and Distributive Numerals," *Language and Linguistics Compass* 13.2 (2019): 2.

whether one or many events take place."[331] It is the latter that caused Dressler, in his seminal treatment of pluractionality, to label one of the classes in his four-fold typology of verbal plurality "distributive Nuancen,"[332] and indeed, the various contours of this class are defined in relation to the number of other clausal arguments, viz., either the grammatical subject, object, or both:

> Beim Verbum bedeutet die Reduplikation Distributivität der Handlung, die vollzogen wird 1. durch einen einzelnen Akteur an distributiven Objekten (obj.-distr.), 2. durch einen einzelnen Akteur in distr. Weise an einem einzelnen Objekt über eine gewisse Zeitdauer (diskontinuativ, repetitiv, freq.), 3. durch distr. Akteure an ihrem jeweils eigenen Objekt (subj distr.), 4. durch distr. Akteure an distr. Objekten, wobei meist ein intensives Morphem dazu kommt.[333]

To illustrate the interaction of argument number on distributive pluractionality consider the following examples from English:[334]

(1) John cut down the tree.

> Single action: one event affects one object, a single "tree."

(2) John cut down the trees.

> Object distributive pluractionality: multiple actions are performed affecting *each* member of a plurality objects.

(3) The children smiled. / The women wore a dress.

> Subject distributive pluractional: multiple actions are performed by *each* member of a plurality of subjects.

It was constructions such as these that led to Cusic's observation that "A striking fact about languages which have plural verbs is the pattern of agreement which holds between the plurality of the verb and plurality in subject and object noun phrases."[335] Nevertheless, the simple presence or absence of a plural verbal argument does not obligate a distributive pluractional reading, for as (4) illustrates, there exist clauses that remain ambiguous with respect to a distributive (pluractional) or collective (singular, non-pluractional) interpretation:

(4) Three policeman stopped a vehicle.

The sentence in (4) has available both a distributive sense whereby "three discrete vehicles" are stopped as a result of the policeman as well as a collective interpretation whereby the three policemen combine their efforts in stopping of a single vehicle.[336] Thus, while it may be the case

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331. Henderson, *Ways of Pluralizing Events*, 78.

332. W. Dressler, *Studien zur verbalen Pluralitiit* (Wien: Biihlau in Kommission, 1968), 66.

333. Ibid., 58. For full account of these subcategories of distributivity see Xrakovskij (Xrakovskij, "Semantic Types of the Plurality of Situations and Their Natural Classification," 3–64.)

334. The type of distributivity involved in each is adapted from Xrakovskij (Xrakovskij, *op. cit.*, 38–42), but constitute a tight affinity with Dressler (*op. cit.*).

335. Cusic, "Verbal Plurality and Aspect," 111.

336. Despite the widespread assumption of verbal distributivity in the linguistic literature, the phenomenon lacks

that plural arguments do in fact serve as an indication of an event plurality in a restricted sense (i.e., Kuhn's "another plurality"), that is, as a reflex of event distributivity, it is important to recall the caution from Durie above[337] that number agreement with plural verbal arguments does not on its own constitute a case of pluractionality.

Be that as it may, attention has already been given to the fact that grammars of the various Semitic languages often call attention to the proclivity of the D-stem to appear with plural arguments,[338] but these regularly do so in a way that is vague with respect to these consitutents' significance for pluractionality[339] and do little more than provide lists of D-stem verbs appearing with plural subjects, and in particular, objects.[340] A notable exception to this general *Tendenz* is Kouwenberg's study of Akkadian which, in emphasizing how often the D-stem of that language appears with plural objects, similarly provides such lists, but couches these with a comment on their relationship to pluractionality: "Thus plurality of such objects typically entails plurality of the action."[341] Although terribly brief, Kouwenberg's statement serves to underscore the fact that plural objects are relevant to the D-stem only in as much as they license multiple events as opposed to whether it "marks a plurality of objects."[342]

In the example given above in (4), a pluractional reading obtains in a distributive sense just in case each of the "three policemen" stops a discrete vehicle such that there are three distinct "building" events. In that example, it was the subject slot in the syntax that was filled with a plural

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a precise definition. In light of this *disideratum* Champollion offers an operational definition based upon what he terms "distributive entailments," such that, "A distributive predicate is a predicate for which [1] and [2] are acceptable and entail each other when it is substituted for PRED: 1. Three people PRED. 2. Three people *each* PRED." (my emphasis; L. Champollion, *Parts of a Whole: Distributivity as a Bridge Between Aspect and Measurement*, Oxford Studies in Theoretical Linguistics [Oxford: Oxford University Press, 2017], 75). The entailment pattern described in Champollion's definition is articulated with respect to the AGENT role (cf., n.343), but can be applied to the PATIENT or THEME in a straightforward manner. Thus, if "X PRED the three Y" entails "X PRED *each one of* the three Y" then PRED is distributive such that "Jacob killed three lambs" entails that "Jacob killed each one of the three lambs."

337. See n.211.

338. For bibliographic information on a wide array of Semitic studies that make a special note tendency of the Semitic D-stem to appear with plural arguments, see, *inter alia*, Fassberg (Fassberg, "Is Pael an Intensive/Plural Form of Peal in Syriac?" 397).

339. An example of the imprecise treatment of plural participants in relation to pluractionality can be found in Fassberg who states: "Intensity manifests itself in a strengthening of the the action, which includes, among other things, plurality of action, subjects, or objects" (Fassberg, *op. cit.*, 396).

340. The following specifically highlight plural objects as being associated with the D-stem in Semitic: Greenberg, "The Semitic 'Intensive' as Verbal Plurality," 576–587; Fassberg, *op. cit.,* 395–431; Kouwenberg, *Gemination in the Akkadian Verb*.

341. Kouwenberg, *op. cit.,* 121.

342. Fassberg, *op. cit.*, 424.

NP whose predicate distributively applies to every atomic unit within the plurality denoted by "three vehicles." However, as previously noted, grammars of the Semitic languages regularly underscore the frequency with which the D-stem is associated with plural objects. In these cases, a single AGENT[343] is responsible for the plural action affecting or passing over to more than one grammatical object (typically a semantic PATIENT) such that the number of events being understood to have taken place is commensurate (although not necessarily quantifiable) to the number of atomic grammatical objects affected in the plurality.[344] Yet when dealing with plural objects it is the case as in (4) above that Durie's caution is apropos in that not all plural objects in the syntax are denotations of pluractionality as (5) demonstrates:

(5) Joseph switched off the lights.[345]

Despite the presence of a plural object (a PATIENT), the sentence in (5) can be understood as a single action in a rather straightforward manner. Plural action in (5) would be in view only if Joseph were to approach each light individually and turn them off one by one, but when the plural NP "the lights" is read as a collective it is clear that only a single event has transpired. This is important because it is not sufficient to simply assert that the D-stem has some nebulous preference for plural objects. Rather, in order for the presence of a plural object to have any relevance to the Semitic D-stem it must be evidentiary of the "second plurality"[346] giving rise to an interpretation of plural action.

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343. Like a PATIENT, an AGENT is another example of a semantic or theta role as described in n.303. Cruse succinctly captures the essence of a semantic AGENT when stating: "This feature is present in any sentence referring to an action performed by an object [i.e., as in "entity" and not "grammatical object"] which is regarded as using its own energy in carrying out the action. Included amongst these objects are living things, certain types of machine, and natural agents" (D. A. Cruse, "Some Thoughts on Agentivity," *Journal of Linguistics* 9.1 [1973]: 21).

344. On the formalization of this phenomenon see H. de Vries, "Two Kinds of Distributivity," *Natural Language Semantics,* 25.2 (2017): 178; cf., R. J. H. Scha, "Distributive, Collective, and Cumulative Quantification," in *Formal Methods in the Study of Language, Part 2*, J. Groenendijk, T. Janssen, and M. Stokhof, eds. (Amsterdam: Mathematisch Centrum, 1981), 488ff.

345. This example is based loosely upon Součková's Hausa illustration in Součková, "Pluractionality in Hausa," 96.

346. See quotation in n.330 above.

5.2.3.1.2.1 *Distributivity, Lexical Aspect, and the Relevance of Event-Internal and -External Pluractionality*

In addition to the verbal distributivity ranging over participants just discussed, Cusic identifies a broad spectrum of other contours that can be correlated with the "general idea" of verbal distributivity:

> The general idea of distribution is separation in time, space, or some other way, of actor from actor, action from action, object from object, property from property, and so on. In relation to our idea of plurality as internal complexity and external multiplicity, distributivity can be thought of as a function which takes the internally or externally plural complex event, redivides it into its separate bounded units, and assigns these units to temporal loci, spatial loci, or matches them one-to-one with other bounded units.[347]

Despite the elasticity afforded verbal distributivity by Cusic, due to the functional profile of the verbal morphology in the Semitic languages not all of these nuances are compatible with the pluractionality that is marked by the derivational rather than inflection systems of the Semitic languages. In fact, the delineation between event-internal and -external pluractionality in its applicability to the stems and conjugations discussed above, also cross-cuts the functionality of verbal distributivity. This is due to the fact that despite the wide spectrum of distributivity described by Cusic, each can be subsumed under the broader potential for events to be distributed along the higher order axes of temporal and/or spatial planes. That all roads of pluractionality, including distributivity, lead back to these temporal and/or spatial axes can be illustrated by the following summation from Xrakovskij who, in his articulation of the central tenets of verbal plurality, places these two dimensions at its core:

> On the intuitive level, it is obvious that any single situation *P* takes place at a certain moment of time *t* in a certain point in space *l*. In other words: *P* (*t, l*). Thus in order for a plurality of situations *P* to be realized, in principle there should be specified (1) either a plurality of moments *t* in each of which a situation *P* occurs, (2) or a plurality of points in space *l* in each of which a situation *P* occurs, (3) or both the plurality of periods of time *t*, and the plurality of points in space *l*.[348]

As a result, irrespective of what a plurality of events is being distributed over (e.g., participants, entities, properties, etc), it is the nature and organization of that plural action relative to a temporal interval that determines its membership in the event-internal or -external classes and in turn its applicability to the Semitic stems or conjugations, respectively. Thus, even when pluractionality is wrought through some "secondary plurality"[349] such as plural arguments, the

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347. Cusic, *op. cit.*, 102.

348. Xrakovskij, "Semantic Types of the Plurality of Situations and Their Natural Classification," 14ff.

349. See n.330 above.

iterated events in question will be portrayed either with a high degree of continuity[350] such that they can be circumscribed to a single, internally complex, temporal interval or will be repeated over separate, discrete, discontinuous intervals. These relationships can be portrayed schematically in the following chart by Xrakovskij where every iteration of an event P1…Pn is confined to a single time T for event-internal pluractionality, while for the event-external variety, P1…Pn is paired to its own, corresponding time interval T_1…T_n.

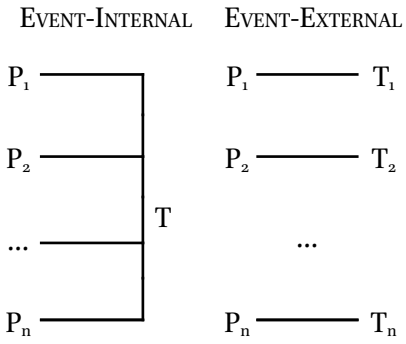

TABLE 5.2: TEMPORAL DISTRIBUTION IN EVENT-INTERNAL VS. -EXTERNAL PLURATIONALITY[351]

Whether a distributive pluractional is perceived as iterated over a single interval or a series of discrete intervals is contingent upon several linguistic criteria that can vary considerably from language to language: "Given multiple objects of a particular type, languages often provide us with alternate construals which either group those objects into a mass or complex object [in the sense of an entity, not a grammatical object], or individuate them."[352] In light of such variability, it is necessary to describe several of these criteria that have relevance to the type of pluractionality potentially marked by the Semitic D-stem.

The previous distinction in the temporal distributivity that attends the event-internal and -external pluractional contrast can be brought to bear upon the other core element of pluractionality identified by Xrakovskij above — spatial distributivity. Cusic expressly links spatial

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350. As a result of her survey on a wide variety of languages, Wood finds the following to be true of the event-internal pluractionals she encountered:

> A high degree of continuity of repetition is common in the class of recognisable [*sic*] event-internal pluractionals. Intuitively this seems obvious: the longer the gap which exists between repetitions, the less likely they are to be regarded as parts of a single event, and the less clear the distinction between one and more than one occasions becomes. Prototypical [event-internal] events presumably occur in a continuous period of time. No clearly intermittent meanings were found which suggested a single event (for example, a meaning such as 'to break into pieces by breaking now and then') (Wood, "Semantic Typology of Pluractionality," 78ff).

351. Xrakovskij, *op. cit.*, 26. Xrakovskij's schematic represented here is a slightly modified version that depends upon that of Leech (see G. N. Leech, *Towards a Semantic Description of English* [Bloomington: Indiana University Press, 1970], 125). The correlations to the even-internal -external categories of Cusic have been added and do not appear in the original.

352. Wood, *op. cit.*, 94.

distributivity with event-external pluractionality and says that in comparison with its repetitive, internal counterpart, "among the repeated types, the situation is much more complicated. Here, distribution in space as well as time enters the picture."[353] That Cusic exclusively associates spatial distribution with the domain of event-external pluractionals is due to the fact that actions dispersed over multiple locations tend to resist the conceptual grouping that can map iterated action onto a single temporal interval, and for this reason are typically construed as separate events. Therefore, plural action dispersed over spatial loci will most often entail multiple, discrete events co-iterated with their own temporal interval (the EVENT-EXTERNAL column in TABLE 5.2), thereby designating them event-external by definition. For example, in (6) below, it can only be the case that the "conquering" done by Joshua involves plural action of a type that transcends a single event and ocassion.

(6) Joshua conquered the cities throughout the land of Canaan.

Here, (6) is a straightforward example of distributional pluractionality due to the fact that many different "conquering" events are applied to the atomic members of the plural designation of "cities."[354] Therefore, the situation denoted in (6) implies a series of bounded events not unlike plural countable entities in the nominal domain. As a result, despite the verbal distributivity connoted by the plural PATIENT "cities," it is typical of the Semitic languages to denote extra-eventual distributivity akin to that in (6) by syntactic or inflectional means rather than through the derivational morphology of the stems. Due to the inherent link between events carried out over many locations and event-external plurality, action involving spatial distributivity is unlikely to have be marked by the D-stem but rather connoted through the conjugations.

The correlations between the temporal and spatial axes of verbal distributivity with the event-internal/-external distinction are also important for their intersection with the argument distributivity often associated with the D-stem by grammars of the Semitic languages. It has been noted several times that between plural subjects and objects, it is the latter that the Semitic grammars have a penchant to highlight for their association with the D-stem.[355] While a rationale for this asymmetry has yet to be offered in the literature, it is to be found in the type of pluractionality elicited by a distributed plural AGENT in the subject role versus a pluralized PATIENT as object. When a situation has a plural subject such that each atomic member of the plurality is

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353. Cusic, "Verbal Plurality and Aspect," 106.

354. This phenomenon was termed *Objektsdistributivum* by Dressler (see *Idem., Studien zur verbalen Pluralitiit*, 66).

355. For Akkadian, Kouwenberg says, "However, plurality of the direct object is the only kind of verbal plurality which is frequently expressed by the D-stem; for the other kinds its use is marginal, restricted to a specific context (…), or more or less hypothetical" (Kouwenberg, *Gemination in the Akkadian Verb,* 117).

interpreted as an AGENT of its own event there is a natural restriction on the potential for those events to be grouped into an internally complex whole.

For example, the simple clause "Three men ran" entails that the three men *each* ran. As a result, the distribution of an event across a plurality of AGENTS presupposes separate, discrete events that transcend a singular occasion and temporal interval[356] and are thus not able to be grouped in a manner that is consistent with event-internal pluractionality. Conversely, a single AGENT acting multiple times on a singular PATIENT, or acting a single time on a plurality of PATIENTS, is able to be so grouped as in the example used above, "Andrew broke the sticks for an hour." This is precisely the findings of Wood in her typological study of pluractionals where she says of Yurok:

> Event-internal pluractionals are also clearly plural in some respects: they involve repetition of a base event and can apparently be distributed over an internal argument [i.e., a grammatical object]. However, in certain ways they seem to function as singular (as would be expected based on the definition of event-internal pluractionals): they are restricted to single occasions, and are not distributable over any argument other than an internal one.[357]

In essence, pluractionality owed to a distributed plural AGENT will be event-external while plural events distributed over a plural PATIENT are eligible for an event-internal interpretation. As was shown in the previous section, the D-stem is the exclusive provenience of event-internal pluractionality and it is for this reason that it has so regularly been associated with plural objects in the grammars. This assessment relative to the Semitic languages accords with Wood's conclusion based upon her large survey of varied languages that, "Event-external pluractionals, when they pluralize participants often pluralize an Agent/external argument,"[358] and inversely, "I have found no examples in which an apparently event-internal pluractional pluralises [sic] the agent of a transitive verb."[359]

5.2.3.1.2.2 *Distributivity as a Possible Pluractional Relation* R *in* S : T_D

Turning now to the applicability of these theoretic considerations to *S* : T_D in *P*-Pss 1–30, since each of the events associated with the distributivity of a plural subject require their own discrete temporal interval, verbs with a plural subject that exhibit distributed action are necessarily event-

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356. While multiple events distributed over a plurality of AGENTS can be contemporaneous with respect to adjacent intervals, they cannot occur *within* the same interval as would be required for an event-internal interpretation.

357. Wood, "The Semantic Typology of Pluractionality," 184.

358. Wood, "Plurality of Events: Parallels Between Language and Perception," 431ff.

359. Wood, "The Semantic Typology of Pluractionality," 85.

external. As a result, it is unlikely on linguistic grounds that a Hebrew G-stem verb with plural subject occasioned the type of event-internal typically marked with the D-stem. On the other hand, distributive pluractional readings keyed to a plural grammatical object *do* have the potential for an event-internal interpretation for the ease with which each distributed event may be constrained to a single, contiguous temporal interval. This means that when confronted with a Hebrew G-stem verb with a singular subject and plural object the Syriac translators may have marked such instances of event-internal pluractionality with their own D-stem.

Nevertheless, it is important to recall that the mere presence of a plural grammatical object does not somehow lead to being marked by the D-stem. Only in those cases where a plural object points to a distributive connotation consistent with event-internal pluractionality is the presence of a plural argument relevant to the pluractional function of the D-stem. This would entail those situations distributed across grammatical objects in such a way that the plurality of events associated with them can be so closely grouped as to be construed as the internal phases of a pragmatically circumscribed, contiguous, macro-event. This means that only those lexical aspects able to license repetitive (as opposed to repeated) action will display the event-internal distributivity occasioned by the presence of a plural grammatical object, namely, Vendlerian achievements or activities.

In the description of event-internal pluractionality of achievement verbs that appeared above in §5.2.3.1, the English example sentence "Andrew broke sticks for an hour" was used. Here, the licensing of the pluractional interpretation of "break" is owed to more than just the plurality of the participant "sticks," but is also as a by-product of the lexical aspect of the verb. Because achievements lack the [+DURATIVE] feature, each event of breaking is construed as being distributed over the members of a plural set of objects in quick succession, approximating a single, yet internally complex event. This stands in contradistinction to accomplishments, for example, which, although specified in their lexical semantics as [+TELIC] just as achievements, are also specified for the feature [+DURATIVE]. Therefore, accomplishments with plural direct objects inherently denote events occurring on different occasions and are thus pluractionally event-external by definition. Accordingly, it is unsurprising that all of the examples adduced by Fassberg[360] from the lexica of Bar Ali and Bar Bahlul that are allegedly illustrative of the Syriac D-stem's function of marking "plural objects" are achievements: ܒܙܩ, ܢܬܦ, ܦܣܩ, ܦܕܪ, ܦܠܚ, ܦܣܣ, ܦܨܥ, ܦܪܙ, ܦܬܚ, and ܩܛܠ.

In addition to achievements, the other lexical aspect whose internal temporal constitution was shown to be compatible with event-internal pluractionality is the Vendlerian activity.

360. Fassberg, "Is Pael an Intensive/Plural Form of Peal in Syriac?" 402ff.

However, even though activities are eligible for an event-internal interpretation due to their potential to be construed as a series of iterated sub-phases internal to a macro-event, when governing plural objects they produce either collective readings or denote event-external pluractionals. For example, a clause such as "The professor taught many students" means either that (A) the professor taught a group of students; or (B) the professor taught each student separately. For meaning (A) the predicate is applied to a group, which although internally composite, is conceived as a singular, collective entity and so a single event is in view. The (B) reading would in fact entail iterating the predicate over each individual member of the plural set of "students," where each "teaching" event would take place in temporal succession — only once a singular "teaching" event has been completed with respect to an individual "student" can the next event begin since there is nothing in the semantics of "teach" that entails a natural *terminus*. In this way, each "student" is the object of its own discrete "teaching" event and any repetitions involved in the situation "The professor taught the students" would necessarily be event-external.

5.3 Conclusion

To explain the plural relation R that may be responsible for the $S : T_{\text{D}}$ analogies in the sample corpus it was first necessary to come to terms with the various ways in which the D-stem has been associated with plural marking by both ancient and modern grammarians of the Semitic languages. A critical survey of the relevant literature on the subject revealed that the "strengthening" attributed to the D-stem by ancient grammarians, that was later understood as verbal "intensity" by their 19th and 20th century successors, is better understood as event plurality or "pluractionality" in the terms of Newman.

With the help of general linguistic theory, it was further shown that Newman's pluractionality can refer to two related linguistic phenomena that are nevertheless distinct in ways that important for the Semitic verbal system. The first of these, labeled "event-external pluractionality" by Cusic, entails plural action that transcends a single event and occasion and includes the familiar categories of habituality, frequentativity, and iterativity. The second, what Cusic termed "event-internal pluractionality," entails an event that is decomposable into a series of iterations that when taken together constitute the internal phases of a single macro-event. When held up against the Semitic verbal system it was shown that these two types of pluractionality are marked by the two different domains of Semitic verbal morphology — the event-external type is indicated by the inflectional morphology of the conjugations, while event-internal pluractionality is marked by the derivational system of the verbal stems. By carefully observing the illustrative

examples and brief descriptions of the D-stem on the part of the ancient Semitic grammarians it is clear that it is the second of these two types of pluractionality that was intended when they referred to the D-stem's role in "strengthening" the action of a verb.

An important implication of the D-stem's denotation of event-internal pluractionality is that not every verb's semantics are logically consistent with this type of plural event. Drawing upon the seminal work of Vendler's categories of lexical aspect as they have been developed by subsequent scholars, it was shown that the semantics of activity and achievement verbs are the categories of verb that are eligible for the type of event-internal pluractionality marked D-stem. In the case of the latter, it is only when a Vendlerian achievement has a singular grammatical subject and governs a plural direct object can event-internal pluractionality obtain, a behavior that explains the penchant of Semitic grammarians to underscore the association of D-stem verbs with plural arguments. Thus, when a Vendlerian achievement governs a plural grammatical object, event-internal pluractionality can be licensed through verbal distributivity whereby a single AGENT acts repetitively upon the individual members of a plural set of entities in such as way that can be conceptually construed as a single, yet internally varigated, event.

The precise delineation of the nature and type of pluractionality that the D-stem is capable of licensing that took place in CHAPTER 5 not only clarifies the ambiguous plural notions often associated with the form, but also circumscribes the translational equivalents in the sample corpus that are able to evince an event-internal interpretation.

CHAPTER 6

TESTING FOR PLURACTIONALITY

After elucidating the nature and type of pluractionality capable of being licensed by the Semitic D-stem in CHAPTER 5, it now remains to bring this linguistic theory to bear upon $S : T_D$ in the sample corpus. Since not every lexical aspect, or *Aktionsart,* is eligible for the event-internal pluractionality marked by the derivational morphology of the Semitic verbal system, a first step in this direction involves ascertaining whether the lexical aspect of the Hebrew G-stem verb that was translated with a Syriac D-stem form can be understood as being comprised of repetitive internal phases consistent with event-internal pluractionality. This was done by testing each clause containing a Hebrew G-stem verb receiving a D-stem in translation for lexical aspects compatible with an event-internal construal, viz., Vendlerian activities and achievements. For the latter, this is licensed only in situations where the action of a single grammatical subject is distributed over the individual members of a plural set of grammatical objects in a manner that can be construed as a single, internally complex event.

In TABLE 6.1 below are all of the clauses exhibiting $S : T_D$ in *P*-Pss 1–30 along with their lexical aspects and the grammatical number of their subjects and objects. After the clauses in question are cells containing a "+" or "-" that indicate the potential compatibility of each respective verb's semantics with event-internal pluractionality. Those verbs whose lexical aspects are incompatible with a pluractional interpretation are further highlighted in grey. Finally, in the column containing the Syriac data listing the Syriac D-stem root used to translate a corresponding Hebrew G-stem verb, forms marked with an asterisk are those that appear exclusively in the D-stem in *P*-Pss 1–30.

Items appearing with "†" in TABLE 6.1 are those whose parsing or lexical aspect deserved further elaboration and justification, but due to their lack of relevance for pluractionality were not discussed in the main body of the chapter. Discussion of these items can be found in the "COMMENT" section immediately following the table arranged in the order of their appearance.

Table 6.1: *Hebrew G-Stem* : *Syriac D-Stem* Translational Equivalents and Their Lexical Aspects

Key:

(A) Chapter.Verse
(B) Hebrew/Syriac Verbal Root (* = roots only in the D-stem in *P*-Pss 1–30)
(C) Hebrew/Syriac Clause
(D) Lexical Aspect of Verb Governing Clause in (C).
(E) Number of verbal subject.
(F) Number of direct object. Oblique arguments appears in parens.

(A)	(B_H)	(C_H)	(D_H)	(E_H)	(F_H)	(B_S)	(C_S)	(D_S)	(E_S)	(F_S)
1.1	הלך	אֲשֶׁר לֹא הָלַךְ בַּעֲצַת רְשָׁעִים	+ (ACT)	Sing	-	*ܗܠܟ	ܕܠܐ ܗܠܟ ܒܥܨܬ ܪܫܝܥܐ	+ (ACT)	Sing	-
2.4	לעג	אֲדֹנָי יִלְעַג־לָמוֹ	+ (ACT)	Sing	(Plural)	*ܣܚܩ	ܡܪܝܐ ܢܣܚܩ ܠܗܘܢ.	+ (ACT)	Sing	(Sing)
3.6	סמך	כִּי יְהוָה יִסְמְכֵנִי	+ (ACT)	Sing	Sing	*ܣܡܟ	ܡܪܝܐ ܣܡܟ ܠܝ	+ (ACT)	Sing	Sing
4.2	חנן	חָנֵּנִי	+ (ACT)	Sing	Sing	ܚܢܢ	ܠܝ ܚܢܢ	+ (ACT)	Sing	(Sing)
4.6	זבח	זִבְחוּ זִבְחֵי־צֶדֶק	+ (ACH)	Plural	Plural	*ܕܒܚ	ܕܒܚܘ ܕܒܚ ܙܒܚܝ ܙܕܩ	+ (ACH)	Plural	Plural
4.6	בטח	וּבִטְחוּ אֶל־יְהוָה	- (STA)	Plural	(Sing)	†*ܒܛܚ	ܘܒܛܚܘ ܒܡܪܝܐ.	- (STA)	Plural	(Sing)
5.7	†דבר	תְּאַבֵּד דֹּבְרֵי כָזָב	+ (ACT)	Plural	Sing	†*ܡܠ	ܐܒܕܬ ܠܡܡܠܠ ܕܟܕܒܐ	+ (ACT)	Plural	Sing
5.9	נחה	נְחֵנִי בְצִדְקָתֶךָ לְמַעַן שׁוֹרְרָי	+ (ACT)	Sing	Sing	*ܢܚ	ܢܚܝ	+ (ACT)	Sing	Sing
5.11	†מרה	כִּי־מָרוּ בָךְ	+ (ACT)	Plural	(Sing)	*ܡܪ	ܡܠܝ ܡܪܝܪܝ	- (STA)	Plural	Sing
5.12	†חסה	חוֹסֵי בָךְ	+ (ACT)	Plural	(Sing)	†*ܚܣܐ	ܟܠ ܡܚܣܝ	- (STA)	Plural	(Sing)
6.3	חנן	חָנֵּנִי	+ (ACT)	Sing	Sing	ܚܢܢ	ܠܝ ܚܢܢ	+ (ACT)	Sing	(Sing)
6.3	רפא	רְפָאֵנִי	+ (ACH)	Sing	Sing	*ܪܦܐ	ܐܦܐ	+ (ACH)	Sing	Sing
6.10	לקח	יְהוָה תְּפִלָּתִי יִקָּח	- (ACC)	Sing	Sing	*ܩܒܠ	ܡܪܝܐ ܨܠܬܝ ܩܒܠ	- (ACC)	Sing	Sing

7.2	חסה	בְּךָ חָסִיתִי	+ (ACT)	Sing	(Sing)	חסה*	ܒܟ ܚܣܝܬܝ	- (STA)	Sing	(Sing)
9.11	בטח	וְיִבְטְחוּ בְךָ יוֹדְעֵי שְׁמֶךָ	- (STA)	Plural	(Sing)	חסה*	ܘܢܒܛܚܘ ܒܟ ܠܝܕܥܝ ܫܡܟ	- (STA)	Plural	(Sing)
9.14	חנן	חָנֵּנִי	+ (ACT)	Sing	Sing	חנן	ܚܢܢܝ ܠܝ	+ (ACT)	Sing	(Sing)
10.4	דרש	רָשָׁע כְּגֹבַהּ אַפּוֹ בַּל־יִדְרֹשׁ	+ (ACT)	Sing	-	חמד*	ܪܫܥ ܟܓܒܗ ܐܦܘ ܠܐ ܡܒܩܫ ܫܐܠ ܠܐ ܚܡܕ	+ (ACT)	Sing	-
11.1	חסה	בַּיהוָה חָסִיתִי	+ (ACT)	Sing	(Sing)	חסה*	ܒܝܗܘܐ ܚܣܝܬܝ	- (STA)	Sing	(Sing)
13.6	שיר	אָשִׁירָה לַיהוָה	+ (ACT)	Sing	(Sing)	שיר*	ܐܫܝܪܐ ܠܝܗܘܐ	+ (ACT)	Sing	(Sing)
15.2	הלך	הוֹלֵךְ תָּמִים	+ (ACT)	Sing	Sing	הלך*	ܗܘܠܟ ܬܡܝܡ	+ (ACT)	Sing	-
15.2	דבר	וְדֹבֵר אֱמֶת בִּלְבָבוֹ	+ (ACT)	Sing	Sing	דבר*	ܘܡܡܠܠ ܫܩܪܐ ܒܠܒܗ	+ (ACT)	Sing	Sing
15.3	נשׂא	וְחֶרְפָּה לֹא־נָשָׂא עַל־קְרֹבוֹ	- (ACC)	Sing	Sing	נשא*	ܘܚܣܪܐ ܠܐ ܢܣܒ ܥܠ ܩܪܝܒܗ	- (ACC)	Sing	Sing
16.1	שׁמר	שָׁמְרֵנִי	+ (ACT)	Sing	Sing	נצר	ܢܛܪܢܝ	+ (ACT)	Sing	Sing
16.5	תמך†	אַתָּה תּוֹמִיךְ גּוֹרָלִי	+ (ACT)	Sing	Sing	תמך†	ܐܢܬ ܬܩܝܡ ܠܟ ܓܪܝܠܝ	+ (ACH)	Sing	Sing
17.5	תמך	תָּמֹךְ אֲשֻׁרַי בְּמַעְגְּלוֹתֶיךָ	+ (ACT)	NA	Plural	תמך	ܬܡܟ ܫܘܪܝ ܒܫܒܝܠܘܬܝܟ	+ (ACT)	Sing	Plural
17.7	חסה	חוֹסִים	+ (ACT)	Plural	-	חסה*	ܚܣܝܡ	- (STA)	Plural	-
17.8	שׁמר	שָׁמְרֵנִי כְּאִישׁוֹן בַּת־עָיִן	+ (ACT)	Sing	Sing	נצר	ܢܛܪܢܝ ܟܐܝܫܘܢ ܒܬ ܥܝܢ	+ (ACT)	Sing	Sing
18.15	שׁלח†	וַיִּשְׁלַח חִצָּיו	- (ACC)	Sing	Plural	שלח*†	ܘܫܕܪ ܚܨܘܗܝ	- (ACC)	Sing	Plural
18.15	המם	וַיְהֻמֵּם	- (ACC)	Sing	Plural	המם*	ܘܐܬܒܗܬ	- (ACC)	Sing	Plural
18.17	שׁלח†	יִשְׁלַח מִמָּרוֹם	- (ACC)	Sing	(Sing)	שלח*	ܫܕܪ ܡܢ ܡܪܘܡ	- (ACC)	Sing	-

18.36	סעד†	וימינך תסעדני	- (STA)	Sing	Sing	*חמד	ܘܝܡܝܢܟ ܬܣܥܕܢܝ	+ (ACT)	Sing	Sing
20.3	שלח	יִשְׁלַח־עֶזְרְךָ מִקֹּדֶשׁ	- (ACC)	Sing	Sing	*ענה	ܢܫܕܪ ܠܟ ܥܘܪܕܢܟ ܡܢ ܩܕܫܐ	- (ACC)	Sing	Sing, (Sing)
20.3	סעד†	וּמִצִּיּוֹן יִסְעָדֶךָּ	- (STA)	Sing	Sing	*חמד	ܘܡܢ ܨܝܘܢ ܢܬܡܟ	+ (ACT)	Sing	Sing
21.8	בטח	כִּי־הַמֶּלֶךְ בֹּטֵחַ בַּיהוָה	- (STA)	Sing	(Sing)	*חנה	ܡܛܠ ܕܡܠܟܐ ܒܛܝܚ ܒܡܪܝܐ	- (STA)	Sing	(Sing)
22.5	בטח	בְּךָ בָטְחוּ אֲבֹתֵינוּ	- (STA)	Plural	(Sing)	*חנה	ܒܟ ܒܛܚܘ ܐܒܗܬܝܢ	- (STA)	Plural	(Sing)
22.5	בטח	בָּטְחוּ	- (STA)	Plural	-	*חנה	ܒܛܚܘ	- (STA)	Plural	(Sing)
22.6	בטח	בְּךָ בָטְחוּ	- (STA)	Plural	(Sing)	*חנה	ܒܟ ܒܛܚܘ	- (STA)	Plural	(Sing)
22.20	חוש	לְעֶזְרָתִי חוּשָׁה	+ (ACT)	Sing	(Sing)	*חלץ	ܠܥܘܕܪܬܝ ܚܠܨ	- (STA)	Sing	(Sing)
23.1	חסר	לֹא אֶחְסָר	- (STA)	Sing	-	*חסר	ܠܐ ܐܚܣܪ	- (STA)	Sing	Sing
23.4	הלך	גַּם כִּי־אֵלֵךְ בְּגֵיא צַלְמָוֶת	+ (ACT)	Sing	-	*הלך	ܓܡ ܕܐܢ ܐܗܠܟ ܒܓܘ ܨܠܡܘܬܐ	+ (ACT)	Sing	-
24.5	נשׂא	יִשָּׂא בְרָכָה מֵאֵת יְהוָה	- (ACC)	Sing	Sing	*נחל	ܢܣܒ ܒܪܟܬܐ ܡܢ ܡܪܝܐ ܢܚܠܬܗ	- (ACC)	Sing	Sing
25.2	בטח	בְּךָ בָטַחְתִּי	- (STA)	Sing	(Sing)	*חנה	ܒܟ ܒܛܚܬܝ	- (STA)	Sing	(Sing)
25.11	סלח	וְסָלַחְתָּ לַעֲוֹנִי	+ (ACH)	Sing	(Sing)	*חטא	ܘܬܫܒܘ ܠܥܘܠܬܝ	+ (ACH)	Sing	Sing
25.16	חנן	וְחָנֵּנִי	+ (ACT)	Sing	Sing	חנן	ܘܚܢܢܝ ܠܝ	+ (ACT)	Sing	(Sing)
25.20	חסה	כִּי־חָסִיתִי בָךְ	+ (ACT)	Sing	(Sing)	*חנה	ܡܛܠ ܕܒܟ ܚܣܝܬ	- (STA)	Sing	(Sing)
26.1	הלך	כִּי־אֲנִי בְּתֻמִּי הָלַכְתִּי	+ (ACT)	Sing	-	*הלם	ܡܛܠ ܕܐܢܐ ܒܬܡܝܡܘܬܝ ܗܠܟܬ	+ (ACT)	Sing	-
26.1	בטח	וּבַיהוָה בָּטַחְתִּי	- (STA)	Sing	(Sing)	*חנה	ܘܒܡܪܝܐ ܒܛܚܬܝ	- (STA)	Sing	(Sing)

26.11	הלך	וַאֲנִי בְּתֻמִּי אֵלֵךְ	+ (ACT)	Sing	-	ܗܠܟ*	ܐܢܐ ܕܝܢ ܒܬܡܝܡܘܬܝ ܗܠܟܬ	+ (ACT)	Sing	-
26.11	חנן	וְחָנֵּנִי	+ (ACT)	Sing	Sing	ܪܚܡ	ܘܪܚܡ ܥܠܝ	+ (ACT)	Sing	(Sing)
27.5	צפן†	כִּי יִצְפְּנֵנִי בְּסֻכֹּה בְּיוֹם רָעָה	- (ACC)	Sing	Sing	ܛܫܐ†	ܡܛܠ ܕܛܫܝܢܝ ܒܡܛܠܬܗ ܒܝܘܡܐ ܒܝܫܐ	- (ACC)	Sing	Sing
27.6	זבח	וְאֶזְבְּחָה בְאָהֳלוֹ זִבְחֵי תְרוּעָה	+ (ACH)	Sing	Plural	ܕܒܚ*	ܘܐܕܒܘܚ ܒܡܫܟܢܗ ܕܒܚܐ ܕܬܘܒܚܬܐ	+ (ACH)	Sing	Plural
27.6	שיר	אָשִׁירָה	+ (ACT)	Sing	-	ܫܒܚ*	ܐܫܒܚ	+ (ACT)	Sing	-
27.7	חנן	וְחָנֵּנִי	+ (ACT)	Sing	Sing	ܪܚܡ	ܪܚܡ ܥܠܝ	+ (ACT)	Sing	(Sing)
27.11	נחה	וּנְחֵנִי בְּאֹרַח מִישׁוֹר לְמַעַן שׁוֹרְרָי	+ (ACT)	Sing	Sing	ܕܒܪ*	ܘܕܒܪܝܢܝ ܒܫܒܝܠܐ ܬܪܝܨܐ	+ (ACT)	Sing	Sing
28.3	דבר	דֹּבְרֵי שָׁלוֹם עִם־רֵעֵיהֶם	+ (ACT)	Plural	Sing	ܡܠܠ*	ܕܡܡܠܠܝܢ ܫܠܡܐ ܥܡ ܚܒܪܝܗܘܢ	+ (ACT)	Plural	Sing
29.9	חשף	וַיֶּחֱשֹׂף יְעָרוֹת	- (ACC)	Sing	Plural	ܒܣܪ	ܘܡܒܣܪ ܥܒܐ	- (ACC)	Sing	Plural
30.3	רפא	וַתִּרְפָּאֵנִי	+ (ACH)	Sing	Sing	ܐܣܐ	ܘܐܣܝܬܢܝ	+ (ACH)	Sing	Sing
30.11	חנן	וְחָנֵּנִי	+ (ACT)	Sing	Sing	ܪܚܡ	ܘܪܚܡ ܥܠܝ	+ (ACT)	Sing	(Sing)

Comment

*ܫܒܪ: *P*-Pss 4.6, 9.11, 21.8, 22.5(x2), 6, 25.2, 26.1

It was stated in the previous chapter that since stative verbs are unmarked for DYNAMICITY and so by definition do not include events in their denotation, it is impossible for such verbs to be pluractional. As a result the repetition of a state is a *non-sequitur*, which for the present analysis means that verbs from ܫܒܪ, meaning "to hope,"[361] have not been explored for a potential pluractional marking with the Syriac D-stem.[362]

Lupu's analysis of the Syriac D-stem seems to agree that verbs from the root ܫܒܪ denote a state for she says of both the G- and D-stem of the root, "Both stems express internal mental activities that only affect the experiencer, which is the grammatical subject of the verb."[363] Indeed, the root ܫܒܪ patterns with other mental state verbs in having an EXPERIENCER subject and THEME object, what the literature refers to as a *fear*-type verb, of which Grimshaw says: "Those [verbs] in the fear class…are always stative and never have an event reading,"[364] and moreover, both Smith and Lakoff, the latter of whom is responsible for the most widely accepted test diagnostic for statives, use "hope" as one of their examples of a prototypical stative verb.[365] Here, Lupu additionally points out that the D-stem of ܫܒܪ "consistently translates the Greek verb ἐλπίζω, 'to hope,'" a verb that Fanning also classifies as a state.[366]

Despite the overwhelming evidence that verbs from ܫܒܪ are stative and the statements from Lupu that seem to agree with this assessment, she nevertheless maintains that "The D stem [of ܫܒܪ] functions as a pluractional, marking the verb for prolonged duration of the activity."[367] The first observation to make in response is that as a root with a stative meaning it is a category error to suppose it can be at the same time an "activity" that is capable of pluractionality. Secondly, here is one of several examples[368] in Lupu's that conflates pluractionality, which refers to multiple events, with temporal duration, which for an event, refers to how long it takes or unfolds, and for a state, to how long it holds. An indication of the duration of a given situation is accomplished through verbal modification by temporal adverbs or analytic structures and should not be

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361. *CSD*, s.v. ܫܒܪ, 359.

362. See §5.2.3.1 above, especially the quote of Xrakovskij in n.290.

363. Lupu, "Semantic Patterns," 216. On the other hand, Lupu states elsewhere that, "Pluractional markers usually interact with activity predicates by pluralizing the phases of action on a given occasion, producing an event with extended duration" (Ibid., 164).

364. J. B. Grimshaw, *Argument Structure* (Cambridge, Mass: The MIT Press, 1990), 23.

365. see G. Lakoff, "Stative Adjectives and Verbs in English," in *Mathematical Linguistics and Automatic Translation*: *Report to the National Science Foundation* 17 (Cambridge, MA: Computational Laboratory, Harvard University, 1966), 16; Smith, *The Parameter of Aspect*, 33.

366. B. Fanning, *Verbal Aspect in New Testament Greek* (Oxford: Clarendon Press, 1990), 135-6.

367. Lupu, *op. cit.,* 216.

368. See n.534 below.

confused with the pluractionality, or multiple occurrences, of that situation, the latter of which is marked by derivational morphology of the D-stem. Given that verbs from מחצ are stative and thus lacking any event denotation, they have been deemed incapable of pluractionality.

דבר : *מכצ: *P*-Ps 5.7

Each of the verbs from these roots are plural participles in the construct state standing in a *nomen regens-rectum* relationship with an immediately juxtaposed noun and so could be interpreted as completely substantival forms not deserving a place here along other more decidedly verbal forms, not least because they also head a phrase serving as a verbal complement of a matrix predicate. However, in both cases the genitive relation is one that predicates an adverbial relationship whereby they "involve the object, direct or mediated, of the underlying verbal action."[369] As a result, despite their formal and syntactical substantival character, these two participles are nevertheless the *nomina regentes* of objective genitival constructions where their verbal character is elicited despite their form.[370]

חסה : *מחצ: *P*-Ps 5.12

In a situation similar to that just described, this pair of clauses also contain two participles in the plural construct that serve as *nomina agentis*. However, unlike the previous set of participles, these govern a prepositional phrase and not a *nomens rectum*. In this way, the verbal character of these participles is rather pronounced despite their substantival form.

שׁלח : *ערה: *P*-Ps 18.15

The root שׁלח, whose principal gloss is often given as "to send,"[371] is often rendered as "to shoot"[372] as is reflected in various English translations that vary between "God shot His arrows"[373] and "God sent out His arrows"[374] at Ps 18.15. This distinction is an important one because the English "shoot" is a Vendlerian achievement that does not have a [+DURATIVE] run-up phase and so would be compatible with event-internal pluractionality in certain contexts. However, it is important to note

369. *BHS*, §9.5.2b, 146.

370. *GKC*, §128*h*, 416.

371. *BDB*, s.v. שׁלח, 1018.

372. *HALOT* gives "to shoot arrows" a separate entry in 3dγ; s.v. שׁלח, 4:1513.

373. See *HCSB, NIV, NLT, GNB*.

374. *NASB, ESV, NKJV, KJV, DRB, RSV, Wycliff Bible*.

that while various idiomatic contexts might call for an English translation of שׁלח with the achievement "shoot," the underlying Hebrew sense of "sending out" the arrows, is properly classified as an accomplishment in lexical aspect.[375] The [+DURATIVE] status of "sending" verbs is also highlighted by Pinker who emphasizes the temporal interval inherent in verbs of "sending" when he states, "A related subclass [of change of possession verbs] includes verbs where a transfer of possession is mediated by a separation in time and space, sometimes bridged by a particular means of transfer."[376] Here, the transfer of "his arrows" is mediated through and accomplished by a weapon. As a result, וַיִּשְׁלַח חִצָּיו is marked here as being incompatible with an event-internal reading, "- (acc)," for despite its plural direct argument, each arrow that is "shot/sent" belongs to its own event.

סעד: Pss 18.36, 20.3

The G-stem of סעד means "to support, sustain,"[377] and has been analyzed here as a state, a lexical aspect precluded from receiving a pluractional interpretation in translation. However, given that the nearly synonymous verbs from the roots סמך/תמך, each with the primary meaning of "support" or "hold,"[378] were analyzed elsewhere as activities, the analysis of סעד requires justification. The reason for the difference in their treatment despite the strong semantic affinity of these roots is due to the variation in their syntactic behavior and the lexical semantics of the clauses they govern. Unlike סמך/תמך, the most frequent denotation of סעד is the type of "support" that comes by way of nourishment through food and drink, and it is only through a metaphorical extension does it refer to a broader, more abstract sense of general preservation. Another important difference is that the G-stem of סעד can felicitously appear in an intransitive clause denoting a state internal to a grammatical subject whereas verbs from סמך/תמך are transitive. Representative uses of the intransitive G-stem of סעד can be found in 1Ki 13.7 and Prov 20.28:

1Ki 13.7 וַיְדַבֵּר הַמֶּלֶךְ אֶל־אִישׁ הָאֱלֹהִים בֹּאָה־אִתִּי הַבַּיְתָה וְסָעָדָה וְאֶתְּנָה לְךָ מַתָּת׃

"And the king spoke to the man of God, 'Come with me to my house and *be sustained* (G-stem), so that I may give you a gift.'"

375. In fact Olsen uses "to send" as a exemplar of an accomplishment; see Olsen, "A Semantic and Pragmatic Model of Lexical and Grammatical Aspect," 199.

376. S. Pinker, *Learnability and Cognition: The Acquisition of Argument Structure, New Edition* (Cambridge, MA: MIT Press, 2013), 129.

377. *HALOT* s.v. סעד, 2:761; BDB s.v. סעד, 703.

378. *HALOT* s.v. סמך, 2:759; s.v. תמך, 4:1752; BDB s.v. סמך, 701; s.v. תמך, 1069.

Prov 20.28 חֶסֶד וֶאֱמֶת יִצְּרוּ־מֶלֶךְ וְסָעַד בַּחֶסֶד כִּסְאוֹ׃

"Loving-kindness and truth will preserve a king and through loving-kindness his throne *is supported* (G-stem)."

Nevertheless, in addition to these stative nuances, סעד does appear in a number of [+DYNAMIC] situations, most often with regard to sustenance with food (e.g., Gen 18.5), but also in cases where an AGENT "sustains" a PATIENT. This is the case in both of the root's attestations in the sample corpus at Pss 18.46 and 20.3.

Given that verbs from סעד appear in both intransitive, stative situations as well as those that are [+DYNAMIC] and transitive is possible only if the stative sense is basic and any fientive notions are added to its semantics by way of pragmatic implicature. This is based upon Olsen's work on the privative nature of the semantic features comprising lexical aspect that demonstrated that it is only when a given feature is lacking for a given verb can it be added by means of other clausal constituents.[379] Thus the [+DYNAMIC] feature present in the semantics of סעד in both Pss 18.46 and 20.3 was added its feature geometry by way of its syntactical environment, yet its underlying semantics is stative. Because of this, the Syriac's translation of סעד with the D-stem of ܣܡܟ is most likely due to a transitivity increasing operation and not pluractional marking.

צפן : ܛܠ: *P*-Ps 27.5

For a justification of the accomplishment interpretation of "hide" verbs see Olsen[380] and Levin.[381]

379. See n.274.

380. "A Semantic and Pragmatic Model of Lexical and Grammatical Aspect," 199.

381. *English Verb Classes and Alterations*, 146.

6.1 Pluractionality: Preliminary Observations from the Data

As explained in the previous chapter, for a pluractional relation *R* to be responsible for $S : T_D$, it is required that the lexical aspect of the Hebrew verb serving as the antecedent in the translational pair have the potential to license event-internal pluractionality. Of the 58 instances where a Hebrew G-stem verb receives a Syriac D-stem verb in the sample corpus, 38 are formed from roots whose semantics are eligible for event-internal pluractionality, i.e., those that are either Vendlerian achievements or activities.

The first lexical aspect eligible for an event-internal pluractional interpretation is the Vendlerian activity. Verbs of this class are unmarked for the [+TELIC] feature that so often naturally divides events into discrete, countable situations. Lacking as they do any intrinsic *terminus*, such verbs can be construed as an event-internal pluractional comprised of a series of repetitions that take place on a single occasion. This, combined with the fact that the Hebrew verb in 33 of the 58 $S : T_D$ analogies in the sample corpus are Vendlerian activities, means that the bulk of the present chapter will be devoted to analyzing whether an event-internal pluractional interpretation on the part of the Syriac translators may have led to their use of the D-stem for the Hebrew G-stem.

For achievements, which are [+TELIC] but lack the [+DURATIVE] feature, an event-internal interpretation is possible only when the punctiliar action characteristic of this lexical aspect is iterated in such a way as to be construed as a single, internally complex macro-event. As was shown above, this occurs most often when an achievement governs a plural PATIENT whereby the action of the verb is distributed over each individual member of a plural set of entities on the same occasion and whose event boundaries are semantically non-salient. It is for this reason that a supposed direct correlation between participant number and the Semitic D-stem has often been noted in the grammars where it has been routinely proposed that the D-stem is in some way preferred for plural arguments generally and plural objects particularly. However, in the discussion of verbal distributivity in §5.2.3.1 it was demonstrated that it is not that the Semitic D-stem somehow "marks" or "selects" plural arguments, but rather that the unmarked DURATIVITY feature in the semantics of achievements allows for the tight bundling of multiple events distributed over a plurality of grammatical objects into a single, internally complex event that is consistent with event-internal pluractionality. This is relevant because in the sample corpus, of the five Hebrew G-stem achievements that are translated with the Syriac D-stem, only two govern a plural PATIENT. As such, the bulk of §6.1.1 below will be dedicated to analyzing whether $S : T_D$ involving these two verb pairs motivated the pluractional marking.

6.1.1 *Hebrew G-Stem Activities Translated with the Syriac D-Stem*

The first lexical aspect that has the potential for pluractional marking by the Semitic D-stem is the Vendlerian activity. Verbs of this class are marked [+DURATIVE] and [+DYNAMIC] because they denote events that are processes unfolding within a pragmatically defined interval of time and are composed of an "an open-ended set of linked steps or stages," such that "moving from one step to the next is a kind of change. As such, a process is really an open-ended set of changes."[382] That activities are an "open-ended" progression of changes accounts for their being unmarked for the TELICITY feature and also what allows them to be consistent with event-internal pluractionality. The compatibility with event-internal pluractionality follows from Vendler's observation that activities "go on in time in a way; any part of the process is of the same nature as the whole."[383] Although Vendler's notion of homogeneity required further honing in subsequent scholarship,[384] his point is that activities "go on" in time by way of repetition, they are, as McClure states, "an unbounded sequence of linearly ordered changes of the same type."[385] That these "linearly ordered changes" — in state, location, or some other quality — are ordered sequentially is indicative of their inherent repetition over a pragmatically determined interval of time.

In an event of "swimming" there is an "intuitive difference between a half stroke and a set of five or six strokes. The first is definitely not a swimming while the second probably is."[386] It is for this reason that any sub-part of a "running" event is also an event of "running" — any temporal interval in which one runs, is a smaller, sub-event of "running."[387] It is this intrinsic internal repetition possessed of every activity verb that makes them consistent with the event-internal

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382. McClure, "Syntactic Projections of the Semantics of Aspect," 91.

383. Vendler, "Verbs and Times," 146.

384. It is unfortunate that the term "homogeneous" has been used in the aspectual literature in several senses. What Vendler has in mind here is the same as the cumulativity adduced for spatial objects by Quine: "So-called mass terms like ‘water’, ‘footwear’, and ‘red’ have the semantical property of referring cumulatively: any sum of parts which are water is water" (W. V. O. Quine, *Word and Object* [Cambridge: The MIT Press, 1960, reprint 2013], 83). In this way, the sum of any two "running" events is itself an event of "running." However, the notion of "homogeneity" proper only concerns stative situations due to the "minimum parts problem" (see p.158 below for a detailed description of the "minimal parts problem"). Despite its inadequacy, Vendler's original description of activity verbs was used here due to demonstrate that their inherent repeatability for some temporal interval was what was thought to combine them into a natural class.

385. McClure, *op. cit.,* 93.

386. Ibid., 92.

387. Even Dowty, in disagreeing with Kenny's axiom for activity predicates "A is (now) φing, then A has φed," acknowledges the repetitive internal structure of activity verbs when he states that, "iterative aspect, whatever its exact nature, is like activities and states in being 'simultaneously' true of an interval and of subintervals and superintervals of that interval" (Dowty, *Word Meaning and Montague Grammar*, 173).

pluractionality marked by the D-stem in Semitic. As a result, Hebrew G-stem activities in the source text that receive a D-stem in Syriac translation require careful scrutiny in that the former easily lend themselves to a pluractional interpretation that may have elicited the heavier morphological marking of the Syriac D-stem in translation.

With this in mind, of the 58 Hebrew G-stem verbs that receive a D-stem in the sample corpus 33, or just over half, can be construed as Vendlerian activities, with these being derived from 13 discrete roots (see TABLE 6.1 above).[388] The great majority of these 33 Hebrew activity verbs in the G-stem receive a Syriac D-stem verb that is likewise a Vendlerian activity, save for the eight verbs arising from four different Hebrew roots appearing in the following section.

Those Hebrew G-stem activities that are translated with a Syriac D-stem verb that is a non-activity will be considered first followed by an analysis of those Hebrew G-stem activity verbs that are translated with a D-stem activity verb in Syriac. This will be done to determine whether an event-internal pluractional interpretation of the Hebrew may have been responsible for the $S : T_{D}$ analogy in these instances. When a non-linguistic relation *R* other than pluractionality is found that is more likely responsible for $S : T_{D}$ analogy, this will be identified and explored.

6.1.1.1 *Hebrew G-Stem Activities Translated with Syriac D-Stem Non-Activities*

Ps 5.11	מרה	כִּי־מָרוּ בָךְ	+ (ACT)	ܡܪܝ*	ܠܐ ܡܬܡܪܝܢ ܒܟ	- (STA)
Ps 5.12	חסה	חוֹסֵי בָךְ	+ (ACT)	ܚܣܐ*	ܡܬܚܣܝܢ ܒܟ	- (STA)
Ps 7.2	חסה	בְּךָ חָסִיתִי	+ (ACT)	ܚܣܐ*	ܒܟ ܚܣܝܬ	- (STA)
Ps 11.1	חסה	בַּיהוָה חָסִיתִי	+ (ACT)	ܚܣܐ*	ܒܡܪܝ ܚܣܝܬ	- (STA)
Ps 16.5	תמך	אַתָּה תּוֹמִיךְ גּוֹרָלִי	+ (ACT)	ܬܡ	ܐܢܬ ܗܘ ܕܩܝܡ ܠܟ ܓܕܠܝ	+ (ACH)
Ps 17.7	חסה	חוֹסִים	+ (ACT)	ܚܣܐ*	ܡܬܚܣܝܢ	- (STA)
Ps 22.20	חוש	לְעֶזְרָתִי חוּשָׁה	+ (ACT)	ܚܫ*	ܠܥܘܪܬܝ ܚܘܫ	- (STA)
Ps 25.20	חסה	כִּי־חָסִיתִי בָךְ	+ (ACT)	ܚܣܐ*	ܠܟ ܒܟ ܚܣܝܬ	- (STA)

The verb pairs appearing above represent those instances where a G-stem Vendlerian activity in the Hebrew *Vorlage* of the sample corpus was translated with a Syriac verb in the D-stem, but one of a different lexical aspect. This situation takes place with four different Hebrew roots that occur eight times in *P*-Pss 1–30.

388. These are (3) דבר, (2) שׁמר, (2) שׁיר, (2) נחה, (2) מרה ,לעג, (7) חנן ,חוּשׁ, (5) הלך, דרשׁ, and (2) תמך.

מרה : *ܡܪܝ in Ps 5.11

כִּי־מָרוּ בָךְ (ACTIVITY) : ܡܪܝܘ ܒܟ (STATE)

It is typical for the lexica to gloss verbs from the root מרה in a manner similar to *HALOT's* definitions, "to be recalcitrant, rebellious,"[389] and in so doing give the appearance of a stative lexical aspect rather than the activity it has been here labeled. Indeed, there are several instances where a stative interpretation is appropriate for verbs from this root,[390] but in each of these cases the participial form is used adjectivally and so it is the attributive use of the conjugation that is responsible for its stative nuance and not the semantics of the verb itself. In fact, of the 44 attestations of verbs from מרה in the Hebrew Bible, nearly half (20) govern a direct object headed by the *nota accusativi* אֵת־ indicating a transfer of verbal action from AGENT to PATIENT,[391] a phenomenon not attested with purely stative verbs. Furthermore, these 44 verbs from מרה are equally distributed between the G- and H-stems with 22 verbs appearing in each. While stative verbs do occasionally appear in H-stem, it is decidedly rare, as Waltke-O'Connor indicate: "Though both [the D- and H-stems] involve causation, the factitive-resultative *Piel* generally has to do with the bringing about of a state or condition, and the causative *Hiphil* with the causing of an event."[392] For these reasons, despite the stative nuances of מרה suggested by the English glosses offered in the lexica, the root nevertheless patterns with fientive verbs both morphologically and syntactically and so has been labeled here a Vendlerian activity.

In *P*-Ps 5.11 the Hebrew G-stem activity verb מָרוּ is translated with the stative verb ܡܪܝܘ from the root ܡܪܐ, which Sokoloff and *CSD* give as their principal gloss, "to be bitter."[393] This raises the question as to whether the Syriac translators might have understood the third common plural form מָרוּ as being from the geminate stative מרר, "to be bitter,"[394] rather than from מרה, "to be rebellious" (this would entail a surface form of מָרְרוּ versus MT's מָרוּ). Given the orthographic similarity between the two verb-forms it may very well be the case that the Syriac translation

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389. *HALOT* s.v. מרה ,2:632; so also *BDB*, s.v. מרה, 598.

390. This is especially the case when appearing in parallel to verb-forms from סרר, e.g., Deut 21.18, 20, Jer 5.23, Ps 78.8.

391. Garr has demonstrated that the Hebrew *nota accusativi* אֵת־ is typically employed not simply to mark a direct object, but more importantly, grammatical objects that display a high degree of affectedness (W. R. Garr, "Affectedness, Aspect, and Biblical 'et," *Zeitschrift für Althebraistik* 4 [1991): 119–34), a function further confirmed by Bekins (P. J. Bekins, "Information Structure and Object Marking: A Study of the Object Preposition *'et* in Biblical Hebrew," PhD. Diss., Hebrew Union College–Jewish Institute of Religion [2012]).

392. *IBHS*, 434.

393. Sokoloff, *Syriac Lexicon*, s.v. ܡܪܝܪܐ, 835; Ibid., s.v. ܡܪܝܪܘܬܐ, 838; and *CSD*, s.v. ܡܪܐ, 297; cf., S. P. Brock and G. A. Kiraz, *Gorgias Concise Syriac-English*, *English-Syriac Dictionary*, s.v. ܡܪܐ. For the variation that exists in the headwords used for verbs derived from this root between Sokoloff and *CSD* see n.839 above.

394. *HALOT*, s.v. מרר, 2:638.

simply misidentified the form. However, the Greek translation has παρεπίκρανάν for מָרוּ here, a 3rd person plural, aorist active indicative from the lemma παραπικραίνω, which LSJ defines as "to embitter, provoke."[395] Thus, it could be the case that the similarity in the Hebrew roots for "to rebel" (מרה) and "to be bitter" (מרר) elicited confusion on the part of the translators who in turn sought clarification from a Greek version.[396] However, if it be supposed that the orthographic similarity between the Hebrew roots מרה and מרר led to consultation of a Greek version on the part of the *Peshiṭta* translators who were met with παρεπίκρανάν and so settled on ܡܪܝ, it is just as likely that this same indistinguishability of forms is responsible for the shape of the Greek text. Should this have been the case, then it is eminently reasonable to conclude that the agreement between the Greek and Syriac readings here is due to polygenesis, where translators of each version independently chose verbs relating to being "bitter" when confronted with the surface form מָרוּ rather than to Greek versional influence upon the *Peshiṭta*. The prospect of polygenesis here is even more likely in light of the fact that of the 44 times the root מרה occurs in the entirety of the Hebrew Bible, the *Peshiṭta* employs ܡܪܝ for 28 of them, but Greek versions attest a form of παραπικραίνω for only 14 of these. Accordingly, it seems much more likely that the Syriac translation was done independently of any Greek version at this point.

These observations are relevant for the *Hebrew G-stem* : *Syriac D-stem* translation involving the roots מרה and ܡܪܝ in *P*-Ps 5.11 under consideration here for two reasons. Firstly, since it has been shown that the D-stem of ܡܪܝ is formed from a root that is underlyingly stative, such verbs are precluded from a pluractional interpretation. Secondly, since the Greek versions of Ps 5.11 also use a stative verb to render מָרוּ it is a real possibility that the choice of ܡܪܝ here is simply a by-product of the translators' consulation with one of these verions. However, the distribution of the D-stem of ܡܪܝ in the broader *Peshiṭta* Hebrew Bible reveals that it is just this root/stem combination that is the preferred rendering of the Hebrew root מרה irrespective of the Greek and criticially, even when the stative form παραπικραίνω is not attested. Thus, the use of the Syriac D-stem of ܡܪܝ for the Hebrew G-stem of מרה does not appear to be the result of a desire to mark pluractionality nor influence from a Greek version, but rather represents a translation technique that is employed throughout the *Peshiṭta* at large.

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395. LSJ, s.v. παρα-πῐ̈εσμός, 1320.

396. Carbajosa also identifies the confusion of similar roots as a contributing factor leading to influence from the Greek version (see Carbajosa, *op. cit.*, 204–06).

חסה : *ܣܒܪ Pss 5.12, 7.2, 17.7, 25.20

חוֹסֵי בָךְ (ACTIVITY) : ܕܡܣܒܪܝܢ ܒܟ (STATE), Ps 5.12

בְּךָ חָסִיתִי (ACTIVITY) : ܒܟ ܣܒܪܬ (STATE), Ps 7.2

חוֹסִים (ACTIVITY) : ܕܡܣܒܪܝܢ (STATE), Ps 17.7

כִּי־חָסִיתִי בָךְ (ACTIVITY) : ܡܛܠ ܕܒܟ ܣܒܪܬ (STATE), Ps 25.20

Since verbs from חסה are Vendlerian activities and those from ܣܒܪ exclusively denote stative events with the meaning "to hope for" in the D-stem,[397] it is clear that pluractionality is not the relation *R* that motived the $S : T_D$ analogy in these translational equivalencies in the sample corpus. Stative verbs such as those from ܣܒܪ do not admit to repeated internal phases since they simply denote situations that hold in time rather than "occur" through time and so obviously do not entail any sort of plural action.

Not only can pluractionality be ruled out as a potential relation *R* on purely linguistic reasons here, but there is an alternate *R* that can account for the *Hebrew G-stem* : *Syriac D-stem* relation for the חסה : *ܣܒܪ translations in *P*-Pss 1–30. There are nine instances of verbs from the root חסה in Pss 1–30 and eight of these govern a locative phrase consisting of a preposition plus the 2ms pronominal suffix (i.e., בָךְ), indicating that the entity in which the "refuge" is to be sought is a personal referent and therefore that the "refuge" to be taken is metaphorical. Nevertheless, for the single instance of חסה where such a locative phrase is wanting in Ps 17.7 the editors of *BHS* propose (*propositum*) הוֹסִים הוֹסֶה־בָךְ for הוֹסִים, presumably suggesting an instance of haplography. In every one of these the antecedent of the pronominal suffix is the Lord, either denoted by the theophoric name or the title "God" (אֱלֹהִים). Therefore, the Hebrew clauses governed by G-stem verbs from חסה in the sample corpus that receive the D-stem of ܣܒܪ in translation are all employed as a part of a figure of speech indicating one looking to God for protection, hope, and security. This is significant because it has been repeatedly observed that the *Peshiṭta* Hebrew Bible displays a tendency to avoid metaphoric references to deity and in fact it was Barnes' opinion that one of the distinguishing characteristics of the *Peshiṭta* Psalms in particular is a "dread of anthropomorphisms."[398] On the nature of this avoidance of metaphorical language for God Weitzman specifically states that, "P [the *Peshiṭta* Old Testament] also rejects figures which represent God as an inanimate object,"[399] which would be the case when comparing Him to a "refuge." While none of the clauses with חסה include a direct metaphor that relates God to an inanimate object (cf., Ps 3.4: וְאַתָּה יְהוָה מָגֵן בַּעֲדִי), the clear implication of the figure $_{\text{G-stem}}$חסה + בָךְ is analogical — just as one trusts a physical edifice for protection and shelter, so also does the

397. Sokoloff, *Syriac Lexicon*, s.v. ܣܒܪ, 964. For the stative nature of ܣܒܪ see the discussion under "COMMENTS" above.

398. W. E. Barnes, "On the Influence of the Septuagint on the Peshiṭta," *Journal of Theological Studies* 2 (1901): 197.

399. Weitzman, *The Syriac Version of the Old Testament*, 29.

Psalmist continually enjoin his readers to put their hope and trust in the Lord. By employing the D-stem of ܣܒܪ for the G-stem of חסה the translators are not only avoiding any allusion to deity as a physical entity, but do so in a way that maintains the intended sense of the figure of speech originally employed in the Hebrew. This explanatory rather than literal handling of חסה accords with Carbajosa's observation on the nature of the *Peshiṭta's* avoidance of metaphor involving deity as found in the final book of the Psalter when he concludes that "P-Ps neutralizes the metaphor by specifying its meaning."[400] This is precisely the tack the translators of the *Peshiṭta* seem to be taking with the בָּךְ + $_{\text{G-stem}}$חסה clauses throughout the sample corpus in using the D-stem of ܣܒܪ to specify that "trust in the Lord" is intended for an admonition "to take refuge" in the God. This conclusion is further supported by the reading in *P*-Ps 14.6 where even the deverbal noun מַחְסֶה from the root חסה is avoided by the Syriac translators when used in a metaphor for the Lord, interpreting the Hebrew's כִּי יְהוָה מַחְסֵהוּ with explanatory clause ܡܛܠ ܕܡܪܝܐ ܗܘ ܬܘܟܠܢܗ.

Accounting for a relation *R* for the *Hebrew G-stem* : *Syriac D-stem* translations of חסה : *ܣܒܪ in *P*-Pss 1–30 by recourse to metaphor avoidance is complicated by the fact that every place where the former pair of verbs occurs in Pss 1–30 the Greek version employs a form of the verb ἐλπίζω, which LSJ glosses as "to hope in."[401] This raises the question as to whether the use of the D-stem of ܣܒܪ for the G-stem of חסה is truly due to the avoidance of metaphorical language for God or is better considered a result of influence upon the *Peshiṭta* by means of a Greek version. What is interesting about this phenomenon is that of the 37 times the root חסה is used verbally in the Hebrew Bible, 𝔊 employs a form of ἐλπίζω in 21 of them, but what is striking is that all of these occur exclusively in the book of Psalms. In the *Peshiṭta* Hebrew Bible on the whole, a verb from the root ܣܒܪ is used only 13 of the 37 times that a verb-form of חסה appears, and significantly, only two of these occur outside of the book of Psalms, viz., Is 57.13 and Zech. 3.12. This shows that *Peshiṭta* translators are open to utilizing a verb other than one from ܣܒܪ for חסה when the Greek translation nevertheless employs a form of ἐλπίζω, especially in the Psalter. This state of affairs thus agrees with Weitzman's assessment when he concludes that "the avoidance of anthropomorphism in P-Psalms is probably not due to LXX, since this is no less a feature of P in those books in which the translators appear not to have consulted LXX at all."[402] While Weitzman's conclusion is in reference to a more specific type of metaphor avoidance than that which is in view here, the findings regarding the distribution of ܣܒܪ for חסה are consistent with his conclusion.

400. Carbajosa, *The Character of the Syriac Version of Psalms*, 140.

401. LSJ, s.v. ἐλπίζω, 537. This is also true for the deverbal example just used from Ps 14.6 where the Greek has ὅτι κύριος ἐλπὶς αὐτοῦ ἐστιν.

402. Weitzman, *op. cit.,* 83.

תמך : ܦܢܝ in Ps 16.5

אַתָּה תּוֹמִיךְ גּוֹרָלִי (ACTIVITY) : ܐܢܬ ܡܦܢܐ ܠܝ ܝܪܬܘܬܝ (ACHIEVEMENT)

In Ps 16.5, the G-stem predicative participle תּוֹמִיךְ from the root תמך has been interpreted as a Vendlerian activity consistent with its most common meaning "to hold,"[403] an atelic, [+DURATIVE] event that lacks a semantically encoded *terminus*.[404] However, both *HALOT* and *BDB* also list as definitions for תמך the glosses "to grasp; to take hold of,"[405] nuances that are [+TELIC] and lacking in DURATIVITY, a feature geometry that, if accurate, would be in conflict with the activity analysis that תּוֹמִיךְ has been assigned here. These lexica further agree that one place exhibiting this [+TELIC], non-durative sense of תמך occurs at Gen. 48.17, and the *HCSB* is representative of nearly every other modern English translation in rendering וַיִּתְמֹךְ as an achievement rather than activity.

Gen.48.17 וַיַּרְא יוֹסֵף כִּי־יָשִׁית אָבִיו יַד־יְמִינוֹ עַל־רֹאשׁ אֶפְרַיִם וַיֵּרַע בְּעֵינָיו וַיִּתְמֹךְ יַד־אָבִיו לְהָסִיר אֹתָהּ מֵעַל רֹאשׁ־אֶפְרַיִם עַל־רֹאשׁ מְנַשֶּׁה׃

"When Joseph saw that his father had placed his right hand on Ephraim's head, he thought it was a mistake and *took his father's hand* to move it from Ephraim's head to Manasseh's." (*HCSB*)

Here, the translation "took" for וַיִּתְמֹךְ suggests an event with a semantically encoded *terminus* consistent with the [+TELIC] feature and one that does not require a temporal interval in which to develop akin to the standard English examples of achievements "arrive" or "notice."

However, of the 21 occurrances of תמך in the Hebrew Bible[406] the intended sense of the other 20 is clearly that of an activity meaning "to hold" or "support," as exemplified by Am 1.8a and Ex 17.12b:

Am 1.8a וְהִכְרַתִּי יוֹשֵׁב מֵאַשְׁדּוֹד וְתוֹמֵךְ שֵׁבֶט מֵאַשְׁקְלוֹן...

"And I will cut off the inhabitants of Ashdod and *the one who holds the scepter* (*lit.* "staff") from Ashkelon..."

403. *HALOT*, s.v. תמך, 4:1751; see also *BDB*, s.v. תָּמַךְ, 1069.

404. It has been taken for granted that תמך further undergirds verbs that are [+DYNAMIC] and are therefore not stative. While it is the case that English permits stative uses of the verb "hold" in relation to such things as a "view, degree, or office," this is not the case in Hebrew. All 21 attestations of תמך in the Hebrew Bible are used in the denotation of events that depend upon the exertion of effort to maintain possession of some entity, even in cases where God is portrayed as holding some figurative item to connote His sovereignty as is the case in Ps 16.5.

405. See n.402.

406. In addition to Gen. 48:17, תמך is found at Ex 17.12, Is 33.15, 41.10, 42.1, Amos 1.5, 8, Ps 16.5, 17.5, 41.12, 63.8, Job 36.17, and Prov 3.18, 4.4, 5.5, 22, 11.16, 28.17, 29.23, 31.19.

Ex 17.12b ...וְאַהֲרֹן וְחוּר תָּמְכוּ בְיָדָיו מִזֶּה אֶחָד וּמִזֶּה אֶחָד וַיְהִי יָדָיו אֱמוּנָה עַד־בֹּא הַשָּׁמֶשׁ׃

"...then Aaron and Hur *supported* his hands, from one [side] and from another [side], and indeed, his hands remained steady until the setting of the sun."

This patterning suggests that the [+TELIC] achievement/accomplishment readings of תמך such as that claimed for Gen 48.17 may have more to do with how verbs from this root have been translated into English (and to a lesser extent, German) than to its actual semantics. However, such translations are far from conclusive for even when some English versions do opt for a [+TELIC] translation of תמך in passages other than Gen 48.17, others nevertheless prefer the atelic activity reading. For example, in Is 33.15 the *NIV* and *HCSB* translate מֹתְמֹךְ in the clause נֹעֵר כַּפָּיו מִתְּמֹךְ בַּשֹּׁחַד as "keep their hands from *accepting* bribes," and "whose hand never *takes* a bribe," respectively, both accomplishment interpretations of תמך. However, the *ESV*, *NASB*, and *KJV* all render מֹתְמֹךְ as "holding" rather than "taking/accepting" brides, e.g., "...shaketh his hands from holding of brides" (*KJV*). The latter trio of translations that use the activity verb "hold" rather than the achievement/accomplishment "take" are not only being being consistent with the overall semantic patterning of תמך in the Hebrew Bible, but also the assessment of R. D. Patterson who says of the root, "the basic idea...is 'grasping securely.'"[407]

In light of these considerations, it is best to consider verbs from תמך as atelic Vendlerian activities that are [+DYNAMIC] and [+DURATIVE] in their feature geometry, even for Gen 48.17 that the lexica assign a [+TELIC] meaning to. In this way, the *KJV* is correct in rendering וַיִּתְמֹךְ יַד־אָבִיו there as "and he *held up* his father's hand," as is *Young's Literal Translation* that gives the circumlocution, "...he *supporteth* the hand of this father." Such translations not only illustrate that an atelic translation that accords with the primary meaning of the root is possible in the passage, but they also agree with Wenham's judgement that the use of תמך at Gen 48.17, "implies a firm hold."[408] As such, תּוֹמִיךְ in Ps 16.5 is best interpreted as a Vendlerian activity in accord with its regular usage throughout the Hebrew Bible despite its rendering in some English translations.

In addition to the challenge of the lexical aspect of תּוֹמִיךְ is the difficulty of identifying the stem of the Syriac verb chosen as its translation in *P*-Ps 16.5, ܡܚܦܐ from the root ܚܦܐ. The Mosul and Urmia editions along with the PESHOT of Accordance all parse the form as a D-stem, but the *CAL* identifies it as an H-stem, an interpretation potentially corroborated by 7a1, which places a supra-linear dot over the *Mīm* that would be consistent with the full | a | vowel of the H-stem's prefix over against the *shewa mobile* for that of the D-stem. However, as regards this latter detail, in the six instances in the Hebrew Bible where 7a1 uses the unvocalized form ܡܚܦܐ to translate the H-stem of שׁוּב, thus increasing the likelihood of the former being a Syriac H-stem participle, there

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407. R. D. Patterson, *TWOT*, s.v. תמך, 2:973.

408. G. Wenham, *Genesis 16-50*, Vol. 2 (Grand Rapids,: Zondervan Academic, 2015), 466.

is a dot above the *Mīm* twice, a dot below the *Nūn* twice, a dot below and in between the *Pē* and *Nūn* once, and no dot at all once.[409] Given these statistics, the supra-linear dot over the *Mīm* in *P*-Ps 16.5 of 7a1 is not a convincing argument for the H-stem of ܐܚܕܪ on its own. In fact, Segal notes that for Syriac manuscripts up until the 7th Century of which 7a1 is a part, the typical practice of indicating the D-stem with a supra-linear dot on the word-initial consonant extends even to the participial prefix (interestingly enough, the example he cites for this behavior is the D-stem participle of ܚܕܪ), while in such manuscripts the H-stem normally receives a dot above the prefix only if the root-initial consonant is elided when closing a syllable (e.g., in ܢ"ܦ verbs).[410] Further bolstering a D-stem interpretation for ܐܚܕܪ in *P*-Ps 16.5 is the semantic context of the passage. The lexica are consistent in noting that the D-stem forms of ܚܕܪ are routinely attested in contexts where monetary or material remuneration are in view,[411] and in *P*-Ps 16.5 the direct object of ܐܚܕܪ is ܚܘܠܦܢܝ, "my inheritance," thus aligning closely with the D-stem's regular semantic patterning. As a result, while it is not possible to ascertain what exactly led to the decision of the *CAL* to parse this form as an H-stem verb, the decision has been made here to interpret ܐܚܕܪ in *P*-Ps 16.5 as a D-stem in agreement with the vocalization reflected in the Mosul and Urmia editions.

The other issue that confronts ܐܚܕܪ is the correct assignment of its lexical aspect. In the G-stem, verbs from ܚܕܪ are glossed "to turn, turnaround; to return," and in the D-stem "to give back; repay, remunerate,"[412] meanings that are clearly [+TELIC] in nature because they encode a lexically determined end-point. Nevertheless, such verbs are ambiguous with respect to DURATIVITY in that their meanings permit readings where their [+TELIC] end-state obtains gradually over an interval marking them [+DURATIVE], but also those that occur near instaneously, thus lacking the [+DURATIVE] feature. This makes a disambiguation between an achievement and accomplishment interpretation for ܚܕܪ verbs difficult, a situation that also impacts their potential for denoting pluractionality, recalling that the former are eligible for a pluractional interpretation while the latter are not.

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409. Of these six instances of ܐܚܕܪ the vocalized manuscripts and Bible software parse the forms as follows:

ܐܚܕܪ in 7a1	Urmia	Mosul	PESHOT	*CAL*
2Sam 9.7: Dot over *Mīm*	D-stem	H-stem	H-stem	H-stem
Ps 19.8: No Dot	H-stem	H-stem	H-stem	H-stem
Ps 69.5: Dot over *Mīm*	D-stem	D-stem	D-stem	H-stem
Is 42.22: Sub-linear dot between *Pē* and *Nūn*	H-stem	H-stem	D-stem	H-stem
Ezek 39.25: Dot below *Nūn*	H-stem	H-stem	H-stem	H-stem
Lam 1.16: Dot below *Nūn*	H-stem	H-stem	H-stem	H-stem

410. See Segal, *The Diacritical Point and the Accents in Syriac*, 18–19.

411. Sokoloff, *Syriac Lexicon*, s.v. ܚܕܪ, 1206.

412. Ibid.

The difference between an achievement versus accomplishment interpretation of ܦܢܝ comes down to whether or not the events in its denotation are [+DURATIVE] in addition to their being [+TELIC], recalling that achievements are punctual while accomplishments encode a temporal interval. To detect the presence of the [+DURATIVE] feature and thus disambiguate accomplishments from achievements, Kenny looked to the logical entailments of verbs when modified by the temporal phrase *in <y time>*.[413] Kenny found that for any [+DURATIVE] event *φ*, if a subject *X φ-ed* in <*y time*> is true, then X *φ-ed at all times during* <*y time*> is also true. However, for a verb *φ'* unmarked for DURATIVITY, if *X φ'-ed in* <*y time*> is true, it is *not true* that *X φ'-ed at all times during* <*y time*>, but rather *X φ'-ed* after the conclusion of the temporal interval <*y time*>. Accordingly, the clause "Solomon *built* [*accomplishment*] the temple in three years" entails that Solomon was building the temple at all times during the temporal interval of "three years," while "Isaac *noticed* [*achievement*] the difference in Jacob in an hour" does not entail that Isaac was engaged in a "noticing" event that spanned an hour, but rather that such an event occurred *after* an hour had elapsed.

Applying Kenny's test to verbs from ܦܢܝ leads to inconclusive results. The statement, "The Lord *returned* my inheritance in three years," can mean either that the inheritance was returned *over the course of three years* or that it was returned *after the completion of three years*. Here again, Olsen's privative analysis of aspectual features rightly predicts that in the face of such ambiguity it is the unmarked member of the pair that is basic, allowing the potential for additional features absent in the basic feature geometry to be added via context.[414] Therefore, for verbs from ܦܢܝ the achievement readings without the DURATIVE feature are basic, but may be variously interpreted as [+DURATIVE] accomplishments by way of pragmatic implicature when other clausal constituents contribute aspectually relevant information to the clause (e.g., "He ran" [activity] vs. "He ran to the store" [accomplishment]).

However, the context of *P*-Ps 16.5 lacks any clausal elements that might be construed as supplying the [+DURATIVE] feature to an underlying achievement verb. The clause governed by ܡܦܢܐ in *P*-Ps 16.5, ܐܢܬ ܡܦܢܐ ܠܝ ܝܪܬܘܬܝ ("You return to me my inheritance"), is uttered in response to the opening entreaty of the psalm, ܛܪܢܝ ܐܠܗܐ ܡܛܠ ܕܥܠܝܟ ܐܬܬܟܠܬ ("Deliver me, oh God, because upon you I have put my trust"), and thus a figurative expression of the deliverance experienced by the psalmist in the face of his enemies. The focus is therefore on the result state effected as a consequence of the verbal event rather than on the process leading up to that result

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413. See Kenny, *Action, Emotion, and Will*, 121ff and the discussion in Dowty, *Word Meaning and Montague Grammar*, 58–9.

414. For an explanation of Olsen's privative feature analysis that allows semantic features to be added via pragmatic implicature see n.274 above.

state. For this reason, ܗܦܟ is best analyzed as an achievement that is simply [+DYNAMIC] and [+TELIC] lacking the DURATIVITY feature.

Having defended the respective activity and achievement interpretations of תמך : ܦܨ in *P*-Ps 16.5, it is now possible to weigh a potential pluractional relation *R* that may account for the *S* : T_D analogy here. As a Vendlerian achievement that is marked [+TELIC] in its semantics, for ܗܦܟ to have an event-internal pluractional interpretation of the type consistent with that marked by the D-stem would require the presence of a sub-set of discrete "repayment" events that have been consigned to the sub-phases of a single, macro-event. The latter is most often licensed by the presence of a plural grammatical object, but in *P*-Ps 16.5 the direct object of ܗܦܟ viz. ܚܠܦܝ ("my inheritance") is singular. Thus, any pluractionality entailed by a verb-from from ܦܨ governing a singular direct object would be *de facto* event-external and thus marked by the Semitic inflections rather than the stems of the derivational domain of Semitic morphology. As a result, the D-stem of ܦܨ here is not likely to be marking an occurrence of event pluractionality understood to be present in the Hebrew *Urtext* on the part of the Syriac translation.

Rather than pluractionality, the variation in lexical aspect as well as stem the Syriac's D-stem is most likely the result of consultation with 𝔊. At 16.5 (𝔊 15.5) the Greek version has ἀποκαθιστάω, the present active nominative, masculine singular participle of ἀποκαθίστημι which LSJ defines as "re-establish, restore, reinstate; pay what is due,"[415] a reading much closer to the *Peshiṭta's* ܗܦܟ than the Hebrew's תּוֹמִיךְ. Furthermore, where תּוֹמִיךְ governs the direct object גּוֹרָלִי, "my lot," the Syriac and Greek translations agree with each other against the MT in reading, respectively, ܚܠܦܝ and τὴν κληρονομίαν μου, "my inheritance." What is even more striking is that the Greek also includes an indirect object in the form of the dative, ἐμοί, that is completely absent from the Hebrew, but is attested in the Syriac by means of the prepositional phrase ܠ in ܗܦܟ ܠܟ ܚܠܦܝ. Thus, not only do the individual lexical items in the parallel clauses between the Greek and Syriac align precisely in terms of the number and semantics of their clause constituents against the Hebrew, but the difficult vocalization and poetic form of the MT also offers a plausible reason why the Syriac translators may have looked to a Greek version here.

The difficult Hebrew of Ps 16.5 arises due to the fact that תּוֹמִיךְ is a masculine singular participle, but has a *Ḥîrĕq-Yod* in place of the *Ṣērê* theme vowel that is typical of the G-stem participle. While the *plene Ḥōlĕm-Waw* in the pretonic syllable is routinely attested in the G-stem participle, this coupled with the *plena scriptio Ḥîrĕq-Yod* theme vowel is unique to this form in the

415. LSJ, s.v. ἀποκαθίστημι, 200ff.

whole of the Hebrew Bible.[416] It is for this reason that the editors of *BHS* recommend reading this verb as תּוֹמֵךְ in agreement with a great many medieval Hebrew manuscripts.[417]

A further difficulty of the Hebrew is the opaque poetic language meant to elicit a sense of confidence in facing the future, viz., that the LORD "holds/supports my lot" (תּוֹמִיךְ גּוֹרָלִי). However, the majority of attestations of גּוֹרָל with pronominal suffix in the Hebrew Bible denote an apportioned piece of property or land (i.e., that which was determined by lot),[418] and in only one place other than the present does it unambiguously refer to items that are cast as a decision-making aid or their metonymic extension referring to one's "destiny."[419] It seems that it was the former sense that was understood by the Greek translators who used the phrase τὴν κληρονομίαν μου ("my inheritance") not only here, but also in a similar form two additional times in close proximity — once in the previous clause (in response to the similarly difficult phraseology of יְהוָה מְנָת־חֶלְקִי) and again in next verse for the Hebrew's נַחֲלָת ("possession;" both of these also receive ܐܚܘܬܐ in Syriac). Thus, it would seem that the direct object of the Greek text τὴν κληρονομίαν μου was not only thought to conform to a particular sense of גּוֹרָלִי, but to also accord with the surrounding context. This in turn led to the use of ἀποκαθιστάω for the problematic תּוֹמִיךְ that the Syriac approximated with the D-stem participle of ܦܪܩ. Thus, the Syriac D-stem here seems to have been chosen in order to elicit the lexicalized semantics of ܦܪܩ in that stem[420] so as to accord with the Greek translation's interpretation of the difficult Hebrew of Ps 16.5 (𝔊 15.5).[421]

חוּשׁ : *ܚܫ in Ps 22.20

לְעֶזְרָתִי חוּשָׁה (ACTIVITY) : ܠܡܚܘܫ ܚܫ (STATE), Ps 22.20

The final G-stem activity verb that is met with a Syriac D-stem of a different lexical aspect occurs in Ps 22.20. Here the G-stem of חוּשׁ, which has the meaning "to hasten (G-stem),"[422] is

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416. Gesenius too calls this form "an anomaly" (*GKC*, 136).

417. The *BHS* editors give strongest endorsement of תּוֹמֵךְ with their *legendum* recommendation, "to be read."

418. See *HALOT*, s.v. בּוֹרָל, 1:185; definition no. 2. These are Josh 18.11, 21.20, 21.40, Judg 1.3 (2x), and 1Chr 26.14.

419. The other attestation of גּוֹרָל with pronominal suffix that refers to the entities that are cast and/or one's destiny is Dan 12.13, while additionally Jer 13.25 (?) and Prov 1.14 (?) could also reasonably be read as lots and/or destiny.

420. Sokoloff, *Syriac Lexicon*, s.v. ܦܪܩ, 1206, definition no. 2 under the uses of the D-stem.

421. It is interesting that the Psalms Targum, while late and so of limited text-critical value, reads אנת תסובר עדבי (P. de Legarde, ed., *Hagiographa Chaldaice* [Lipsiae: Aedibus B. G. Teubneri, 1873], 7) whereby the Aramaic form תסובר from the root סבר is employed for the תּוֹמִיךְ of the Hebrew, which Jastrow defines as "to carry; to bear, endure; to sustain" (M. Jastrow, *Dictionary of the Targumim, Talmud, and Midrashic Literature* [London: Luzac & Co., 1926], s.v. סְבַר, 952).

422. See *HALOT,* s.v. חוּשׁ, 1:1300. There is another enigmatic use of חוּשׁ appearing in Job 20.2 and Ecc. 2.25, where verbs from the root mean "to be painful" and "to be delighted with," respectively (Ibid.).

translated with the D-stem of the Syriac stative root ܨܒܐ, meaning "to remain" or "to expect."[423] As a stative verb denoting a situation that does not involve change over a temporal interval nor any internal complexity, the Syriac D-stem is clearly not being used to mark any pluractionality within the denotation of ܨܒܐ at Ps 22.20.[424] Furthermore, that ܨܒܐ only appears in the D/Dt-sems in the whole of Syriac literature means that the *Peshiṭta* translators chose the D-stem not for its capacity to mark a particular linguistic function, but rather were constrained in the morphological shape of their chosen translational equivalent by the lexical stock of their language.

While the use of the Syriac D-stem for the Hebrew G-stem in this clause from *P*-Ps 22.20 is due to the lexeme employed in translation rather than any desire to mark pluractionality, as with the previous example, the variance in the stem and lexical aspect of the verb chosen by the Syriac translations also appears to betray the influence of a Greek translation. However, unlike other instances in the sample corpus where a difficult Hebrew *Vorlage* appears to have led the Syriac translators to consult and then adopt a verb in their translation whose semantics aligns closely with a Greek version, in Ps 22.20 the D-stem of ܨܒܐ seems to have little resemblence in meaning to the Greek's πρόσχες from the lemma προσέχω, which LSJ gives as its primarily gloss, "to hold to"[425] and *BrDAG* defines as "to be attentive, pay attention."[426] Thus, while the respective verbs chosen by the Syriac and Greek translators are both clearly stative in their lexical aspect in contradistinction to their Hebrew *Vorlagen*, they nevertheless remain semantically quite disparate from one another.

Here, the difficulty of the Hebrew text arises from the fact that the root undergirding the Hebrew imperative חוּשָׁה occurs a mere 20 times in the whole of the Hebrew Bible and its 2nd person subject in Ps 22.20 is appositional with respect to a preceding vocative expression, אֵיָלוּתִי, "my strength,"[427] that is a *hapax legomenon*.[428] That the rarity of חוּשׁ seems to have proven problematic for the Syriac translators is evidenced by the inconsistency with which the root is treated outside of the *Peshiṭta* Psalms, where it is often left untranslated and is only rarely (4x) given a form of the semantically similar ܒܥܐ, "to hasten, be quick."[429] For our purposes though, the

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423. Sokoloff, *Syriac Lexicon*, s.v. ܨܒܐ, 663.

424. In fact Olsen cites the English verb "remain" as one of her examples of stative lexical aspect (see Olsen, "A Semantic and Pragmatic Model of Lexical and Grammatical Aspect," 196).

425. LSJ, s.v. προσέχω, 1512.

426. *BrDAG,* s.v. προσέχω (https://dictionaries-brillonline-com.ezproxy-prd.bodleian.ox.ac.uk); cf., *BDAG,* s.v. προσέχω, 721.

427. See *HALOT*, s.v. אֵיָלוּתִי, 1:41.

428. That the Syriac translators did not seem to fully understand אֵיָלוּתִי can be seen in how they chose to translate the form with two instances of ܐܠܗ "Oh God!," replicating the opening words of the Psalm, yet *sans* pronominal suffixes, seemingly assuming that the leading *ālap*, *yūd*, and *lāmad* of אֵיָלוּתִי was theophoric, opting for a calque of the Hebrew אֵל, rather than a form of ܐܝܠܘܬ.

429. Sokoloff, *Syriac Lexicon*, s.v. ܒܥܐ, 1439. On this point see Lund agrees saying, "A check of the formal

most noteworthy feature for how the *Peshiṭta* handles חוּשׁ outside of the Psalms is that only once is it translated with a form of ܚܘܫ,[430] a situation that changes completely within the Psalter where eight, or just under half, of the 20 occurrences of חוּשׁ are attested. Within the Psalms, the Syriac translators' treatment of חוּשׁ is almost completely regular as they use the D-stem of ܚܘܫ for seven of these eight attestations of חוּשׁ, and more particularly, for the six times that חוּשׁ appears as an imperative, each is translated with a D-stem imperative of ܚܘܫ. The inconsistency with which חוּשׁ is handled outside of the *Peshiṭta* Psalms in contradistinction to how uniformly it is translated with the D-stem of ܚܘܫ within the book suggests that a translation technique unique to that corpus played a role in how the Syriac translators treated G-stem imperatives of חוּשׁ.

Nevertheless, this translation technique within the *Peshiṭta* Psalms does not appear to have been completely organic to the Syriac translators. This is because a similar phenomenon occurs in Greek translations of the Hebrew Bible where the aorist active imperative of προσέχω, "to pay attention,"[431] is used for five of the six imperatival instances of חוּשׁ within the Psalms, whereas elsewhere in the Hebrew Bible it is never once used as a translation of the root. Thus despite the differing semantics of ܚܘܫ versus προσέχω, that they appear uniformly and in concert opposite imperatives of חוּשׁ in the Psalms vis-à-vis such a varied tranlational profile elswhere suggests some manner of consultation with a Greek version on the part of the Syriac translators.

While the precise impetus that may have led the Syriac translators to use the semantically incongruent ܚܘܫ for חוּשָׁה at *P*-Ps 22.20 remains obscure, that the former is only attested in the D-stem and appears to be a part of a translation technique active at the very places where one is also evidenced in the Greek, it is certain that the relation *R* obtaining between $S : T_D$ at Ps 22.20 is not due to pluractionality, but rather other, extra-linguistic motivations. In selecting ܚܘܫ for the G-stem of חוּשָׁה, the Syriac translators seemed to have adhered to a broader translational strategy evident in the Psalter that called for the use of a lexeme only attested in the D-stem.

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equivalents of חוּשׁ in the *qal* reveals that S [the *Peshiṭta*] had no standard equivalent for חוּשׁ" (Lund, "The Influence of the Septuagint on the Peshitta, 222).

430. The lone instance of חוּשׁ : ܚܘܫ occurring outside of the Psalms, viz. Job 20.2, is contested. Most likely the root there is חשׁ, cognate to the Arabic حس, "to become tender; compassionate towards" (Lane, *An Arabic-English Lexicon*, s.v. حس, 563). This is also the conclusion of Keil and Delitzsch in *Commentary on Job*, Vol. I., B. Bolton, trans. (Edinburgh: T & T Clark, 1869) .374.

431. See n.426.

6.1.1.1.0.1 *Hebrew G-Stem Activities Translated with Syriac D-Stem Non-Activities: Conclusion*

There are eight Hebrew G-stem activity verbs from four unique roots that are translated with a Syriac D-stem verb that is not also a Vendlerian activity. By subjecting these four sets of root/stem combinations to thorough analysis, it was shown that none of these instances of $S : T_{\text{D}}$ exhibit any evidence that the variance in stem was born out of a desire to morphologically mark a sense of pluractionality in the context of the Hebrew *Urtext*. This is because in each case the Syriac D-stem verb used for the Hebrew G-stem represented a lexical aspect that was inconsistent with the species of pluractionality marked by the Semitic D-stem. At the same time, not only did pluractionality fail to account for $S : T_{\text{D}}$ in these instances, but an alternate relation R was adduced in each case that could better account for the translators' choice Syriac D-stem for the Hebrew G-stem. Where a Hebrew G-stem verb activity was translated with a Syriac D-stem non-activity, it was the lexical choice of the Syriac translators who, in the face of a difficult Hebrew text, often consulted with a Greek translation and chose a lemma whose semantics in the D-stem was felt more appropriate. In conclusion, what the analysis of the $S : T_{\text{D}}$ translations between Vendlerian activies and non-activities reveals is that the relation R between the source and target texts arises from textual and interpretative choices rather than a desire to mark pluractionality.

6.1.1.2 *Hebrew G-Stem Activities Translated with Syriac D-Stem Activities*

The previous section was concerned with Hebrew G-stem activity verbs that were translated with Syriac D-stem verbs of a different lexical aspect. Of the 58 Hebrew G-stem verbs that are translated with a Syriac D-stem in the sample corpus, 33 are Vendlerian activities, of which all but eight receive a Syriac D-stem translational equivalent that is also an activity. This means that the remaining 25 Hebrew G-stem activity verbs that are translated with a Syriac D-stem in *P*-Pss 1–30 have a translational equivalent that is also a Vendlerian activity. Therefore, it now remains to analyze those Hebrew G-stem activity verbs that receive a Syriac D-stem activity verb in translation. This is particularly important for determining the nature and type of pluractionality that the Syriac translators may have wished to capture in their source text by means of their D-stem since activity verbs represent a verbal class shown to be naturally compatible with the species of pluractionality routinely marked by the Semitic D-stem.

6.1.1.2.1 The Hebrew G-stem : Syriac D-stem Analogy: Heterogeneous versus Homogeneous Activities

In order to accurately evaluate the $S : T_D$ analogies involving Vendlerian activities that may be explained by a pluractional relation *R*, several linguistic considerations must be taken into account. Firstly, it must be recalled that one of the hallmarks of activity verbs is that they are unmarked for the telicity feature. Thus the conclusion of a event denoted by an activity verb is not lexically encoded in the semantics of the verb itself, or as Smith states, "Activities *terminate* or *stop*, but they do not *finish*: the notion of completion is irrelevant to a[n activity] event."[432] It is for this reason that Vendler's statement that activities, "go on in time in a way; any part of the process is of the same nature as the whole,"[433] was highlighted above. This intuition was given classic articulation by Bennett and Partee who described verbs with the type of homogeneity just described by Vendler as possessing the subinterval property: "SUBINTERVAL verb phrases have the property that if they are the main verb phrase of a sentence which is true at some interval of time I, then the sentence is true at every subinterval of I including every moment of time in I. Examples of subinterval verb phrases are: *walk, breathe, walk in the park, push a cart*."[434] In other words, every subinterval of a "walking" event is itself an event of "walking." However, this formulation of the subinterval property was shown to be too strong due to what has been termed the "minimal parts problem," which although coined by Link,[435] arises from an extension of the conception of mass nouns to events that originated with Bach.[436]

This problem concerns two issues. Firstly, since activity predicates such as "walk" are dynamic and thus entail some manner of change, it is not possible for them to be true at "every moment of time" as Bennett and Partee suggest. McClure used the example of a bouncing ball to illustrate the sub-eventual series of changes inherent to activity verbs where a ball-bouncing event cannot be recognized as such event if a picture is taken the exact moment a ball contacts a given surface.[437] While a single reference frame is sufficient to capture the stative situation, "the ball is on the floor," it would fail to register the dynamic event "the ball is bouncing on the floor." For the latter to be evaluated as true, pictures taken at regular intervals are necessary to register the

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432. Smith, *The Parameter of Aspect*, 23; italics in original.

433. Vendler, "Verbs and Times," 146.

434. M. R. Bennett and B. Partee, "Toward the Logic of Tense and Aspect in English," in *Compositionality in Formal Semantics*: *Selected Papers by Barbara Partee* (Oxford: Blackwell Publishing), 72; all formatting original.

435. G. Link, *Algebraic Semantics in Language and Philosophy* (Stanford: Center for the Study of Language and Information, 1998), 21.

436. Bach, "The Algebra of Events," 7ff.

437. McClure, "Syntactic Projections of the Semantics of Aspect," 88ff.

change that is inherent in an event of "bouncing." As a result, there is a certain "minimum part" of a dynamic event that needs to be taken into account for it to be recognized as such and any "zooming in," or finer degree of granularity, beyond that "minimum part" renders the event unrecognizable under its event name.

Furthermore, the size and nature of the minimum part required to characterize an activity verb is contingent upon the event being denoted. For example, Dowty famously cites the example of the activity verb "waltz:" "Now since the waltz involves sequences of three steps, I believe it is reasonable to maintain that any interval at which x takes less than three steps is not an interval at which *x waltzes* is true (…), but merely an interval at which x makes certain movements with his or her feet."[438] Thus, while the "minimum parts" of a "waltzing" event required to satisfy the subinterval property of Bennett and Partee cited above are comparatively large, those of other events are much smaller. For instance, the action denoted by a verb such as "fall" can be sliced into extraordinarily small intervals with each still being properly regarded as a "falling" event, thus satisfying the subinterval property. All that is required to recognize such an event of "falling" is a variation in the position of some object relative to a previous, higher position, allowing for a much thinner evaluative slice of the event to be taken for its appraisal. It is this observation that led Link to impose a "granularity parameter"[439] upon the formalization of activity verbs that constrains the minimal size of an eventual subinterval that is contingent upon the nature of the event denoted. Clearly the size of the subintervals required to satisfy the subinterval property of activity verbs is comparatively much larger for "waltz" than it is for "fall."

Yet it is not just the granularity scale that differentiates activity verbs such as "waltz" and "fall." Commensurate with the size of the minimum interval required for the decomposition of these two classes of verbs is the extent to which they involve a degree of relative internal complexity. Activity verbs with comparatively larger subintervals tend to "involve even more complex patterns of change of position, changes not just with respect to overall location but changes with respect to positions of the parts of the organism [that is performing the activity]."[440] This stands in contrast with homogeneous verbs that satisfy the subinterval property, which entail not only much smaller minimum parts, but also much simpler and contiguous dynamic subphases. It is for this reason that Taylor termed verbs of the "fall" type "homogeneous" and those of the "waltz" type (along with other verbs of bodily motion) as "heterogeneous."[441]

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438. Dowty, *Word Meaning and Montague Grammar*, 171; original italics.

439. Link, *op. cit.,* 203.

440. Dowty, *op. cit.*, 170.

441. Taylor, "Tense and Continuity," 211. It is important to note that the homogeneity proper belongs only to the description of stative verbs where a situation simply holds for a given interval and is completely devoid of any internal structure. Thus, the homogeneity of activity verbs in the parlance of Taylor is relative rather than absolute.

A further consequence of the homogeneous/heterogeneous dichotomy arising from the varying construals of the size of minimum parts required to satisfy the subinterval property of activity verbs is the salience of the repetitions intrinsic to their internal structure. In fact, the iterations of the subintervals constituting an event of "waltzing" are so highly pronounced that a failure to achieve a pragmatically determined repetition of the three step sets internal to a waltz also means a failure of a "waltzing" event to obtain. This is why Dowty states that the decomposition of heterogeneous activity verbs necessarily implicates notions of iterative aspect and explains that although "there is an English expression *take a step*, we do not normally refer to instances of taking a single step as 'walking', bur rather reserve this activity verb for instances of taking two or more steps."[442] However, this is not the case with a homogeneous verb such as "fall." While it is true that the relative position changes of an entity undergoing a "falling" event are repeated until its conclusion, these repetitions are so imperceivable and under-pronounced that they are virtually undetected. The absence of internal complexity within the decomposition of homogeneous activities means a commiserate absence of the discernible boundaries that separate the sub-phases of the heterogeneous counterparts.

The preceding considerations are relevant to the $S : T_{\text{D}}$ translations in our sample corpus because nearly all of the Hebrew G-stem activity verbs that receive a Syriac D-stem in translation in *P*-Pss 1–30 are of Taylor's heterogeneous type in that they consist of subintervals that are comparatively large and whose repetitions are consequently readily perceivable. Conversely, those few Hebrew G-stem activity verbs of the homogeneous class that receive a Syriac D-stem in translation reveal either a use of the D-stem other than the morphological marking of pluractionality or show evidence of the influence of a Greek translation. What this seems to suggest is that Hebrew and Syriac differ in their construal of certain activity verbs for which there are discernible sub-phases, with the Syriac language betraying a penchant for encoding heterogeneous events with a finer-grained lexico-semantic representation than does Hebrew. This manifests in *P-Pss* 1–30 as some heterogeneous Hebrew G-stem activity verbs being represented as an event-internal pluractional marked by the Syriac D-stem, either with a lexeme where the D-stem is meaningfully applied to the semantic core of a root or as a petrified root/stem combination whose path to lexicalization in the Syriac D-stem was wrought by this very construal. In this way, the relation R between $S : T_{\text{D}}$ where S is a heterogeneous activity is clearly pluractionality.

Since activity verbs by definition involve some modicum of change they are not "homogeneous" in the same way that a stative situation is, but rather the intuition that Taylor attempted to capture in his nomenclature is that an event such as "falling," "*fills time* as homogeneous stuff fills space," while a heterogeneous activity "*delimits time* as a substance delimits space" (Taylor, *op. cit.*; emphases original).

442. Dowty, *op. cit.*, 173; original italics.

A particularly striking example of this phenomenon can be seen with the Hebrew root דרשׁ, which only occurs in the Hebrew G-stem in the sample corpus, but is a fitting illustration in that it attests to both heterogeneous as well as homogeneous activity meanings. With the typical glosses, "to seek, inquire, investigate,"[443] the heterogeneity of the activity verb דרשׁ arises from the fact that these meanings are based upon the notion of going back and forth in search of a thing — an event where one punctiliarly looks for an item in a single locale fails to constitute an event of "searching" or "investigating." The underlying repetitive nuance of verbs from דרשׁ can be seen in *BDB*'s first gloss for the root "to frequent"[444] in the sense of "to tread (about),"[445] meanings that are historically reflected in its Syriac and Arabic cognates. In Syriac, ܕܘܫ means to tread repeatedly so as to create an opening, such as is the case with a well-trodden path,[446] and evidence of the heterogeneous character of the more abstract meanings of דרשׁ, "to inquire" or "to investigate" in the sense of "searching out a meaning" are attested by its Arabic cognate درس, which is used in these sense of "to read repeatedly in order to remember."[447] It is the analogical extension of these senses of repeatedly "treading about" or "frequenting" that דרשׁ came to mean "to seek" as one "goes about" in search of an item.

However, the G-stem of דרשׁ also means "to seek" an entity in the sense of "to demand"[448] or "to be intent on" it.[449] Here, the nuance of such a "seeking" event is more of that of a mental activity rather than physically looking for a lost item or investigating a matter. With this meaning, דרשׁ is a homogeneous activity verb because a "seeking; demanding" event of this sort can be subdivided into infinitesimally small subintervals such that each and every one is also a "seeking; demanding" event that nearly approximates a stative situation and so is consistent even with the "strong version" of Bennett and Partee's subinterval property.

What is striking though is how the Syriac handles the heterogeneous versus homogeneous senses of the G-stem forms of דרשׁ in the sample corpus. Verbs from דרשׁ occur eight times in Pss 1–30, and in seven of these the *Peshiṭta* offers a finite verb in a parallel clause for its translation and in one instance the translation of דרשׁ appears in a relative clause that the *Peshiṭta* adds vis-à-vis

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443. *HALOT,* s.v. דרשׁ, 1:233.

444. *BDB*, s.v. דרשׁ, 205. While rare, this usage can be seen for example in Amos 5.5:

וְאַל־תִּדְרְשׁוּ בֵּית־אֵל וְהַגִּלְגָּל לֹא תָבֹאוּ וּבְאֵר שֶׁבַע לֹא תַעֲבֹרוּ

"And do not frequent (*lit.* "tread upon") Bat-El and as for Gilgal, you shall not enter and as for Beer-Sheva, you shall not pass over."

445. Ibid.

446. Sokoloff, *Syriac Lexicon*, s.v., ܕܘܫ, 325.

447. Lane, *An Arabic-English Lexicon*, s.v. درس, 871.

448. *BDB*, s.v. דרשׁ, 205.

449. *HALOT*, s.v. דרשׁ, 1:233; definition no. 6.

the Hebrew.[450] In *P*-Ps 10.4 where the G-stem form of דרשׁ is a heterogeneous activity meaning "to investigate, look for," the Syriac utilizes the D-stem of ܥܩܒ, "to pursue; to inquire about,"[451] but in Pss 9.11, 13, 10.13, 15, 14.2, 22.27, and 24.6 where the sense of דרשׁ is the homogeneous activity of "seeking" or "demanding" an unpaid account or justice,[452] the Syriac employs the G- or Gt-stem of ܒܥܐ or ܬܒܥ with the homogeneous meanings, "to seek, desire"[453] and "to seek, desire justice,"[454] respectively. This distribution shows that when the sense of דרשׁ is a heterogeneous activity, the Syriac translators use a verb in the D-stem, but when the strongly homogeneous, quasi-stative sense of "desiring" or "wanting" an entity is in view, Syriac roots with homogeneous meanings in the G-stem are employed.

Beyond just the theoretical, such a distinction in the event construal of the different types of "seeking" events in Hebrew and Syriac has implications for how the translation at *P*-Ps 10.4 is to be understood. As already mentioned, the sole instance in the sample corpus where the *Peshiṭta* employs the D-stem for דרשׁ is at *P*-Ps 10.4 where the syntax of the underlying Hebrew is difficult. There דרשׁ appears in a negated clause where its subject has been variously construed as either "the wicked one" (רָשָׁע) or "God" (אֱלֹהִים), each resulting in a slightly different interpretation of the passage as set out below:

Ps 10.4 רָשָׁע כְּגֹבַהּ אַפּוֹ בַּל־יִדְרֹשׁ אֵין אֱלֹהִים כָּל־מְזִמּוֹתָיו׃

Sense 1: רָשָׁע as Subject

"The wicked, in the height of his haughtiness (*lit.*, "nose"), *does not seek*, 'there is no God,' are all his thoughts."

Sense 2: אֱלֹהִים as Implied Subject

"The wicked, with his haughty face, [has spurned the Lord]. '*He does not call to account!*' 'There is no God!' Such are all his devices!"[455]

In the first sense, the emblematic behavior of the "wicked" (רָשָׁע) is in view and is portrayed as a failure "to search out, seek after, or investigate" God. This is the understanding of Ibn Ezra[456] and is reflected in multiple English translations that run parallel to the *KJV*'s, "The wicked, through the

450. This occurs at Ps 9.11:

Clause 2	Clause 1
-	כִּי לֹא־עָזַבְתָּ דֹרְשֶׁיךָ יְהוָה׃
ܕܒܥܝܢ ܠܟ ܡܪܝܐ.	ܕܠܐ ܫܒܩܬ ܐܢܬ ܠܐܝܠܝܢ

451. See Sokoloff, *Syriac Lexicon*, s.v. ܥܩܒ, 1128; *CAL* s.v. ܥܩܒ; and *CSD*, s.v. ܥܩܒ, 424.

452. See *HALOT*, *op. cit.,* definition no. 4; BDB*, op. cit.,* definition no. 5.

453. See Sokoloff, *Syriac Lexicon*, s.v. ܒܥܐ, 169; *CAL* s.v. ܒܥܐ; and *CSD*, s.v. ܒܥܐ, 50.

454. *CAL* s.v. ܬܒܥ; see also Sokoloff, *op. cit.*, s.v. ܬܒܥ, 1620ff.

455. This is the translation of Craigie in Craigie and Tate, *Psalms 1–50*, 121.

456. Abraham Ibn Ezra, *Rabbi Abraham Ibn Ezra's Commentary on the First Book of Psalms: Chapters 1-41*, A. ben Meïr, and H. N. Strickman, trans. (Brighton, MA: Academic Studies Press, 2009), 88.

pride of his countenance, *will not seek after God*: God is not in all his thoughts."[457] The second sense sees "God" (אֱלֹהִים) as the subject and speaks of a transeunt belief articulated in the mind of the "wicked" (רָשָׁע) and understands דרשׁ in the sense of "seeking out" a requirement or demand for compensation or accountability, typically for the purposes of revenge or to collect on a debt.[458] The latter sense (Sense 2) is reflected not only in the translation of Craigie quoted above, but it is also the understanding of many English translations such as the *NRSV* which reads: "In the pride of their countenance the wicked say, '*God will not seek it out*'; all their thoughts are, 'There is no God.'"[459] This notion of seeking recompense is even more pronounced in the *HCSB*, which gives the translation, "In all his scheming, the wicked arrogantly thinks: '*There is no accountability*, [since] God does not exist.'"[460]

By translating דרשׁ with the D-stem of ܒܥܐ the *Peshiṭta* is interpreting the clause according to the first of these options just presented. There is no Syriac lexicon that offers a gloss for ܒܥܐ that approximates the "seek revenge, remuneration" nuance that is encountered amongst the definitions of the G-stem of ܒܥܐ and to a lesser extent that of ܒܥܝ.[461] Furthermore, it is only when דרשׁ is interpreted in its heterogeneous sense of "searching" for some entity (based on the underlying sense of "going back and forth" in that search) that the Syriac utilizes its D-stem in translation in contradistinction to the homogeneous nuances of דרשׁ that the Syriac translates with either the G/Gt-stem of altogether different roots. What this demonstrates is that not only do Hebrew and Syriac differ in their construal of an event of "searching, looking for; investigating" as opposed to the homogeneous notion of "seeking; desiring," but this very distinction can aid in understanding how the *Peshiṭta* has interpreted the Hebrew at Ps 10.4.

6.1.1.2.2 Hebrew G-stem Activities Translated with Syriac D-stem Activities

The variance in the construal of the internal phases of Hebrew G-stem verbs denoting Vendlerian activities on the part of the Syriac just illustrated with דרשׁ provides the orientation from which the pluractional relation *R* obtaining in the following list of $S : T_D$ activity verbs can be

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457. Emphasis added. This is also the course of translation taken by *Wycliff, RSV, NASB, NLT, NIV,* and *ESV.*

458. This is the sense of דרשׁ that is translated with the G-stem of ܒܥܐ in *P*-Ps 10.14 discussed above. See above for the relevant bibliographic information from the lexica.

459. This is also the position undergirding the translations in *NET, HCSB*, and Rashi, who states, "He will not seek: All his thoughts tell him, 'The Holy One, blessed be He, will not seek anything that I may do because there is no judgment' (A. J. Rosenberg, *The Complete Tanakh* (*Tanach*) - *Hebrew Bible: The Jewish Bible with a Modern English Translation and Rashi's Commentary* [The Judaica Press, https://www.chabad.org/library/bible_cdo/aid/16231/showrashi/true, accessed Nov. 20,2019]).

460. The *NET* does the same but is even more paraphrastic: "God won't hold me accountable; he doesn't care."

461. See Sokoloff, *op. cit.*, s.v. ܒܥܐ, 1128; *CAL* s.v. ܒܥܐ; and *CSD*, s.v. ܒܥܐ, 424.

understood. The table below contains the Hebrew G-stem activity verbs that are translated with Syriac verbs in the D-stem, but unlike those Hebrew G-stem activity verbs treated in the previous section, the following receive a Syriac D-stem verb which is of the same lexical aspect as the verb it is translating, i.e., a Vendlerian activity.

דבר	ܡܠܠ*	Pss 5.7, 15.2, 28.3
דרשׁ	ܒܥܐ*	Ps 10.4
הלך	ܗܠܟ*	Pss 1.1, 15.2, 23.4, 26.1, 26.11
חנן	ܚܢܢ	Pss 4.2, 6.3, 9.14, 25.16, 26.11, 27.7, 30.11
לעג	ܣܚܩ*	Ps 2.4
נחה	ܢܚܐ*	Pss 5.9, 27.11
סמך	ܣܡܟ*	Ps 3.6
שׁיר	ܫܒܚ*	Pss 13.6, 27.6
שׁמר	ܢܛܪ	Pss 16.1, 17.8
תמך	ܬܡܟ*	Ps 17.5

The list above represents 25 out of the 58 instances of the $S : T_{\text{D}}$ translations in the sample corpus and involve ten unique Hebrew roots and nine in Syriac. These Hebrew G-stem activities that are translated with Syriac D-stem activities fall into three groups: (1) *heterogeneous* Hebrew G-stem activities translated with *heterogeneous* D-stem activities; (2) *homogeneous* G-stem activities translated with *heterogeneous* D-stem activities; and (3) *homogeneous* G-stem activities that are translated with a D-stem activities whose function is one other than pluractionality.

What this set of translations will reveal is that when the Hebrew G-stem activity verb is heterogeneous and is translated with a Syriac D-stem activity verb that is likewise heterogeneous (group [1]), the pattern just described above with respect to דרשׁ holds. That is, the choice of the D-stem on the part of the Syriac translators appears to be owed to a variation in the marking of activity verbs with internal phases whereby Syriac views such events with finer granularity than does Hebrew. Group (2) involves a set of verbs where Hebrew and Syriac vary in their construal of an event, the former conceiving it as homogeneous but the latter as internally complex and therefore pluractional where the repetition of its internal phases is discernible. Finally, group (3) is comprised of verbs where the relation *R* between the $S : T_{\text{D}}$ translation is due to a function of the D-stem other than pluractionality. Each of these groups will be treated in turn below.

6.1.1.1.1.1 Group 1: Heterogeneous Hebrew G-stem Activities Translated with Heterogeneous Syriac D-stem Activities

דבר	ܡܠܠ*	Pss 5.7, 15.2, 28.3
דרשׁ	ܒܥܐ*	Ps 10.4
הלך	ܗܠܟ*	Pss 1.1, 15.2, 23.4, 26.1, 26.11
לעג	ܣܚܩ*	Ps 2.4
שׁיר	ܫܒܚ*	Pss 13.6, 27.6

דבר : *ܡܠܠ Pss 5.7, 15.2, 28.3

תְּאַבֵּד דֹּבְרֵי כָזָב (ACTIVITY) : ܘܬܘܒܕ ܠܡܡܠܠܝ ܕܓܠܬܐ (ACTIVITY), Ps 5.7

וְדֹבֵר אֱמֶת בִּלְבָבוֹ (ACTIVITY) : ܘܡܡܠܠ ܡܘܫܪܬܐ ܒܠܒܗ (ACTIVITY), Ps 15.2

דֹּבְרֵי שָׁלוֹם עִם־רֵעֵיהֶם (ACTIVITY) : ܕܡܡܠܠܝܢ ܫܠܡܐ ܥܡ ܚܒܪܝܗܘܢ (ACTIVITY), Ps 28.3

The differences in the construals of event granularity for the attested meanings of דרש are immediately applicable to the first translational analogy involving a pair of activities, viz., דבר : *ܡܠܠ. To explain the $S : T_D$ relation R between דבר : *ܡܠܠ, it is helpful to begin by contrasting the distribution of this pair of "speaking" roots with that of their near synonyms אמר and ܐܡܪ.

In Pss 1–30 every instance of אמר is in the G-stem and is translated with its Syriac cognate ܐܡܪ, which is also exclusively in the G-stem in the sample corpus.[462] This distribution reflects their broader usage across the books of the Hebrew Bible, where אמר is in the G-stem 5283/5307 times,[463] and ܐܡܪ appears only in the Syriac G- or Gt-stem.[464] This stands in contrast with the distribution of דבר : *ܡܠܠ, where דבר is nearly always in the D-stem across the Hebrew Bible (1083/1133x)[465] and is most often translated in the *Peshiṭta* with ܡܠܠ, a root that is only attested in the D-/Dt-stems.[466] These statistics beg at least two questions that require explanation when confronted with the $S : T_D$ analogy involving the translational pair דבר : *ܡܠܠ in the sample corpus. The first issue concerns why one pair of "speaking" verbs, viz., אמר : ܐܡܪ, is nearly always set in a *Hebrew G-stem* : *Syriac G-stem* analogy across the Hebrew Bible, while the roots דבר : *ܡܠܠ, having nearly the same meanings, exhibit a marked preference for the *Hebrew D-stem* : *Syriac D-stem* analogy, albeit with a few exceptions. Secondly, in light of this rather strong opposition between the G-stem of אמר : ܐܡܪ and the D-stem of דבר : *ܡܠܠ, what is it about these three instances of the G-stem of דבר in the sample corpus that makes them number with these rare exceptions? Dealing with the first of these issues will provide the orientation necessary to explain the second and, ultimately, the *Hebrew G-stem* : *Syriac D-stem* analogy of דבר : *ܡܠܠ in *P*-Pss 1–30.

To begin with the first of these issues, while אמר and ܐܡܪ are cognate roots, it is more than this that contributes to their pairing in translation as well as their strong preference for the G-stem in contradistinction to דבר / ܡܠܠ. The similarity in the meanings of אמר / דבר and ܐܡܪ / ܡܠܠ belies a subtle distinction in the lexical semantics of these pairs of nearly synonymous roots that

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462. See Pss 2.7, 3.3, 4.5, 4.7, 10.6, 10.11,13, 11.1, 12.5, 6, 13.5, 14.1, 16.2, 18.2, 27.8, 29.9, 30.7.

463. Of the 5307 instances of אמר appearing in the Hebrew Bible, 5283 are in the G-stem, 21 are in the N-stem, 2 in the H-stem, and a single instance is in the Gp-stem.

464. In the *Peshiṭta* Hebrew Bible ܐܡܪ occurs 6328 times, with 6297 of these in the G-stem and 31 in the Gt-stem.

465. There are 1133 occurrences of דבר denoting speaking events in the Hebrew Bible, where 1083 are in the D-stem, 40 in the G-stem, four in the N-stem, three in the Ht, two in the Dp, and one in the Gp.

466. ܡܠܠ appears 661 times in the *Peshiṭta* Hebrew Bible, 658 of which are in the D-stem with the remaining three being in the Dt-stem.

runs along the homogeneous versus heterogeneous opposition in activity verbs described above. The root אמר is used for speech acts that are construed as homogeneous, which is made plain by *HALOT's* gloss, "to say, simple act of communicating something."[467] On the other hand, verbs built from דבר denote acts of "speaking,"[468] a heterogeneous activity consisting of the issuance of words, a class of event that admits to internal sub-phases and, critically, internal repetition. This variance in event construal is even evident in the distinction made in Hebrew between the denotation of speech formulae, where a block of quoted speech is introduced with אמר (i.e., לֵאמֹר), and the actual speaking of the words within the quotation that is denoted with a form of דבר.[469] On this point *TLOT* agrees, saying that for אמר, "attention to the content of the speech is important, but *dbr* pi. indicates primarily the activity of speaking, the production of words and phrases,"[470] and later, "*dbr* pi. also describes the pronunciation of a particular content."[471] Jenni too, despite invoking his *Aktualis* versus *Resultativ* schema to account for this opposition, notices the difference in event construal underlying the G-stem-אמר / D-stem-דבר opposition being adduced here, stating:

> Diese Unterscheidung von gewohnheitsmäßig-allgemeinem Reden und Reden in einer bestimmten Situation trifft zwar den Sachverhalt mit einzelnen Ausnahmen recht gut; von unseren Voraussetzungen her dürfte jedoch die Unterscheidung nicht von der unbestimmten oder bestimmten Situation, sondern vom Objekt her zu suchen sein: der Aktualis beschränkt sich auf die Handlung und die allgemeine Art des Sprechens als solche, ohne daß ein bestimmter Wortinhalt vorschwebte, der Resultativ dagegen hat immer einen bestimmten Wortinhalt, sei er genannt oder stillschweigend vorausgesetzt, im Auge. Es wird also unterschieden zwischen dem irgendwie (z. B. nach Herkunft, Zeit, Wahrheitsgehalt) qualifizierten, aber hinsichtlich des Ergebnisses, des formulierten Wortinhaltes, unbestimmt gelassenen Sprechakt und dem in bestimmten Worten erreicht gedachten Sprechergebnis. Das Qal bedeutet «im Wortlaut (momentan oder absichtlich) nicht näher bestimmt gedachte Worte machen», das Pi'el dagegen «im Wortlaut bestimmt gedachte Worte machen».[472]

In this way, the difference in the lexical aspect of אמר and דבר runs parallel to the difference between that of "foliage" versus "leaves" adduced by Wood in the previous chapter. That verb-forms from אמר are overwhelmingly attested in the G-stem is due to an event construal that accords salience to the undifferentiated whole of a given speech act, while those from דבר, appearing almost exclusively in the D-stem, emphasize the repetitive internal sub-phases intrinsic to the "speaking of words." As such, the heterogeneous activity of "speaking" denoted by the D-

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467. *HALOT*, s.v. אמר, 1:66.

468. Ibid., s.v. דבר, 1:210; *BDB*, s.v. דבר, 180.

469. E.g., Gen 18.32, Is 36.11, Jer 30.2, et. al.

470. *TLOT*, s.v. דָּבָר, 1:327.

471. Ibid., 1:328.

472. Jenni, *Das Hebräische Pi'el*, 165.

stem of דבר is the morphologically marked member set against the G-stem of אמר in the "speaking" versus "saying" opposition.

Like Hebrew, Syriac also distinguishes events of "saying" and "speaking" along homogeneous versus heterogeneous lines by way of the G-stem of ܐܡܪ and the D-stem of ܡܠܠ, respectively. The former means "to say"[473] generally, an activity without discernible sub-phases that consequently only appears in the G-/Gt-stem throughout the *Peshiṭta* Hebrew Bible, while verbs from ܡܠܠ are glossed by Sokoloff as "to talk"[474] and "to speak, say; recite"[475] by *CSD,* heterogeneous activities that only occur in the D-/Dt-stems. In this way, the G- and D-stem distributions corresponding to the homogeneous versus heterogeneous semantic patterning for verbs of "saying" and "speaking" denoted by ܐܡܪ and ܡܠܠ, respectively, approximates that which occurs between אמר and דבר described above.[476] However, unlike Hebrew where the roots אמר and דבר can be found in more than a single stem, albeit very rarely, the morphological profile of ܐܡܪ and ܡܠܠ is more rigid — in the whole of the *Peshiṭta* Hebrew Bible verbs from ܐܡܪ are only encountered in the G/Gt-stems while ܡܠܠ exclusively appears in the D/Dt-stems.[477]

The preceding observations concerning אמר / דבר and ܐܡܪ / ܡܠܠ and their respective distributions in the G- and D-stems along the lines of lexical aspect provide the context necessary to interpret the *Hebrew G-stem* : *Syriac D-stem* analogy involving דבר : *ܡܠܠ in the sample corpus. It is first important to note that there are nine instances of דבר in Pss 1–30 that are translated with the D-stem of ܡܠܠ, where five are used to form a finite verb and the remaining four, active participles. Each of the five finite forms of דבר are in the D-stem,[478] but only one of the four participial forms is,[479] with the remaining three occurring in the G-stem. What is particularly interesting is that syntactically, each of these three G-stem participles is a *nomen regens* governing an objective genitive while semantically each is also a *nomen agentis* denoting "one [who] is speaking." Conversely, the fourth participle is predicative and denotes an event rather than a substantive, but critically, joins the five finite forms of דבר in being declined in the D-stem. In other words, when דבר is used to predicate an *event* of "speaking," either as a finite verb or

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473. Sokoloff, *Syriac Lexicon*, s.v. ܐܡܪ, 57.

474. Ibid., s.v. ܡܠܠ, 773.

475. *CSD*, s.v. ܡܠܠ, 273.

476. This is not to suggest that forms of אמר are always translated with ܐܡܪ and דבר with ܡܠܠ. It is sometimes the case that the D-stem of דבר is translated with the G-stem of ܐܡܪ, but this does little to detract from the semantic argument being put forth here. This is especially true since the converse is not true, i.e., that the G-stem of אמר is translated with the D-stem of ܡܠܠ.

477. Not only does this pattern hold throughout the Hebrew Bible, but also in all of the extra-biblical literature cited by Sokoloff/Brocklemann.

478. These occur at Pss. 2.5, 12.3 (2x), 17.10, and 18.1.

479. Ps 12.4.

participle, it is in the D-stem, but when used *substantively* to denote "one [who is] speaking," it is in the G-stem. This behavior of דבר in the sample corpus holds for the broader Hebrew Bible, where of the 40 attestations of the root in the G-stem, 39 are participles functioning substantively and the one remaining G-stem form is an infinitive construct that is also functioning as a substantive.[480] To explain this phenomenon many have followed Nyberg,[481] who suggests that verbs such as those from דבר, which are typically in the D-stem save for their participial forms that are in the G-stem, refer to "a habitual act, the 'profession' or 'nature' of the one who performs it,"[482] but the more likely explanation involves the morphological reflexes of event construal. The absolute correspondence between the respective substantival versus predicative functions of דבר in G- and D-stems suggests a variation in verbal marking along the homogeneous-G-stem/heterogeneous-D-stem patterning detailed above. With the root דבר already undergirding the nouns דָּבָר ("word, thing, matter") and מִדְבָּר ("wilderness"), the further denotation of a substantive was left to the G-stem participle acting as *nomen agentis*, and as "one [who] is speaking," דבר lacks any of the repetitive internal sub-phases that characterize a "speaking" *event*, and so is particularly appropriate for the G-stem. This stands in contradistinction to the intrinsic event-internal pluractionality of its predicative denotation that receives the more heavily marked D-stem.[483]

While this may explain the morphological distribution of דבר more generally and its three instances of the G-stem in the sample corpus particularly, it also provides an explication for the relation *R* in the *Hebrew G-stem* : *Syriac D-stem* analogy involving דבר : *ܡܠܠ in the sample corpus. In *P*-Pss 1–30, each of the three G-stem participles of דבר is met with a D-stem participle of ܡܠܠ, an unsurprising result given that verbs from ܡܠܠ are always in the D/Dt-stem everywhere they are attested in the *Peshiṭta* Hebrew Bible. Nevertheless, it is important to note that these three participial forms of ܡܠܠ also agree with their Hebrew counterparts in being *nomina agenti*, denoting "one [who is] speaking" rather than *events* of "speaking," and yet remain in the D-stem. In marking all forms of ܡܠܠ with the D-stem irrespective of their syntactical function(s), Syriac fails to make a distinction in its derivational morphology between the different lexico-semantic nuances

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480. See Ps 51.6 (51.4 English).

481. H. S. Nyberg, *Hebreisk Grammatik* (Uppsala: Hugo Gebers Forlag, 1952), 221.

482. P. N. Ginsbury, "*'Dover'* and *'M'Daber'*" *Jewish Bible Quarterly* XXXIII.1 (2005): 41. See also Jenni, *Das Hebräische Pi'el*, 164; *TWOT* s.v. דָּבַר, 1:179; *TLOT* s.v. דָּבַר, 1:328.

483. Ryder contends that the D-stem of דבר signals a denomination function from the related substantive דָּבָר (Ryder, *The D-stem in Western Semitic*, 124, 127). In such a scenario, the G-stem would then constitute a derived variant of the D-stem, but since all attestations of the G-stem of דבר are nominal, it would make little sense that its D-stem counterpart would in turn be derived from a noun. Furthermore, as Creason has observed the "Qal verb is limited to only two forms, the infinitive and the participle, which is not what one would expect if the Qal were the derived verb. Rather one would expect that many, if not all, of the possible forms of this verb would be attested" (Creason, "Semantic Classes," 215).

licensed by the various inflectional forms of ܥܒܕ, showing itself to be more sensitive to the repetitive sub-phases intrinsic to the semantics of this root.

דרשׁ : *ܚܦܨ Ps 10.4

רָשָׁע כְּגֹבַהּ אַפּוֹ בַּל־יִדְרֹשׁ (ACTIVITY) : ܚܦܨ ܠܐ ܡܬܚܩܪ ܟܐܦܝܗ (ACTIVITY), Ps 10.4

See discussion above in §6.1.1.2.1.

הלך : *ܗܠܟ Pss 1.1, 15.2, 23.4, 26.1, 26.11

אֲשֶׁר לֹא הָלַךְ בַּעֲצַת רְשָׁעִים (ACTIVITY) : ܗܠܟ ܠܐ ܐܙܠ ܒܥܝܢܬ ܪܫܝܥܐ (ACTIVITY), Ps 1.1
הוֹלֵךְ תָּמִים (ACTIVITY) : ܗܠܟ ܒܬܡܝܡܘܬܐ (ACTIVITY), Ps 15.2
גַּם כִּי־אֵלֵךְ בְּגֵיא צַלְמָוֶת (ACTIVITY) : ܐܦ ܟܕ ܐܗܠܟ ܒܓܘ ܛܠܡܐ ܕܡܘܬܐ (ACTIVITY), Ps 23.4
כִּי־אֲנִי בְתֻמִּי הָלַכְתִּי (ACTIVITY) : ܐܪܡ ,ܐܢܐ ܒܬܡܝܡܘܬܝ ܗܠܟܬ (ACTIVITY), Ps 26.1
וַאֲנִי בְתֻמִּי אֵלֵךְ (ACTIVITY) : ܐܪܡ ,ܐܢܐ ܒܬܡܝܡܘܬܝ ACTIVITY), Ps 26.11

The morphological marking corresponding to the variations in event construal shown to undergird the *Hebrew G-stem* : *Syriac D-stem* analogies of דרשׁ : ܚܦܨ and דבר : *ܥܒܕ not only explains why the Syriac D-stem is used for the Hebrew G-stem in verbs from the roots הלך : *ܗܠܟ in the sample corpus, but also why ܗܠܟ appears exclusively in the D-stem in the whole of Syriac literature.

As regards הלך, it was shown in the previous chapter[484] that Hebrew construes events of "walking" with a coarser-grained resolution than does Syriac, with the G-stem of the root being used for the homogeneous activities of "leaving, departing" as well as the heterogeneous activities of "walking, going," while the D(t)-stem is reserved only for those events whose event-internal repetition is especially pronounced, such as in the denotations of "walking back and forth" or "wandering about" (e.g., 1Ki 21.27). Conversely, CHAPTER 5 also drew attention to the fact that for the homogeneous activities of "leaving; departing" Syriac uses the G-stem of an altogether different root, viz., that of ܐܙܠ, and denotes every heterogeneous event of "walking; going," irrespective of the degree of salience accorded its internal repetitions, by the D-stem of the cognate root ܗܠܟ.

These variations in event construal corresponding to the distributions of הלך : *ܗܠܟ in the G- versus D-stems in both Hebrew and Syriac are immediately evident in the sample corpus. Of the seven attestations of הלך in Pss 1–30, none denote the homogeneous activity meaning "to leave; depart," and so conspicuously, there are also no attestations of the Syriac root ܐܙܠ. Morphologically, five of these seven instances of הלך are in the G-stem and denote a heterogeneous event of "walking; going" and are translated with the D-stem of ܗܠܟ. What is

484. See the discussion and related examples involving הלך in the previous chapter, §5.2.3.1.

interesting is that the remaining two occurrences of הלך in the sample corpus at Pss 12.9 and 26.3 are in the Dt-stem, but with verbs from הלך being intransitive, these forms are clearly not reflexive in meaning. In fact, Speiser numbers הלך amongst those "atypical" roots whose meaning in the Dt-stem, "can hardly be reflexive, middle, or reciprocal,"[485] saying that הלך "in the Qal or Pi'el, as the case may be—appear[s] to perform the same duty as the *t*-forms."[486] Indeed, Speiser's instinct that the D- and Dt-forms of הלך are equivalent finds support in the sample corpus. The context and meaning of הלך in Pss 12.9 and 26.3 where the Dt-stem is attested appear to be clear-cut cases of event-internal pluractionality that is consistent with the marking by D-stem. In Ps 12.9, "the wicked *walk about* all around (סָבִיב רְשָׁעִים יִתְהַלָּכוּן)," a pluractional reading emphasized by the adverb סָבִיב, and in 26.3 the psalmist "walks about" in the Lord's truth as a manifestation of his integrity. As a result, the use of the Dt-stem for הלך at Pss 12.9 and 26.3 resembles to a remarkable degree the paradigmatic event-internal pluractional use of the D-stem of הלך in 1Ki 21.27 discussed in the previous chapter.

The point of rehearsing the various semantic nuances of the G- and Dt-stems of הלך in the sample corpus is to underscore how Hebrew reserves its more heavily marked morphology for the root only in those instances where event-internal pluractionality is especially pronounced, being otherwise content to utilize the G-stem for both the homogeneous ("leaving, departing") as well as heterogeneous ("walking; going") activity denotations. This shows once again how Hebrew is comparatively coarser-grained in its construal of such events than is Syriac, for the latter utilizes its D-stem not only for the event-internal pluractional denotations of הלך ("walking about; walking back and forth"), but also for the simple heterogeneous activity of "walking; going." For the homogeneous denotation of הלך that is left unattested in Pss 1–30, Syriac employs an altogether root, viz., the G-stem of ܐܙܠ. This behavior is consistent with the *Tendenz* of Syriac evinced by the pairs of verbs examined thus far to be more sensitive to the presence of the internal sub-phases of heterogeneous activities, being quicker to mark such events with the D-stem whereas the Hebrew is content to leave them in the G-stem.

This finer-grained construal of internally complex, heterogeneous activities as event-internal pluractionals on the part of Syriac explains why every verb-form of ܗܠܟ appears exclusively in the D-stem, not only when translating the G-stem forms of הלך listed here from the sample corpus, but also everywhere the root is to be found in Syriac literature. Of course, the exclusivity of ܗܠܟ in the D-stem suggests that the relation *R* responsible for the *Hebrew G-stem* : *Syriac D-stem* analogy involving הלך : *ܗܠܟ in the sample corpus is a lexicalized root/stem

485. Speiser, "The Durative Hithpa'el," 118ff.

486. Ibid. Speiser concludes that these "atypical" Dt-stem form of הלך in reality marks "iterative" action, but the examples that he adduces alongside the Akkadian *alāku* are in fact simply internally complex activities.

combination for ܗܠܟ. Nevertheless, considered in light of the variations in event construal along different degrees of granularity the translation of the Hebrew G-stem of הלך with the Syriac D-stem of ܗܠܟ is motivated by more than simply the petrified semantics of this root/stem pairing.

לעג : *ܡܚܟ Ps 2.4

אֲדֹנָי יִלְעַג־לָמוֹ (ACTIVITY) : ܘܡܪܝܐ ܢܡܚܟ ܒܗܘܢ.. (ACTIVITY), Ps 2.4

The next pair of *Hebrew G-stem* : *Syriac D-stem* activity verbs to be analyzed from the sample corpus also displays Syriac's proclivity for rendering heterogeneous Hebrew G-stem activities with the D-stem. Verbs from the root לעג appear twice in the sample corpus at Pss 2.4 and 22.8, and while the former is our primary concern since it is in the G-stem and receives direct translation in a parallel clause, it should be noted at the outset that both occurrences are translated with the D-stem of ܡܚܟ. Thus ܡܚܟ appears exclusively in the D-stem in Pss 1–30, a distribution that is consistent with Sokoloff who lists only glosses for the D- and Dt-stems of the root, indicating that these are the only stems in which ܡܚܟ is attested in the whole of Syriac literature.[487] Given the morphological distribution of ܡܚܟ, it is likely that the root's appearance in the D-stem in the sample corpus is the result of its having been lexicalized, a status that would have constrained the translators in their choice of stem for ܡܚܟ when faced with the Hebrew G-stem of לעג. Accordingly, the likely relation *R* that explains the *Hebrew G-stem* : *Syriac D-stem* analogy involving לעג : ܡܚܟ in the sample corpus is that of a lexicalized root/stem combination in the D-stem.[488]

While lexicalized semantics in the D-stem is undoubtedly responsible for the morphological profile of ܡܚܟ in *P*-Pss 1–30, it is also true that like ܗܠܟ and ܡܠܠ discussed above, here is another example of Syriac's preference for the D-stem when confronted by a heterogeneous activity verb in the Hebrew G-stem. With verbs from the root לעג meaning "to stammer in one's face, to deride,"[489] they are similar to the other *verba dicendi* discussed above in that "dem in bestimmten Worten erreicht gedachten Sprechergebnis,"[490] "hat immer einen bestimmten Wortinhalt, sei er genant oder stillschweigend vorausgesetzt, im Auge."[491] Such events of "speaking," which are construed as the issuance of individuated words as opposed to those of the

487. Sokoloff, *Syriac Lexicon.*, s.v. 728 ,ܡܚܟ. This is likewise the case for *CAL,* s.v. ܡܚܟ.

488. That ܡܚܟ is only attested in the D-stems also rules out the potential for its plural complement at *P*-Ps 2.4, ܒܗܘܢ, as having elicited the use of the D-stem by way of distributivity.

489. *HALOT*, s.v. לעג, 2:532.

490. Jenni, *Das Hebräische Piʿel*, 165.

491. Ibid. See also Levin who includes "mock" in her category of "manner of speaking" verbs (Levin, *English Verb Classes and Alterations*, 97ff).

more general act of "saying," entail large and salient sub-phases that are repeated over the course of discernible temporal sub-intervals. In this way, an event of "mocking" is analogous to one of "speaking" or "walking" discussed above, and ultimately, to Dowty's paradigmatic heterogeneous event of "waltzing."

That these underlying mechanisms of lexical aspect are responsible for Syriac's preference for the D-stem of ܗܰܟ is supported by the morphological distribution of the language's other verbs for "mocking." Of the three Syriac roots listed in the lexica that mean "to mock" *sensu stricto*, two appear only in the D-stem (ܗܰܟ ,ܨܰܚ), while the third means "to mock" only in the D-stem with an altogether different definition in the G-stem (ܟܣܚ, "to laugh"). What this means is that there are no roots in Syriac for which "mocking" events are denoted by the G-stem, but more importantly, that verbs of this semantic field show an overwhelming preference for the D-stem.

The case of ܟܣܚ is particularly interesting because in the D-stem the root is a synonym of ܗܰܟ meaning "to mock, ridicule,"[492] but in the G-stem means "to laugh."[493] As such, the G-stem of ܟܣܚ is clearly semantically related to its D-stem denotation "to mock," but it is not at all transparent how any function traditionally associated with the Semitic D-stem could account for the relationship of the two meanings.[494] Nevertheless, it should be noted that the sub-phases of an event of "laughing" are markedly less differentiated and discrete than that of a "mocking" — both are Vendlerian activities but the boundaries of the internal repetition and phasality of the latter are clearly more salient than in the former. What this once again shows is Syriac's tendency to mark heterogeneous activity verbs with the D-stem as opposed to those more homogeneous events that tend to remain in the G-stem. On this point Jenni, in his seminal study of the Hebrew D-stem, observed a similar difference in event construal for verbs within this semantic field concluding that, "Für das Qal paßt an fast allen Stellen die Bedeutung (*spottend*) *lachen* (...), wobei jeweils die einfache aktuelle Tätigkeit gemeint ist,...Im Pi'el dagegen finden wir kompliziertere Vorgänge ausgedrückt."[495] Jenni's remarks regarding Hebrew verbs of "laughing" versus "mocking"

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492. *CSD*, s.v. ܟܣܚ, 68.

493. Sokoloff, s.v. ܟܣܚ, 227.

494. It may be tempting to see in the differentiation of verbs of "laughing" and "mocking" by means of the G-and D-stems along the lines of the factivizing function of the D-stem described by Kouwenberg. In this way, the analogy of such roots in the G- and D-stems would be something akin to "to laugh" (G-stem) and "*cause* to laugh," i.e., "to mock" (D-stem). However, not only are the semantics of "mock" and "*cause* to laugh" incongruent, but furthermore, the addition of the causative operator in the figure "to *cause* to laugh" is typically marked by the H-stem as opposed to the D-stem. The former marks the addition of an AGENT to a clause for which an AGENT is already present, thus increasing the number of AGENT subjects in a given clause from *n* to *n* + 1, while the factitive function of the D-stem "does not indicate the presence of an additional agent but a change in the subject from non-agentive to agentive" (Kouwenberg, *The Akkadian Verb and Its Semitic Background*, 257).

495. Jenni, *Das Hebräische Pi'el*, 155; original italics.

are appropriate here since when the *Peshiṭta* employs verb-forms from ܟܣܚ it is most often in translation for the Hebrew root צחק and its by-form שׂחק (as is the case in Ps 2.4). What is interesting is that both of these Hebrew roots also display the same morpho-semantic correspondence exhibited by ܟܣܚ — in the G-stem צחק/ שׂחק are used to denote events of "laughing," but in the D-stem events of "mocking."[496] As a result, Jenni's comments suggest an account of the distinction in the construal of events of "laughing" and "mocking" in the G-stem versus D-stem that is similar to that proposed here, viz., that the former is employed with roots denoting events of "laughing" due to fact that they are relatively more homogeneous and therefore internally simple ("einfache Tätigkeit") as compared to their D-stem counterparts, which, meaning "to mock," have an internal structure that is comparatively more heterogeneous and therefore complex ("kompliziertere").

While the preceding discussion helps to explain Syriac's penchant for marking the internal heterogeneity of roots for denoting events of "mocking" with the D-stem, it does beg the question as to why Hebrew retains the G-stem for לעג for "mocking" events such as in Ps 2.4. However, that Hebrew, as opposed to Syriac, should use a G-stem verb for "mocking" is unsurprising given the general direction of the translational pairs analyzed thus far. Hebrew and Syriac, while overlapping in their marking of various event construals with their derivational verbal morphology, routinely differ in the granularity with which they conceive of the sub-intervals of various heterogeneous activity verbs. Hebrew has shown a tendency to be coaser-grained in its event construals than Syriac, being far more likely to place both homogeneous as well as heterogeneous activities in the G-stem, while Syriac has been shown to be finer-grained in such construals, being much more inclined to employ its D-stem whenever a heterogeneous activity with discernible, repetitive sub-phases is denoted.

In the end, the choice of the Syriac translators to bring the G-stem of לעג into their own language with the D-stem of ܡܗܐ in Ps 2.4 is primarily born out of a lexicalized root/stem combination in Syriac. Nevertheless, it is also true that the lexicalized derivational morphology of ܡܗܐ accords on the one hand with the broader trend of Syriac to mark events of "mocking" with the D-stem as was shown to be the case for ܡܗܐ ,ܚܫ, and especially ܟܣܚ, and on the other, the broader data from the sample corpus. In both of these, Syriac has been consistently more likely to mark events with repetitive internal sub-phases with its D-stem. As such, even if fully lexicalized, the choice of the D-stem for ܡܗܐ as a translational equivalent of לעג conforms to a relation *R* that appears to have motivated many of the *Hebrew G-stem* : *Syriac D-stem* translations involving a pair of the heterogeneous Vendlerian activities encountered thus far. This is an important observation because it offers evidence that what has often been considered a "lexicalized" root/stem

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496. *BDB*, s.v. שׂחק, 965ff and *HALOT*, s.v. צחק, 3:1017.

combination might be better conceived of as a "relatively motivated" form *à la* Saussure: "Le principe fondamental de l'arbitraire du signe n'empêche pas de distinguer dans chaque langue ce qui est radicalement arbitraire, c'est-à-dire immotivé, de ce qui ne l'est que relativement. Une partie seulement des signes est absolument arbitraire; chez d'autres intervient un phénomène qui permet de reconnaître des degrés dans l'arbitraire sans le supprimer: *le signe peut être relativement motivé*."[497] Thus, if what has been shown here is correct, Syriac's marking of "mocking" events with the D-stem is not strictly "lexical" as such, but may be better considered as "partially motivated" due to the congruency with which such marking adheres identifiable linguistic mechanisms.

שִׁיר : *ܫܒܚ Pss 13.6, 27.6

אָשִׁירָה לַיהוָה (ACTIVITY) : ܐܫܒܚ ܠܡܪܝ (ACTIVITY), Ps 13.6
אָשִׁירָה (ACTIVITY) : ܐܫܒܚ (ACTIVITY), Ps 17.6

In Pss 13.6 and 27.6 G-stem verbs from the root שִׁיר, meaning "to sing; to play music,"[498] are translated with D-stem forms of ܫܒܚ, a root that is typically glossed as "to praise, glory."[499] In both instances, the Psalmist says that he will "sing" (אָשִׁירָה) "to the LORD" (לַיהוָה), an event that the Syriac translators interpret as an act of "praise," leading to their choice of the D-stem of ܫܒܚ. Since ܫܒܚ appears exclusively in the D/Dt-stem everywhere it is attested in Syriac literature, its use for the G-stem of שִׁיר seems clearly to be owed to a lexicalized meaning of the root in the Syriac D-stem. Nevertheless, the correlation between the meaning and morphology of this root aligns with the Syriac D-stem's pattern of usage that has been routinely observed in many of the pairs of *Hebrew G-stem* : *Syriac D-stem* activity verbs that have been analyzed thus far.

שִׁיר and ܫܒܚ, while occupying similar semantic fields, differ slightly in their denotations and manifest this difference in their verbal morphology. In both Hebrew and Syriac, verbs used to denote events of "singing," as well as verbs of making music more generally, appear in a variety of stems, but show a marked preference for the G-stem (ענה, שׁיר; ܙܡܪ, ܢܨܚ). On the other hand, verbs that exclusively mean "to praise"[500] appear only in the D- or Dt-stems (הלל, זמר, שׁבח; ܫܒܚ). While clearly related semantically, these two sets of verbs are differentiated in the way that the second is a more particularized subset of the first. Verbs of "praise" often denote events that involve "singing;

497. Saussure, *Cours de Linguistique Générale*, 180ff (original italics); cf., Holdcroft, *Saussure: Signs, System, and Arbitrariness* (Cambridge: Cambridge University Press, 1991), 56.

498. *HALOT*, s.v. שִׁיר, 4:1480.

499. Sokoloff., s.v. ܫܒܚ, 1500ff.

500. There are certain other roots where "praise" is but one of a variety of its definitions, but here we refer to those meaning "praise" alone. Nevertheless, even with roots that list "praise" among other meanings such as with רנן, their tendency is to use the D-stem for the denotation of "praise."

music making," but are further specified with theological content intended for a cultic context, and when used apart from any cultic *accoutrement*, always denote the celebration or exaltation of some entity.[501]

In this way, the relationship between verbs of "singing; music making" and those of "praise" is similar to that which obtains amongst the other *verba dicendi* discussed above where a difference in the granularity of event construal leads to a concomitant variation in verbal morphology. Events of "praising" presuppose a more pronounced degree of internal heterogeneity as compared to general events of "singing; making music" since what differentiates a "song of praise" are the particular words and content that may not necessarily be present in an act of making music with the voice or musical instrument. As such, like the "speaking" and "mocking" events discussed above, here again is an internally complex event that prefers the D-stem since they are, "Worten [die das] erreicht gedachten Sprechergebnis."[502]

In Pss 13.6 and 27.6 where the *Hebrew G-stem* : *Syriac D-stem* analogy takes place with שִׁיר : *ܫܒܚ the context clearly involves the exaltation of the LORD through song, which the Syriac translators interpret as a "praising" event, leading them to use the D-stem of ܫܒܚ, an explicit verb of "praise," for the G-stem of שִׁיר. The decision to use ܫܒܚ at Pss 13.6 and 27.6 constrained the translators in their use of the D-stem since the root only appears in the D/Dt-stems everywhere it is attested in Syriac literature. Despite this clear case of lexicalization, "praising" events, with their "bestimmten Worten," entail salient and discernible sub-phases, an event structure that Syriac has continually shown itself to be particularly sensitive to in the data presented thus far. Like verbs of "walking, speaking, and mocking," the internal heterogeneity and repetitive sub-phases of "praising" events leads to their heavy marking with the D-stem. Thus, not only is the Syriac D-stem of ܫܒܚ appropriate here given the lexicalized meaning of "praise" in that stem, but further, like ܗܠܝ ܚܡܣ, and ܚܠ discussed above, the internal complexity of "praising" events is consistent with the type of event that routinely elicits a reflex in the verbal morphology of Syriac and so offers insight into how ܫܒܚ came to be exclusively attested in the D-stem.

6.1.1.1.1.2 Group 2: Homogeneous G-stem Activities Translated with Heterogeneous D-stem Activities

The present section also deals with Hebrew G-stem activities, but unlike those discussed above that belonged to Taylor's heterogeneous class, these are of the homogeneous type. This set of Hebrew G-stem activities is translated with a Syriac D-stem verb that is likewise an activity, but it

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501. See for example, the secular uses of ܫܒܚ in Ge. 12.15, Nu. 21.17, 1Sam 18.6, et. al.

502. Jenni, *Das Hebräische Pi'el*, 164.

will be shown that the action of the event denoted by the source text is construed in a slightly different manner in Syriac thus eliciting marking with the D-stem.

סמך	ܣܡܟ*	Ps 3.6
תמך	ܣܡܟ*	Ps 17.5
נחה	ܕܒܪ*	Pss 5.9, 27.11

סמך : *ܣܡܟ Ps 3.6

כִּי יְהוָה יִסְמְכֵנִי (ACTIVITY) : ܡܛܠ ܕܡܪܝܐ ܣܡܟܢܝ (ACTIVITY), Ps 3.6

תמך : *ܣܡܟ Ps 17.5

תָּמֹךְ אֲשֻׁרַי בְּמַעְגְּלוֹתֶיךָ (ACTIVITY) : ܣܡܟܬ ܗ̈ܠܟܬܝ ܒܫܒ̈ܝܠܝܟ (ACTIVITY), Ps 17.5

Given the orthographic and semantic similarity of סמך and תמך[503] in addition to the fact that they are translated with the same Syriac root in the D-stem, both forms will be treated together. However, prior to discussing their semantics, the inclusion of תמך in Ps 17.5 in an analysis of its potential to denote a plural event that the Syriac translators marked with their D-stem must be justified in light of its inflectional form. Morphologically, תמך is an infinitive absolute in the clause תָּמֹךְ אֲשֻׁרַי בְּמַעְגְּלוֹתֶיךָ from Ps 17.5 that, if functioning substantively, is clearly not denoting any event at all little alone one that is plural. Nevertheless, it is best to take תָּמֹךְ verbally where, despite being a non-finite form, it "exhibits its character as an expression of the *verbal idea* by taking an object,"[504] viz., אֲשֻׁרַי ("my steps"). This was clearly the understanding of the *Peshiṭta* that translates תָּמֹךְ with the D-stem perfect ܣܡܟܬ as well as that of 𝔊, which uses the imperative κατάρτισαι. The verbal sense תָּמֹךְ is so pronouned in Ps 17.5 that the editors of *BHS* even recommend emending the text here to a perfect with an instruction to *probabiliter legendum* תָּמְכוּ.[505] Thus, despite being a non-finite form, we are justified in considering תָּמֹךְ for its potential to denote event pluractionality in the clause it governs in Ps 17.5.

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503. Despite appearances, these roots are unrelated since the direction of the inter-dental and sibilant consonant shifts in Proto-Semitic preclude a common etymological origin. While the ṯ > š shift is a well-documented phenomenon in comparative Semitic, there is no historically attested pathway that can account for a potential shift from the dental of תמך to the to the unvoiced fricative dental-alveolar of סמך or vice-versa.

504. *GKC* 113*a* (original italics). See also §113*gg* where תָּמֹךְ at Ps 17.5 is cited as an example of an infinite absolute with an implied grammatical subject.

505. Despite this recommendation, since 8QPs has תמך and the Ps. Targum has סעיד, both *sans* final *Wāw*, it is more likely the case that the infinite absolute is the original *lectio difficilior* and both the Syriac and Greek used finite forms to translate a Hebrew conjugation not available to them thus giving the sense rather than the form of their original.

Semantically, the roots סמך and תמך are nearly identical, each with a primary meaning of "support" or "hold,"[506] with סמך exhibiting the additional nuance of "lay" or "place."[507] Further to their semantic similarity, verbs from סמך and תמך are also alike in being overwhelmingly attested in the Hebrew G-stem throughout the Hebrew Bible.[508] In terms of their lexical aspect, סמך and תמך undergird activity verbs,[509] which accords with the description of Levin, who says of verbs of the "hold" and related "keep" classes, that "These verbs describe prolonged contact with an entity, but they do not describe a change of possession or a change of location."[510] Such a characterization means that while denoting dynamic situations that impinge upon an entity being "held" or "supported," the semantics of verbs of this type locate them squarely in the category of Taylor's homogeneous activity class detailed above. Indeed, events of "holding, supporting" (and in the case of סמך, "laying") do not admit to any discernible internal structure and come very close to fulfilling even the strong verbs of Bennett and Partee's sub-interval property.[511] This is also true for an additional nuance within the semantic range of סמך, where a metaphorical extension of the primary denotation of "support" is associated with the strength that is afforded an individual through the sustenance of food and drink. This is the case, for instance, in Gen. 27.37:

Gen. 27:37 וַיַּעַן יִצְחָק וַיֹּאמֶר לְעֵשָׂו הֵן גְּבִיר שַׂמְתִּיו לָךְ וְאֶת־כָּל־אֶחָיו נָתַתִּי לוֹ לַעֲבָדִים וְדָגָן וְתִירֹשׁ סְמַכְתִּיו…

"And Isaac answered and said to Esau, 'Behold, I have placed him as master over you and I have given all of your brothers as servants for him, and have *sustained* (G-stem) him with grain and new wine…'"

All of these shades of meaning are united in referring to events that lack internal complexity and so it is not surprising that they in turn are nearly always found in the Hebrew G-stem, albeit accompanied by a smattering of passive voice alterations marked by the N-stem and in the case of סמך, also the G-passive.

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506. *HALOT*, s.v. סמך, 2:759; s.v. תמך, 4:1752; *BDB*, s.v. סמך, 701; s.v. תמך, 1069.

507. See *HALOT*, *op. cit.*, definition 2a.

508. The root סמך appears 48 times in the Hebrew Bible, 38 of these being in the G-stem (N = 6x, G-Passive = 3x, D = 1x), while 20 of the 21 instances of תמך are in the G-stem (the remaining verb is in the N-stem) (*Groves-Wheeler Westminster Morphology*, v.4.14, J. Alan Groves Center for Advanced Biblical Research [Glenside, PA: 1991–2010)]).

509. That the lexical aspect of the root תמך is that of a Vendlerian activity despite sometimes being used for verbs denoting [+TELIC] situations in the Hebrew Bible was defended and treated at length in the discussion of the root in Ps 16.5 above on p.148ff.

510. Levin, *English Verb Classes and Alterations*, 145.

511. See n.973 above.

Given their nearly synonymous meanings it is also no surprise that in *P*-Pss 1–30 סמך and תמך are translated with verbs from the same Syriac root, ܣܡܟ.[512] However, a key difference between verbs from ܣܡܟ and those Hebrew verbs it translates in *P*-Pss 1–30 is that סמך is attested in the D-stem at a much higher rate תמך, which never appears in the Hebrew D-stem or its medio-passive counterpart.[513] Where the Hebrew roots סמך/תמך use the G-stem for a wide-array of "holding, supporting" events, Syriac tends to make a distinction between those that have a more stative and homogeneous coloring and those that require a repeated investiture of energy input to achieve and, more importantly, to maintain. Thus, the sense of סמך that denotes "support" in the form of physical nourishment is never translated with the D-stem in Syriac, but always the G-stem. Similarly, when תמך denotes a static state of "holding," as it does in seven out of its 21 attestations in the Hebrew Bible, it is always translated with the G-stem of ܣܡܟ, such as in Amos 1.8:

Amos 1.8 הִכְרַתִּי יוֹשֵׁב מֵאַשְׁדּוֹד וְתוֹמֵךְ שֵׁבֶט מֵאַשְׁקְלוֹן...

"And I will cut off the one dwelling in Ashdod, and the one *holding* (G-stem) the staff from Ashkelon..."

P-Amos 1.8 ܘܐܘܒܕ ܠܥܡܘܪܐ ܡܢ ܐܫܕܘܕ. ܘܣܡܟ ܫܒܛܐ ܡܢ ܐܫܩܠܘܢ...

"I will cause the destruction of the inhabitant of Ashdod and the one *holding* (G-stem) the scepter from Ashkelon..."

When ܣܡܟ is in the D-stem the difference between it and the G-stem just illustrated is very slight, and at times, imperceptible, but *CSD* suggests an interesting distinction by glossing the D-stem form as "to uphold, support step by step, continuously."[514] Such a definition implies a more dynamic and agentive nuance than is exhibited by the G-stem form, a subtlety that finds an echo in Comrie's description of verbs that possess the [+DYNAMIC] feature: "With a dynamic situation...the situation will only continue if it is continually subject to a new input of energy...To remain in a state requires no effort, whereas to remain in a dynamic situation does require effort."[515] This is illustrated in a particularly poignant way, for instance, in Ex 17.12b where the G-stem of תמך is translated with the D-stem of ܣܡܟ in the episode of Aaron and Hur's effort to keep Moses' arms aloft:

512. There is one instance where the G-stem of תמך is translated with the D-stem of ܥܕܪ which was treated above on 148ff.

513. 12 out of the 81 instances of ܣܡܟ in the *Peshiṭta* Hebrew Bible (14.81%) are in the D-stem.

514. *CSD*, s.v. ܣܡܟ, 380.

515. Comrie, *Aspect,* 50.

ܘܐܗܪܘܢ ܘܚܘܪ ܡܣܡܟܝܢ ܗܘܘ ܐܝ̈ܕܘܗܝ. ܚܕ ܡܢ ܗܪܟܐ ܘܚܕ ܡܢ ܗܪܟܐ. ܘܗ̈ܘܝ ܐܝ̈ܕܘܗܝ ܒܡܗܝܡܢܘܬܐ *P*-Ex 17.12
ܥܕܡܐ ܕܥܪܒ ܫܡܫܐ.

"...and Aaron and Hur were *supporting* (D-stem) his hands, one on [one] side, one on another side, that his hands remained sure until the sun set."

This is also the case in *P*-Ps 37.17 where the D-stem of ܣܡܟ is used to translate the G-stem of סמך in addition to the instance of תמך just exemplified in Ex. 17 above.

ܡܛܠ ܕܕܪ̈ܥܝܗܘܢ ܕܪ̈ܫܝܥܐ ܢܬܬܒܪܘܢ. ܡܣܡܟ ܠܙܕ̈ܝܩܐ ܡܪܝܐ. *P*-Ps 37.17

"Because the arms of the wicked will be broken, [but] the Lord *supports* (D-stem) the righteous."

As these examples illustrate, it is difficult to see much of a difference between Amos 1.8 where the denotation of a "scepter" being "held" is done by the G-stem and Moses' hands being "supported" in Ex 17.12 that is marked by the D-stem. Yet a subtle distinction is hinted at by *CSD* in the definition for the D-stem of ܣܡܟ quoted above that suggests that an object be "supported *continuously*." This "continual" energy input associated with the D-stem of ܣܡܟ finds an interesting parallel with Součková's examination of Hausa, an Afro-Asiatic dialect of Chadic,[516] where verbs like "push" denoting ostensively simple homogeneous events like "push a cart"[517] undergo morphological reduplication, suggesting "that the seemingly continuous action rather involves repeated inputs of energy," such that "the person pushes again and again, repeats his or her effort, but the movement is actually never interrupted."[518] In this way, events requiring continual energy input are in fact pluractional despite the fact that, "the repetitiveness of the action is obscured because the agent maintains contact with the object pushed. The fact that the individual event units of pushing can be repeated almost without any visible transitions gives the impression that the event is continuous."[519] Thus *CSD*'s "continual support," offered as a gloss for the D-stem of ܣܡܟ is a parallel example to the pluractionality marked by reduplication in Hausa on account of the continual investiture of energy that is required for the event to obtain. It is important to note that what is being referred to here is not the "intensity" thought to be marked by the D-stem per Bauer-Leander's definition, "Formen, die eine größere Intensität, Energie bei der Ausführung der Handlung ausdrücken,"[520] where the form allegedly denotes a heightened amplitude of the energy or force by which an event transpires. Not only were the verbs claimed for

516. It is significant that these findings of Součková arise from Hausa, a Chadic language, the study of which led Newman to coin the term "pluractional" in his seminal work, Newman, *The Classification of Chadic within Afroasiatic*, 13; and also his *Nominal and Verbal Plurality in Chadic*.

517. Součková, "Pluractionality in Hausa," 181

518. Ibid.

519. Ibid.

520. Bauer and Leander, *Historische Grammatick der Hebräischen Sprache des Alten Testamentes*, §38*g'* p.281.

notion of "intensity" always [+TELIC], but there was a misunderstanding of Hebrew and Arabic speaking grammarians' treatment of the form.[521] Rather, here is an example of what Ryder referred to as "more of an activity" (كثّر) that the ancient Arabic grammarians used in reference to the D-stem as opposed to the notion of *größere Intensität.*

As a result, it would seem that Hebrew construes events of "holding, supporting" as homogeneous activities where the internal sub-phases of the activity are not given any salience, but Syriac, which it has been shown to do so often, is finer-grained in its construal of such activity events whereby the complexity of their internal structure is given more prominence and thus marked by the D-stem. Here, the internal complexity of the pluractional D-stem appears to manifest as repeated events of energy.

נחה : *ܕܒܪ Pss 5.9, 27.11
נְחֵנִי בְצִדְקָתֶךָ לְמַעַן שׁוֹרְרָי (ACTIVITY) : ܕܒܪܝܢܝ (ACTIVITY), Ps 5.9
וּנְחֵנִי בְּאֹרַח מִישׁוֹר לְמַעַן שׁוֹרְרָי (ACTIVITY) : ܘܕܒܪܝܢܝ ܒܫܒܝܠܐ ܬܪܝܨܐ (ACTIVITY), Ps 27.11

That verbs from the root נחה, meaning "to lead,"[522] are homogeneous follows from the fact that they could plausibly be considered as adhering to the sub-interval property as articulated by Bennett and Partee discussed above despite the fact that it is often deemed too strict for most activities due to the minimal parts problem. This is because an event of "leading" could be seen as true not only at some interval of time *I*, but also at every sub-interval of *I* including every moment of time in *I*. This is further underscored by the fact the נחה appears exclusively in the G-stem (Pss 5.9, 27.11) and its causative counterpart, the H-stem (Ps 23.3), not only in Pss 1–30, but also in the totality of the Hebrew Bible. Such a derivational profile would be expected given a simple, homogeneous activity event with a causative alteration. However, the manner in which נחה is treated by the *Peshiṭta* offers a glimpse into how events of "leading" are construed differently in Hebrew and Syriac.

In the sample corpus, the D-stem of ܕܒܪ is used to translate each attestation of נחה in both the G- and H-stems, qualifying ܕܒܪ as one of the D-stem-isolates identified above in TABLE 4.2, but throughout the wider corpus of the entire *Peshiṭta* ܕܒܪ appears much more frequently in the G- than D-stem, and to a much lesser extent both of their medio-passive counterparts. What is interesting about these broader attestations is that of the 248 times ܕܒܪ appears in the G-stem in the *Peshiṭta* Hebrew Bible, it is being utilized to translate the G-stem of the root לקח the vast

521. See the explanation of this issue in n.187.

522. *HALOT*, s.v. נחה, 2:685; see also *BDB*, s.v. נחה, 634ff.

majority of the time (186x). The Hebrew root לקח has the primary meaning "to take,"[523] but this in two senses. The first sense of "take" refers to the "grasping" or the "taking" that occurs with one's hand. This is exemplified in Ex. 4.17 where Moses is implored by the LORD to "grasp" or "seize" the staff with which he performed miraculous signs before Pharaoh:

Ex. 4.17 וְאֶת־הַמַּטֶּה הַזֶּה תִּקַּח בְּיָדֶךָ אֲשֶׁר תַּעֲשֶׂה־בּוֹ אֶת־הָאֹתֹת׃

"And you shall *take* (G-stem) this staff in your hand which you performed with it the signs."

However, the G-stem of לקח attests to an additional nuance of "take" that is also quite common, namely, the conveyance of something or someone to or from a given location,[524] a member of what Gropen, et. al., describe as verbs of "accompanied motion in a direction."[525] It is when לקח denotes this sense of "take" that it is most often translated with the G-stem of ܕܒܪ. This is the case, for instance, in the Hebrew and *Peshiṭta* texts of Gen. 19.15:

Gen. 19.15 וּכְמוֹ הַשַּׁחַר עָלָה וַיָּאִיצוּ הַמַּלְאָכִים בְּלוֹט לֵאמֹר קוּם קַח אֶת־אִשְׁתְּךָ
וְאֶת־שְׁתֵּי בְנֹתֶיךָ הַנִּמְצָאֹת פֶּן־תִּסָּפֶה בַּעֲוֺן הָעִיר׃

""And when dawn arose, the angels pressed Lot saying, 'Get up, *take* (G-stem) your wife and your two daughters found [with you] lest you be swept away in the iniquity of the city.'"

ܘܟܕ ܣܠܩ ܨܦܪܐ. ܐܠܝܨܘ ܡܠܐܟܐ ܠܠܘܛ ܘܐܡܪܝܢ ܠܗ. ܩܘܡ ܕܒܪ ܐܢܬܬܟ ܘܬܪܬܝܢ ܒܢܬܟ ܕܐܫܬܟܚ ܕܠܡܐ
ܬܬܒܠܥ ܒܚܛܗܝܗ ܕܩܪܝܬܐ.

"And when the morning rose, the angels urged Lot, saying to him, 'Get up! *Take* (G-stem) your wife and your two daughters who are to be found, lest you be swallowed in the sin of the city.'"

Given these statistics, it is clear that the translators of the *Peshiṭta* associated the G-stem of ܕܒܪ with the notion of "taking" in the second of the senses just described that refers to accompanied motion. In addition, that the root ܕܒܪ occurs 325 times in the *Peshiṭta* Hebrew Bible, and 248 of these are G-stem verbs (186 of these dedicated to translating the Hebrew לקח), it is safe to assume that the sense of "take" related to motional conveyance is the "default" (see §3.2.1 above) semantics of ܕܒܪ in the G-stem. Furthermore, as a verb that is specified as [+DURATIVE] and [+DYNAMIC] while being underspecified for the TELICITY, the motional sense of the G-stem of ܕܒܪ is a quintessential Vendlerian activity in its lexical aspect. Critically though, as activities, these verbs by definition are decomposable into a series of internal phases, or as McClure was quoted above saying, "an unbounded sequence of linearly ordered changes of the same type."[526] The critical role played by

523. *HALOT,* s.v. לקח, 2:534; *BDB,* s.v. לקח, 542.

524. *HALOT,* s.v. לקח, 2:534, definition no.2.

525. J. Gropen, S. Pinker, M. Hollander, R. Goldberg, and R. Wilson, "The Learnability and Acquisition of the Dative Alternation in English," *Language* 65.2 (1989): 212.

526. McClure, "Syntactic Projections of the Semantics of Aspect," 93.

the preceding characterization of ܕܒܪ, despite being culled from translational data outside of the sample corpus, is that the G-stem of ܕܒܪ, in being used to translate the G-stem of לקח with such frequency, demonstrates the Syriac translators' penchant to associate it with verbs exhibiting internal homogeneity. Verbs of accompanied motion with the meaning of "taking; taking away" possesses internal phases that are non-differentiated, continuous, and as a result, highly opaque. Given these considerations, the G-stem of ܕܒܪ quite comfortably qualifies as a homogeneous activity as conceived of by Taylor.[527]

With the G-stem of ܕܒܪ being employed for homogeneous activity verbs of accompanied motion, an appropriate opposition for its D-stem counterpart would be to mark internally complex, heterogeneous activities consistent with event-internal pluractionality. According to this analogy, the primary meaning of the D-stem of ܕܒܪ, "to lead, guide,"[528] can be construed as a series of iterated "taking" sub-events that are consigned to the internal sub-phases of a single situation in contradistinction to the homogeneous "taking" event that Syriac marks with the G-stem.[529] In this way the relation of the G-stem of נחה, "to lead," to the D-stem of ܕܒܪ, is similar to that identified above between the G-stem of דרשׁ and the D-stem of ܒܨܐ identified above. The D-stem of ܕܒܪ more closely patterns with the type of heterogeneous action denoted by the D-stems of ,ܡܫܫ ܗܠܟ, and ܡܠܠ discussed above that admit to discernable internal sub-phases, especially in light of

527. The inclination to take the G-stem of ܕܒܪ as a homogeneous activity based upon the prevalence with which it is employed in the translation of the atelic sense of th G-stem of לקח, finds further support in its translation of נהג. In the G-stem, נהג means "to drive; to drive away, off," and of the 19 times it appears in that stem, it is translated with the G-stem of ܕܒܪ in 14 of them (see *HALOT,* s.v. נהג, 2:671; *BDB,* s.v. נהג, 624).

528. Sokoloff, *Syriac Lexicon*, s.v. ܕܒܪ, 272.

529. Lupu's analysis of the Syriac D-stem often conflates pluractionality, which refers multiple events, with temporal duration, which refers to how long it takes for an event to unfold. For example, Lupu states, "In the Peshitta, the pluractional D-stem was generally found to extend the duration of activity predicates" ("Semantic Patterns" 53). However, elsewhere she seems to indicate that this "extended duration is due to pluralizing the phases of an action" (Ibid., 164). Thus, is it not always clear what type of temporal extension Lupu intends. Lupu's analysis of the root of the G- versus D-stem denotations of ܕܒܪ is one of several places where this occurs, as she states that, "the two stems are distinguished by the length of time over which the action is said to occur" (Ibid., 203). However, she then goes on to say that the D-stem of ܕܒܪ, "refers to actions that are extended in time…often accompanied by adverbs or prepositions phrases that convey this temporal…extent" (203ff). Rather, any "extension in time" of an event denoted by the D-stem is accomplished by these "adverbs and prepositional phrases" and not the morphological encoding of the D-stem. Lupu is right to draw a distinction between the G-stem of ܕܒܪ, which denotes a single action, "to take," versus the plural action of the D-stem, "to lead," but the regular association of the latter with these temporal modifiers is due to the fact that an event of "leading" (D-stem) is a series of iterated "taking" micro-events that can be repeated indefinitely over a specified temporal interval. The length of temporal interval over which an event transpires is a phenomenon distinct from whether or not that event is pluractional. Not only do these two concepts refer to completely different phenomena, but they are also denoted by different linguistic mechanism. The former entails morphological alterations on the verb while the later is denoted by temporal modifiers and sentential analytic structures.

its semantic profile in the other stems. The internal sub-phases within the construal of events marked by the D-stem of הכנ may not be immediately obvious, but when considered against its G-stem counterpart that is predominately employed for homogeneous events, the internal complexity of the D-stem becomes apparent. In this way, the Syriac maintains its propensity to make a distinction between homogeneous and internally heterogeneous events in a manner that is more finely grained than its Hebrew counterpart, choosing to mark the latter in its verbal morphology with the D-stem. As a result, the relation *R* that motivated the *Hebrew G-stem* : *Syriac D-stem* translation in the cases of נחה : הכנ in *P*-Pss 5.9, 27.11 is consistent with type of event-internal pluractionality that is routinely marked by the verbal derivatonal morphology in Semitic.

This consistency with marking internally heterogeneous activity verbs with the Syriac D-stem also informs our analysis of the fact that הכנ exclusively appears in that stem throughout the sample corpus. That the G-stem of הכנ is widely employed in the *Peshiṭta* translation of the Hebrew Bible, a fact that was used in the argument of the function of its D-stem complement, demonstrates that the use of the latter in the sample corpus is due to an intended meaningful employment of the stem and is not a lexicalized root/stem combination.

6.1.1.1.1.3 Group 3: Homogeneous G-stem Activities Translated with D-stem Activities: Non-Pluractional D-Stem Function

The preceding section dealt with homogeneous Hebrew G-stem activity verbs whose event construal possessed no discernible internal sub-phases, but the Syriac translators nevertheless rendered these with their D-stem due to their denotation of events that require repeated energy input to maintain, thus construing them as more internally complex than Hebrew does. It now remains to treat the following two root/stem combinations representing the balance of activity verbs in the sample corpus.

חנן	ומא	Pss 4.2, 6.3, 9.14, 25.16, 26.11, 27.7, 30.11
שׁמר	נטר	Pss 16.1, 17.8

Like the set of Hebrew G-stem activity verbs receiving a Syriac D-stem in translation discussed in the preceeding section, these Hebrew G-stem verbs are of the homogeneous class described by Taylor. This is because their internal structure is akin to a verb such as the English "to fall" where the boundaries of their internal sub-phases are opaque and indiscernible. In contradistinction to the previous section where the use of the D-stem by the Syriac translators was owed to a difference in the construal of an event where homogeneous Hebrew G-stem activities are viewed as more heterogeneous in Syriac and thus marked with the D-stem, here a different use of the Syriac D-stem seems to be involved. Therefore, another relation *R* must be sought to account for the *Hebrew G-stem* : *Syriac D-stem* analogy of these verbs. In these instances, such a relation is to be found not

through recourse to the event construal of the lexical item in the Hebrew *Urtext* but rather in their relation to the G-stem forms within their own language. The most likely relation *R* responsible for this set of verbs is factitivity, a function of the D-stem other than pluractionality.

חנן : ܐܫܬ Pss 4.2, 6.3, 9.14, 25.16, 26.11, 27.7, 30.11
חָנֵּנִי (ACTIVITY) : ܐܫܬ ܚܠ (ACTIVITY), Ps 4.2
חָנֵּנִי (ACTIVITY) : ܐܫܬ ܚܠ (ACTIVITY), Ps 6.3
חָנְנֵנִי (ACTIVITY) : ܐܫܬ ܚܠ (ACTIVITY), Ps 9.14
וְחָנֵּנִי (ACTIVITY) : ܐܫܬ ܚܠ ܗܘ (ACTIVITY), Ps 25.16
וְחָנֵּנִי (ACTIVITY) : ܐܫܬ ܚܠ ܗܘ (ACTIVITY), Ps 26.11
וְחָנֵּנִי (ACTIVITY) : ܐܫܬ ܚܠ (ACTIVITY), Ps 27.7
וְחָנֵּנִי (ACTIVITY) : ܐܫܬ ܚܠ ܗܘ (ACTIVITY), Ps 30.11

A first issue to be dealt with in this *Hebrew G-stem* : *Syriac D-stem* analogy is that the Hebrew root חנן, as it is typically glossed in English, "to have mercy on," may give the impression of a stative situation. However, *HALOT's* definition of the root when accompanied by an accusative direct object, "to favour someone; to favour someone with,"[530] implies an action whose effects have the potential to carry over to a PATIENT rather than simply being an emotion experienced by the grammatical subject. This dynamic nature of חנן is further suggested by Yamauchi who says of its G-stem form: "The verb *ḥānan* depicts a heartfelt response by someone who has something to give to one who has need."[531] Further to the dynamism intimated by *HALOT* and Yamauchi, when verbs from חנן are placed in pseudo-cleft sentences, a standard semantic test for dynamicity, they remain felicitous: "What God *did* was have mercy (on the crowd)"[532] This remains the case even when put in the formulation *What happened to X is Y*,[533] Beaver's more rigorous diagnostic for dynamic situations that registers potential change in the direct object on account of verbal force transfer, e.g., *What happened to* him *was that God had mercy upon him*.

In addition to these semantic considerations, the G-stem of חנן also patterns with the vast majority of dynamic verbs syntactically, for as the lexica point out in their definitions, the form takes an accusative direct object as opposed to the prepositional complementation often given in English glosses of the verb. This is an important observation with applicability for Pss 1–30 where each attestation of the G-stem of חנן has a pronominal direct object, a syntagm much more

530. *HALOT*, s.v. חנן, 1:334. The dynamic reading of חנן is also presupposed in the primary gloss given in *BDB*, "shew favour, be gracious" (s.v. חנן, 335).

531. E. Yaumachi, *TWOT*, s.v. חָנַן, 1:302.

532. This as opposed to "*What Joseph *did* was know Hebrew." See Dowty, *Word Meaning and Montague Grammar*, 55.

533. J. Beavers, "On Affectedness," *Natural Language & Linguistic Theory* 29.2 (2011): 339ff.

common with dynamic as opposed to stative situations. While the dynamism of חנן with direct object is perhaps subtle in the Hebrew sample corpus, it is especially clear in examples such as Gen. 33.5 where a divalent situation involving the form denotes a clear transfer of action from subject to affected direct object as underscored by the use of the Hebrew *nota accusativi*:[534]

Gen. 33.5 וַיִּשָּׂא אֶת־עֵינָיו וַיַּרְא אֶת־הַנָּשִׁים וְאֶת־הַיְלָדִים וַיֹּאמֶר מִי־אֵלֶּה לָךְ וַיֹּאמַר הַיְלָדִים
אֲשֶׁר־חָנַן אֱלֹהִים אֶת־עַבְדֶּךָ׃

"When he [Esau] lifted up his eyes and saw the women and the children, he said, 'Who are these to you?' And he [Jacob] said, 'The children God *has graced your servant with* (*lit.* "...which God has graced your servant").'"

Thus, both the semantic as well as syntactic evidence points to a dynamic rather than stative interpretation for the G-stem of חנן, hence justifying its need to be tested for event pluractionality that the Syriac translators may have marked with their own D-stem.

Although each of the seven attestations of חנן appears in the G-stem and is translated with the D-stem of ܚܢܢ, it is helpful to begin by considering the semantics of the G-stem of the latter. The typical glosses for the G-stem of ܚܢܢ offered in the lexica such as *CSD*'s, "to love, to delight in, desire,"[535] give the impression of a stative situation. But unlike חנן, the G-stem of ܚܢܢ rarely governs pronominal direct objects, preferring instead prepositional phrase complements. Thus in the G-stem, ܚܢܢ semantically and syntactically patterns closely with archetypal verbs of psychological state,[536] confirmed by the fact that every time the Hebrew of Pss 1–30 attests the G-stem verbs for unambiguously stative verbs of "love" such as those from אהב or רחם (the latter only appearing a single time),[537] the *Peshiṭta* translates these with the G-stem of ܚܢܢ.[538]

However, in the D-stem ܚܢܢ exhibits a semantic nuance much closer to the dynamic situations licensed by the G-stem of חנן and can even denote an event whose action transfers from subject to object, a sense that is suggested by *CSD*'s, "to be pitiful to,"[539] and *CAL's* "to have mercy upon."[540] This dynamic nuance for the D-stem of ܚܢܢ is particularly clear in cases like *P*-Phil 2.27 where an AGENT has actively and volitionally performed some tangible act of mercy which registers

534. On the function of the *nota accusativi* אֶת־ for the marking objects affected by the action of verb see Garr, "Affectedness, Aspect, and Biblical *'et*" as well as n.390.

535. *CSD*, s.v. ܚܢܢ, 537.

536. On the label and the unique behaviors of such verbs see Levin, *English Verb Classes and Alterations*.

537. See *HALOT*, s.v. אהב, 1:17; s.v. רחם, 3:1216.

538. These occur at Pss 4.3, 5.12, 11.5, 11.7, 18.2 (רחם), and 26.8.

539. *CSD*, s.v. ܚܢܢ, 537.

540. *CAL*, s.v. ܚܢܢ.

an effect in the PATIENT. Here, the event being described goes well beyond simply the denotation of a psychological state that obtains in an EXPERIENCER subject:

P-Phil 2.27 ܐܦ ܐܬܟܪܗ ܓܝܪ ܥܕܡܐ ܠܡܘܬܐ ܐܠܐ ܐܠܗܐ ܪܚܡ ܥܠܘܗܝ ܠܐ ܗܘܐ ܕܝܢ ܥܠܘܗܝ ܒܠܚܘܕ ܐܠܐ
ܐܦ ܥܠܝ ܕܠܐ ܬܗܘܐ ܠܝ ܟܪܝܘܬܐ ܥܠ ܟܪܝܘܬܐ.

"For also he was sick as unto death, *but God had mercy upon him*, but not upon him alone, but also upon me, so that there was not sorrow upon sorrow for me."

When applying Beavers' tests for object-affectedness, the D-stem of ܪܚܡ remains felicitous when construed as *What happened to him was that God had mercy upon him,* but is ungrammatical when formulated as, **God had mercy on the sick man, but he is still sick*.[541] Thus, the D-stem of ܪܚܡ passes both of the diagnostics designed by Beavers to test for verbs whose action leave an effect upon a PATIENT.[542]

While the preceding analysis was able to show that despite the English glosses for the G-stem of חנן and the D-stem of ܪܚܡ that suggest a stative interpretation for these verbs, in fact they are best interpreted as dynamic in nature. Although dynamic in nature, it is clear that neither verb-form denotes events comprised of a series of iterated sub-phases and pattern more closely with factitive situations. Accordingly, the D-stem of ܪܚܡ is the more highly transitive factitive counterpart of the stative G-stem form.[543]

שמר : ܢܛܪ Pss 16.1, 17.8
שָׁמְרֵנִי (ACTIVITY) : ܢܛܪܢܝ (ACTIVITY), Ps 16.1
שָׁמְרֵנִי כְּאִישׁוֹן בַּת־עָיִן (ACTIVITY) : ܢܛܪܢܝ ܐܝܟ ܒܒܬܐ ܕܥܝܢܐ (ACTIVITY), Ps 17.8

In a manner similar to what was just seen with חנן : ܪܚܡ, the translation of the G-stem of שמר with the D-stem of ܢܛܪ is not owed to a desire to mark an internally complex and heterogeneous pluractional event in the Hebrew, but rather is due to an inner-Syriac difference in the construal of a semantically related set of situations with respect to low and high semantic transitivity. Across the Hebrew Bible שמר appears in the G-stem 424 out of its 468[544] occurrences and attests two closely related semantic nuances that fall within the broader notion of "the

541. See J. Beavers, "On Affectedness," *Natural Language & Linguistic Theory* 29.2 (2011): 339–42.

542. The account of the difference between the G- and D-stems of ܪܚܡ presented here is supported by the analysis of the same verb by Lupu in "Semantic Patterns," 101.

543. Lupu also includes this verb in her "Low transitivity D-stems" category, meaning the the D-stem form of ܪܚܡ is the highly transitive counterpart to the low transitivity of the G-stem (Lupu, "Semantics Patterns," 101-2).

544. These figures are according to the *Groves-Wheeler Westminster Morphology*, v.4.14, J. Alan Groves Center for Advanced Biblical Research (Glenside, PA, 1991–2010).

protection (keeping) and maintenance (also the storage) of a good."[545] The first sense within this general notion of "keeping" and "maintaining" concerns various persons or objects, such as what Cain says about his brother in Gen. 4.9 (הֲשֹׁמֵר אָחִי אָנֹכִי, "Am I keeper of my brother?") or a physical object, such as in 2Sam 15.16 where David leaves the matters of his household under the care of his wives and concubines (וַיַּעֲזֹב הַמֶּלֶךְ אֵת עֶשֶׂר נָשִׁים פִּלַגְשִׁים לִשְׁמֹר הַבָּיִת, "But the King left ten women, namely concubines, to maintain the house"). This nuance manifests at times with a more active and agentive sense with a meaning more akin to the English notion of "guard" or "protect" as in Ex 23.30: הִנֵּה אָנֹכִי שֹׁלֵחַ מַלְאָךְ לְפָנֶיךָ לִשְׁמָרְךָ, "Behold, I will send my angel before you in order *to guard/protect* you."

In addition to the notion of "guarding" or "protecting," the second nuance of the G-stem of שׁמר is also related to the idea of "keeping" and "maintaining," but rather than a physical stewardship or conservatorship, the sense is that of "to obey" or "listen to"[546] in a more abstract sense. A quintessential example of this usage takes place in Gen. 26.5 where Isaac is promised blessing on account of the obedience and faithfulness of his forefather Abraham:

Gen. 26.5 עֵקֶב אֲשֶׁר־שָׁמַע אַבְרָהָם בְּקֹלִי וַיִּשְׁמֹר מִשְׁמַרְתִּי מִצְוֹתַי חֻקּוֹתַי וְתוֹרֹתָי׃

"Because of Abraham, who listened to my voice and *kept* (G-stem) my obligations, my commandments, my statutes, and my laws."

As indicated by the overwhelming preference for the G-stem within the Hebrew Bible (424/468x), the Hebrew language fails to make a distinction between these various senses of שׁמר in its derivational verbal morphology via the verbal stems.

In a very similar way, the Syriac root ܢܛܪ, employed in translation for each attestation of the G-stem of שׁמר in *P*-Pss 1–30, denotes situations of "keeping" and "maintaining" in both the physical and abstract senses discussed above with respect to the Hebrew. However, unlike שׁמר that appears almost exclusively in Hebrew G-stem with only a single attestation in the D-stem, the Syriac D-stem constitutes a slightly higher percentage of the overall attestations of the root in the *Peshiṭta* Hebrew Bible with 20 of the 531 occurrences appearing in the D-stem. At just 3.76% of all the occurrences of ܢܛܪ, the D-stem remains extremely rare, but considering that three of the 20 attestations of the D-stem, or 15% of all the ܢܛܪ verbs in that stem appear in Pss 1–30, its function in the sample corpus may very well have implications beyond it.

With regard to function, it was shown above that in Hebrew the G-stem of שׁמר is employed for both the abstract as well as physical senses of "guarding; watching over" of the root, that is, for both a sense of protecting or watching over physical items or in a more non-concrete

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545. *TLOT*, s.v. שׁמר, 3:1381. Similarly, the *TWOT* states that "The basic idea of the root is 'to exercise great care over'" (*TWOT*, s.v. שׁמר, 2:939).

546. See *BDB*, s.v. שׁמר, 1036; definitions 3.a–d.

sense of "observing" or "obeying." This too is the situation in Syriac regarding the G-stem of ܢܛܪ. For example, the G-stem is used in Gen. 28.15a in a vision of Jacob's when God promises His unconditional and unflinching protection during his sojourn:

ܗܐ ܥܡܟ ܐܢܐ ܘܢܛܪ̈ܟ ܒܟܠ ܐܬܪ ܕܬܐܙܠ ... *P*-Gen. 28.15

"And behold, I will be with you, and *I will guard you* (G-stem) wherever you go..."

Concurrently, the G-stem is also used in the example from Gen. 26.5 adduced above as an example of the abstract sense of "guarding; watching over" that means something more akin to "obedience; observance:"

ܒܟܠ ܕܫܡܥ ܐܒܪܗܡ ܠܩܠܝ ܘܢܛܪ ܡܛܪܬܝ ܦܩܘܕܝ ܦܬܓܡܝ ܘܢܡܘܣܝ. *P*-Gen. 26.5

"Because Abraham listened to my voice and *kept* (G-stem) my precepts and my commandments and my covenants and my laws."

Despite this similarity with the Hebrew, the use of ܢܛܪ in the *Peshiṭta* differs in that while the G-stem can be used for both semantic nuances of the root, the D-stem is employed exclusively in the first, more concrete sense relating to physical protection and safeguarding. In *P*-Pss 1–30 both senses of שׁמר : ܢܛܪ are attested, but when "observance; obedience" is meant the *Hebrew G-stem* : *Syriac G-stem* translational analogy is employed.

שׁמר : ܢܛܪ, *Hebrew G-stem* : *Syriac G-stem*

Sense 1: Guard, Protect (Physical Stewardship)

Ps 12.8	אַתָּה־יְהוָה תִּשְׁמְרֵם תִּצְּרֶנּוּ מִן־הַדּוֹר זוּ לְעוֹלָם׃	ܐܢܬ ܗܘ ܡܪܝ ܢܛܪ̈ܝܢ ܢܛܪ̈ܝܗ ܡܢ ܗܢ ܕܪܐ ܠܥܠܡ.
Ps 25.20	שָׁמְרָה נַפְשִׁי וְהַצִּילֵנִי אַל־אֵבוֹשׁ כִּי־חָסִיתִי בָּךְ׃	ܢܛܪ ܢܦܫܝ ܘܫܙܒܢܝ ܠܐ ܐܒܘܫ ܐܡܛ ܒܟ.

Sense 2: Observe, Obey (Abstract Stewardship)

Ps 18.22	כִּי־שָׁמַרְתִּי דַּרְכֵי יְהוָה וְלֹא־רָשַׁעְתִּי מֵאֱלֹהָי׃	ܐܡܛ ܐܢ ܢܛܪ̈ܬ ܐܘܪ̈ܚܬ ܡܪܝܐ ܘܠܐ ܐܫܬܡܥܬ ܠܐܠܗܝ.
Ps 19.12	גַּם־עַבְדְּךָ נִזְהָר בָּהֶם בְּשָׁמְרָם עֵקֶב רָב׃	ܐܦ ܥܒܕܟ ܢܙܗܪ ܒܗܘܢ ܒܢܛܪܗܘܢ ܐܓܪ ܣܓܝ.
Ps 25.10	כָּל־אָרְחוֹת יְהוָה חֶסֶד וֶאֱמֶת לְנֹצְרֵי בְרִיתוֹ וְעֵדֹתָיו׃	ܟܠ ܐܘܪ̈ܚܬ ܡܪܝܐ ܚܣܕ ܘܫܪܪܐ ܠܢܛܪ̈ܝ ܩܝܡܗ ܘܣܗܕ̈ܘܬܗ.

שמר : ܢܛܪ, *Hebrew G-stem* : *Syriac D-stem*

Sense 1: **Guard, Protect (Physical Stewardship)**

Ps 16.1	שָׁמְרֵנִי אֵל כִּי־חָסִיתִי בָךְ׃	ܢܛܪܢܝ ܐܠܗܐ ܡܛܠ ܕܥܠܝܟ ܐܬܬܟܠܬ.
Ps 17.8	שָׁמְרֵנִי כְּאִישׁוֹן בַּת־עָיִן בְּצֵל כְּנָפֶיךָ תַּסְתִּירֵנִי׃	ܢܛܪܢܝ ܐܝܟ ܒܒܬܐ ܕܥܝܢܐ. ܘܒܛܠܠܐ ܕܟܢܦܝܟ ܬܛܫܝܢܝ.
Ps 17.4[547]	לִפְעֻלּוֹת אָדָם בִּדְבַר שְׂפָתֶיךָ אֲנִי שָׁמַרְתִּי אָרְחוֹת פָּרִיץ׃	ܒܥܒ̈ܕܐ ܕܒܢܝ̈ܢܫܐ. ܒܡܡܠܠܐ ܕܣܦܘ̈ܬܐ. ܐܠܐ ܢܛܪܬܢܝ ܡܢ ܐܘܪܚܬܐ ܒܝ̈ܫܬܐ.

The pattern observed above in *P*-Pss 1–30 holds for the entire *Peshiṭta* Hebrew Bible. While the G-stem of ܢܛܪ can routinely be found denoting the abstract sense of "obey, observe," as illustrated with the example in *P*-Gen. 26.5 above, not one of the 20 instances of the D-stem does. This means that the D-stem is used only for situations where the grammatical object is a true PATIENT that is affected by the action of the verb, thus residing in a clause that is relatively high in semantic transitivity. This stands in contradistinction to clauses governed by the G-stem of ܢܛܪ, a verb-form that tolerates objects completely unaffected by the verbal action and indeed, in those situations where the grammatical object of the verb is that which is "obeyed" or "observed," it is the subject that is affected. That the Syriac D-stem is to be found exclusively in highly transitive situations vis-à-vis the G-stem accords with Kouwenberg's statement that, "the fact that the D-stems of the latter verbs, in so far as they have approximately the same meaning, are generally preferred in sentences which rank in the topmost part of the transitivity scale because of the highly salient nature of the subject, the object and the action itself."[548] Clearly there is overlap between the G- and D-stems of ܢܛܪ, but the latter seems to be an example of the phenomenon of the D-stem emphasizing the concreteness and transitivity of the action observed by Kouwenberg:

> The corresponding G-stem can be used in the same circumstances, but to a much larger extent than the D-stem it is also used in a wider range of context; e.g., in secondary meanings, with abstract objects, or without objects, irrespective of the degree of transitivity they imply… By using a D form, a speaker can emphasize that the action denoted by the verb should be viewed in its concrete, literal sense, rather than in some metaphorical meaning; that it has a visible effect on the object; and that the direct object (the "patient" in the literal sense) is actually and visibly affected by the action.[549]

As a result of these considerations, the relation *R* that obtains between $S : T_D$ analogy for שמר : ܢܛܪ, where the former is a homogeneous Vendlerian activity, is is not one of pluractionality owed to the internal sub-phases of the action, but rather a difference in the event construals of "guarding; care-taking" events in Hebrew and Syriac. Where Hebrew makes no distinction in its morphology

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547. The previous two passages contain parallel clauses where שמר and ܢܛܪ are translational equivalences as parallel clause constituents. In Ps 17.4, it is clear that the D-stem of ܢܛܪ is being used to translate the G-stem of שמר, but the Syriac translators have introduced an adversative clause in Ps 17.4 headed by the particle ܐܠܐ that is absent from the Hebrew thus separating ܢܛܪ from the main Hebrew clause containing the G-stem of שמר .

548. Kouwenberg, *Gemination in the Akkadian Verb,* 101.

549. Ibid., 115.

between the physical and abstract notions of "guarding" events, Syriac does, using its D-stem to mark the more concrete and therefore more highly transitive member of the pair of events.[550]

6.1.1.2.2.1 *Hebrew G-Stem Activities Translated with Syriac D-Stem Activities: Conclusion*

What this section has revealed is a tendency on the part of the Syriac translators to utilize their D-stem when the Hebrew G-stem verb in their *Urtext* is a heterogeneous activity as defined by Taylor. Since the latter are comprised of internal sub-phases that receive a high degree of salience as exemplified by English verb "waltz," they can be construed as possessing a set of linearly arranged, repeated changes that go on in time until the energy necessary for their constitution ceases. This set of repeated changes approximates to a great degree the type of event-internal pluractionality described in CHAPTER 5.[551] This suggests that Hebrew and Syriac differ in the granularity with which they construe heterogeneous activity events. Hebrew appears to be coarser-grained with respect to some internally complex situations, content to denote them with the default morphology of the G-stem, whereas Syriac is much more sensitive to the variegated internal structure of such events, marking the relatively salient sub-phases of these verbs with the D-stem. This appears also to be true not only of activity verbs that possess discernible boundaries between their internal sub-phases, but also those that are more homogeneous but require a continual input of agentival energy to obtain. While these homogeneous verbs more closely exhibit the sub-interval property as described in its strong form by Bennett and Partee, they are nevertheless construed as internally complex along with lines of Součková conclusion with respect to Hausa whereby the continued effort of an AGENT is repeatedly injected into an event on a single occasion and therefore receives morphological reduplication. Both of these behaviors suggest that Syriac is finer-grained in its event construal of activity verbs than is Hebrew, choosing to reflect a heterogeneous and/or internally complex, highly agentive activity in its verbal morphology via the D-stem.

The final group of Hebrew G-stem activity verbs translated with the Syriac D-stem are homogeneous and are translated with a Syriac activity verb that is also homogeneous. The Syriac

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550. This is also the assessment of Lupu with respect to the difference between G- and D-stems of בלה, who, on account of the different direct objects typically governed by the two forms of the verb, concludes, "Thus the two stems also differ in terms of transitivity—the D stem is more highly transitive than the G stem since it prefers more highly individuated objects" (Lupu, "Semantic Patterns," 281). Despite this, Lupu places this verb not her category of "Low transitivity D stems," but in the chapter "Semantic Change in the D Stem" under the sub-category of "MCM [multi-contextual meanings] with partially overlapping semantics fields," (Ibid., 257) stating, "This group contains roots that produce stems with significant semantic differences in prototypical uses., though…there is also overlap in their full semantic ranges."

551. See §5.2.3.

D-stem verbs used in translation of the Hebrew G-stem in these instances are clearly not pluractional in nature, but are instead marking a distinction with their Syriac G-stem counterparts. In both instances, the Syriac D-stem verb has a G-stem counterpart that is either stative or abstract in contradistinction to the D-stem denotations that are dynamic and concrete, and whose action affects their grammatical object. Thus while not explored in the present work, this D-stem behavior is typical of factitive meanings and is completely devoid of a pluractional interpretation.

6.1.2 *Hebrew G-Stem Achievements Translated with Syriac D-Stem Achievements*

The second lexical aspect that potentially accords with a pluractional interpretation of the Semitic D-stem is the Vendlerian achievement. For a G-stem achievement in the Hebrew text to have been construed as pluractional by the Syriac translators as to be marked by the D-stem, it would be necessary for a single AGENT to act repeatedly on a single PATIENT or for an AGENT to perform a series of punctiliar events on a plural set of individual PATIENTS in a single, albeit, internally complex event. It is the latter that led grammarians to propose a special relationship between the Semitic D-stem and plural verbal arguments, especially grammatical objects. However, verbs of every stem are able to take plural objects and so the notion that a particular derivation is reserved for a function that every verb-form may license violates the fundamental, if not overly simplistic, axiom of structural linguistics that a difference in form entails a difference in function.[552] Rather, the relevance of plural participants to the functionality of the D-stem arises from the intersection of verbal distributivity and pluractionality, where an achievement, as a discrete, non-durative [+TELIC] event, may be iterated during a single temporal interval over each member of the plural set of objects. Thus, when testing the *Hebrew G-stem* : *Syriac D-stem* achievements in the sample corpus for event-internal pluractional marking, we are only interested in those where the antecedent Hebrew G-stem forms govern plural grammatical objects.

In *P*-Pss 1–30 there are only five achievements in the Hebrew G-stem that receive a Syriac D-stem in translation and these concern only three roots זבח, סלח, and רפא, which are rendered with D-stem forms of ܕܒܚ, ܚܣܐ, and ܐܣܐ, respectively. The clauses in which these verb-forms appear are in the chart below.

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552. This notion was given classic articulation by Bloomfield when he states, "We assume that each linguistic form has a constant and definite meaning, different from the meaning of any other linguistic form in the same language" (L. Bloomfield, *Language*, 158; cf., Saussure's discussion on the linguistic *signe* in *Cours de Linguistique Générale*, 157).

Ps 4.6	זבח	זִבְחוּ זִבְחֵי־צֶדֶק	*ܕܒܚ	ܙܒܚܘ ܕܟܝܢ ܘܒܛܚܘ ܒܡܪܝܐ
Ps 6.3	רפא	רְפָאֵנִי	*ܐܬܪ	ܐܬܪ
Ps 25.11	סלח	וְסָלַחְתָּ לַעֲוֹנִי	*ܫܒܩ	ܫܒܩ ܠܝ ܠܚܛܝܬܝ
Ps 27.6	זבח	וְאֶזְבְּחָה בְאָהֳלוֹ זִבְחֵי תְרוּעָה	*ܕܒܚ	ܘܐܙܒܚ ܒܡܫܟܢܗ ܕܟܝܢ ܕܒܚܝ ܕܚܕܘܬܐ
Ps 30.3	רפא	וַתִּרְפָּאֵנִי	*ܐܬܪ	ܘܐܬܪܦܝܬܢܝ

Of these five Hebrew G-stem verbs that are translated with the Syriac D-stem, only זבח in Pss 4.6 and 27.6 governs plural objects. With an achievement meaning זבח, would be consistent with a pluractional interpretation that the Syriac may have marked with its D-stem. While a different function of the D-stem may be responsible for the relation *R* in these other $S : T_D$ analogies, since זבח : *ܕܒܚ alone have plural objects they are the only pair potentially eligible for the pluractional marking of the D-stem. As such, these forms will be investigated further below.

זבח : *ܕܒܚ *P*-Pss 4.6, 27.6

זִבְחוּ זִבְחֵי־צֶדֶק (ACHIEVEMENT) : ܙܒܚܘ ܕܟܝܢ ܘܒܛܚܘ ܒܡܪܝܐ ܕܒܚ (ACHIEVEMENT), Ps 4.6

וְאֶזְבְּחָה בְאָהֳלוֹ זִבְחֵי תְרוּעָה (ACHIEVEMENT) : ܘܐܙܒܚ ܒܡܫܟܢܗ ܕܟܝܢ ܕܒܚܝ ܕܚܕܘܬܐ ܕܒܚ (ACHIEVEMENT), Ps 27.6

A first issue confronting the translational pair of זבח : *ܕܒܚ in *P*-Pss 4.6 and 27.6 is the fact that ܕܒܚ only appears in the D-stem throughout the sample corpus. While this raises the question of whether the use of the Syriac D-stem in these instances might be due to lexicalization, this is unlikely given that forms of ܕܒܚ in the G-stem are unambiguously attested in the *Peshiṭta* outside of our corpus.[553] This suggests a meaningful and intentional use of the D-stem when translating these particular instances of the G-stem of זבח in *P*-Pss 4.6 and 27.6.

A second issue regarding the translational equivalents of זבח : *ܕܒܚ in *P*-Pss 4.6 and 27.6 is their status as achievements and hence their potential for a pluractional interpretation. As described in the previous chapter, Vendlerian accomplishments and achievements pattern together in that they both specify a lexically defined, semantically entailed end or *terminus* of their verbal action and so bear the feature [+TELIC]. Accomplishments and achievements differ in that the former are further marked as [+DURATIVE] since they inherently encode a leading process occupying an initial temporal interval culminating in a semantically defined final result state. Achievements on the other hand denote events that are completed just as nearly as they begin and so are tantamount to punctiliar, instantaneous changes of state. While there have been various linguistic diagnostics proposed to differentiate these two verb classes,[554] their distinction is often highly dependent upon pragmatic knowledge of the real world. For example, Tenny states that,

553. This is true, for instance, in cases where ܕܒܚ appears as a plural participle (e.g., Ex 8.22, Lev 17.5, 19.5, Isa 65.3, Ezek 34.3, Hos 13.2,Ezra 4.2, and 6.3).

554. See the full and now iconic list offered by Dowty in *Word Meaning and Montague Grammar*, 60.

"Cracking a pane of glass may only take an instant, but cracking the bough of a tree might take a few minutes,"[555] an observation that caused Walková to conclude, "It follows that the interpretation of a situation as durative or punctual is dependent on the denotee of the affected verb argument and our real-world knowledge."[556] Such dependence on "real-world" pragmatic considerations is necessary for the proper assessment of the aspectual classification of זבח and ܕܒܚ for the present discussion.

In Hebrew and Syriac, each of these roots, typically glossed as "to sacrifice," are attested in contexts where DURATIVITY may be more or less pronounced, or indeed even absent altogether, thus patterning with achievements. In particular, when זבח and ܕܒܚ occur in contexts devoid of cultic *accoutrement*, either in the denotation of butchering an animal for food[557] or when predicating the killing of people,[558] their punctual tenor is more pronounced and they take on a nuance more akin to simply "slay" or "kill."[559] For example, in 1Ki 19.21 Elisha takes his plowing team of oxen "and slaughtered it (Syr. "them")" (וַיִּזְבָּחֵהוּ / ܘܕܒܚ ܐܢܘܢ) and Josiah "slaughtered" (ܘܕܒܚ / וַיִּזְבַּח) the priests of the high places according to 2Ki 23.30. Examples like these fail tests designed to detect the [+DURATIVE] feature of accomplishments such as modification with a temporal *for*-phrase (*"Josiah slayed/killed a priest on the altar *for three hours*") and complementation with adverbs of degree of completion (*"Elisha *partially* slayed/killed his oxen").[560] However, זבח and ܕܒܚ in cultic contexts do pass such tests. For example, both זבח and ܕܒܚ can serve as the complement of the verb "finish" (e.g., "Abraham *finished* sacrificing to the Lord" versus *"Abraham *finished* arriving at Mt. Moriah") and they produce ambiguous readings when modified by the adverb "almost" ("Abraham *almost* sacrificed Isaac" means either Abraham was interrupted during the initial process of completing the sacrifice or he did not attempt to sacrifice Isaac at all).[561] Given that

555. C. L. Tenny, *Aspectual Roles and the Syntax-Semantics Interface* (Dordrecht: Springer Science & Business Media, 2012), 16; see also the same point made by Olsen in "A Semantic and Pragmatic Model of Lexical and Grammatical Aspect," 52ff.

556. M. Walková, "Dowty's Aspectual Tests: Standing the Test of Time but Failing the Test of Aspect," *Poznán Studies in Contemporary Linguistics* 48.3 (2012): 499.

557. See, for example, Deut 12.15a (MT; it is interesting that *P* utilizes a different verb altogether here (ܢܟܣ) based upon this fact), 1Sam 28.24 (MT), 1Ki 19.21 (MT and *P*), Ps 106.38 (MT and *P*), and Ezek 34.3 (MT and *P*).

558. E.g., 1Ki 13.2 (MT and *P*) and 2Ki 23.20 (MT and *P*).

559. Although less conspicuous, the punctiliar nature of the culminating result state of זבח and ܕܒܚ can nevertheless be felt in certain contexts that *do* involve cultic sacrifice; e.g., 1Chr 15.26 (MT and *P*) and 2Sam 6.13 (MT and *P*).

560. For the status of "kill" verbs as achievements rather than accomplishments see B. Hollósy, "On Aspectual Classes of Verb Phrases," *Hungarian Studies in English* 16 (1983); 81–99 and F. Martin, "Revisiting the Distinction Between Accomplishments and Achievements," in *From Now to Eternity*, J. Mortelmans, T. Mortelmans, and W. de Mulder, eds. (Amsterdam: Rodopi, 2011), 43–64.

561. On the diagnostics commonly used to flag the durative phase Vendlerian accomplishments especially with

verbs from זבח and ܕܟܝ can occur in both durative and non-durative contexts, it is best to see them as achievements inherently lacking the [+DURATIVE] feature in their semantics that can be added by way of pragmatic implicature as demonstrated by Olsen's privative features.[562] Thus, the temporal interval implied in many of the attestations of זבח and ܕܟܝ in cultic contexts arises not from the semantics inherent to an event of "sacrificing," but rather on the events and processes that attend such a ritual "slaying/killing." It is for these reasons that verbs from זבח and ܕܟܝ are most appropriately analyzed as achievements inherently lacking the [+DURATIVE] feature in their lexical semantics, which can nevertheless be added to their denotation by the contexts in which they appear. Thus, as achievements, זבח and ܕܟܝ may be eligible for a pluractional interpretation and so deserve their place here.

Having established זבח / ܕܟܝ as achievements, it now remains to assess whether pluractionality may be a fitting relation *R* to explicate the $S : T_D$ analogy involving זבח : ܕܟܝ. To do this, it will be necessary to take each pairing of $S : T_D$ involving זבח : ܕܟܝ in the sample corpus in turn.

P-Pss 4.6

In *P*-Ps 4.6 the G-stem of זבח is translated with the Syriac D-stem, but the verb-form in question, זִבְחוּ, is an imperative with a plural AGENT. Due to this, the Psalmist is exhorting a multitude of individuals to perform discrete actions, a clear case where an iteration of separate events is in view and therefore an instance of event-external pluractionality.[563] As a result, the "sacrifices" that are

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respect to their effects when modified by "almost" see Dowty, *Word Meaning and Montague Grammar*, 58.

562. Olsen, "A Semantic and Pragmatic Model of Lexical and Grammatical Aspect," 52–7.

563. The event-external interpretation זבח / ܕܟܝ in these contexts is in large part predicated upon the understanding that the plural exhortation to "sacrifice sacrifices of righteousness" is referring to literal, as opposed to metaphorical, sacrifices. However, should the point of the Psalmist be an exhortation for righteous action or disposition (cf., Ps 51.16) such that the grammatical objects זִבְחֵי־צֶדֶק / ܕܟܝ ܙܕܩ are understood as inanimate, abstract denotations, then the event-external repetition is not as sure. However, most commentators see זִבְחֵי־צֶדֶק / ܕܟܝ ܙܕܩ as material rather than metaphorical sacrifices such that the זִבְחֵי־צֶדֶק of the Hebrew text "were those which were offered properly, not only in a ritual sense, but also in a spiritual sense; the one whose sacrifices were accompanied by genuine repentance and true trust was returning to a proper relationship with God" (Craigie and Tate, *Psalms 1–50*, 81). This is also the position of Ibn Ezra (see Ibn Ezra, *Rabbi Abraham Ibn Ezra's Commentary on the First Book of Psalms*, 40) as well as that of Delitzsch who says "these are not sacrifices which, instead of consisting in slaughtered animals, consistent in actions which are in accordance with God's will; they are sacrifices that are offered in the right disposition" (F. Delitzsch, *A Commentary on the Book of Psalms*, D. Eaton and J. E. Duguid, trans. [New York: Funk and Wagnalls, 1883], 150). Furthermore, the only other instance of the phrase זִבְחֵי־צֶדֶק in the Psalter, which occurs in Ps 51.21 (MT), clearly intends literal, material sacrifices for it stands in an appositional relation with עוֹלָה וְכָלִיל, "a whole offering and burnt offering," and is a part of two parallel temporal clauses, the other being עַל־מִזְבַּחֲךָ פָּרִים אָז יַעֲלוּ, "then they will offer bulls on your altar." Thus, the distribution and

intended here cannot be construed as a single, internally complex event characteristic of the event-internal pluractionality because they are to be carried out by multiple discrete individuals. It was noted above how often the grammatical literature indicates that the Semitic D-stem governs clauses with plural direct objects, but this was shown to be due to a particular manifestation of verbal distributivity, a species of event-internal pluractionality whereby a single AGENT acts upon each individual member of a plural set of PATIENTS. While it is the case that the Hebrew and Syriac clauses in Ps 4.6 do in fact have plural PATIENTS, both additionally have a plural AGENT as grammatical subject, but for event-internal pluractionality to obtain Wood states that, "Two…characteristics are apparently essential: in order for repetitions to be treated as the phases of a single event, they must occur in temporal or spatial proximity and *must not be distributed over Agents*."[564] Due to these factors, it is unlikely that the translation of the Hebrew G-stem with the Syriac D-stem in Ps 4.6 is owed to a desire to overtly mark a plural event in the morphology of the target text.

In contradistinction to this conclusion, Sokoloff makes the claim that the D-stem form of ܕܒܚ denotes habitual or frequentative action, offering the gloss, "Pa. to sacrifice (constantly)."[565] If this understanding were to be correct, it would provide counter-evidence not only for the notion that the D-stem is reserved for the marking of event-internal pluractionality, but also the more general claim that the denotations of habituality and frequentativity are accomplished by the verbal conjugations rather than by the derivational morphology of the stems. Indeed, the use of the Syriac D-stem of ܕܒܚ in *P*-Ps 4.6 does seem to fit Sokoloff's definition as an exhortation to "'constantly' sacrifice sacrifices of righteousness." So, could the use of the D-stem of ܕܒܚ for the G-stem of זבח be motivated by a desire on the part of the Syriac translators to mark a frequentative nuance latent in the Hebrew *Urtext* with their own D-stem as Sokoloff's lexicon suggests?[566]

An explanation for the *Hebrew G-stem* : *Syriac D-stem* analogy for זבח : ܕܒܚ in Ps 4.6 along the lines suggested by Sokoloff must be rejected because a "constant" semantic nuance of the D-stem of ܕܒܚ is countervailed by its broader distribution. For example, the very first attestation cited in Sokoloff's lexicon for such a meaning seems to undermine the implicit episodic versus "constant" distinction that is said to differentiate the G- and D-stems of ܕܒܚ:[567]

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context of זִבְחֵי־צֶדֶק in Ps 4.6 seems to clearly denote material rather than analogical sacrifices.

564. Wood, "Plurality of Events," 433ff; emphasis added.

565. Sokoloff, *Syriac Lexicon*, s.v. ܕܒܚ, 269.

566. It is interesting to note that *CSD* offers no suggestion that the difference between the G- and D-stem forms of the root ܕܒܚ resides in episodic versus constant sacrifice (see *CSD*, s.v. ܕܒܚ, 81).

567. That the form of ܕܒܚ is a D-stem in this example is evidenced by the fact that 7a1 places *quššaya* over the *beth,* the Mosul edition vocalizes the form as a D-stem, and the *CAL* and Brill Concordance both parse ܕܒܚ as a D-stem.

ܕܒܚ ܐܒܪܗܡ ܒܛܘܪܐ ܘܩܪܐ ܠܐܚܘܗܝ ܠܡܐܟܠ ܠܚܡܐ ܘܐܟܠܘ ܠܚܡܐ ܘܒܝܬܘ ܒܛܘܪܐ. *P*-Gen. 31.54
ܕܒܚ

"And Jacob sacrificed (D-stem) a sacrifice on the mountain, then called to his brothers in order to eat a meal, so they ate a meal and remained on the mountain."

It is clear that the sense of ܕܒܚ in the *Peshiṭta* of Gen. 31.54 is not a "constant" sacrifice but rather a single occurrence and so the D-stem here does not mark habituality/frequentativity as Sokoloff claims. This is also the case for the second example adduced by the lexicon, viz., 1Sam 1.3:

ܘܗܘ ܓܒܪܐ ܗܘ ܡܢ ܩܪܝܬܗ ܒܟܠ ܫܢܐ ܫܢܐ ܠܡܣܓܕ ܘܠܕܒܚ ܠܝܗܘܐ ܨܒܐܘܬ ܒܫܝܠܘ. ܘܬܪܬܝ ܒܢܝ ܥܠܝ ܟܗܢܝܢ ܗܬܡ ܚܦܢܝ ܘܦܝܢܚܣ. *P*-1 Sam 1.3

"And that man would go up from his village from time to time in order to worship and to sacrifice (D-stem) to the Lord of Hosts in Shiloh, and the two sons of Eli were there."

1Sam 1.3 does in fact refer to a regular, or "constant" activity, but it is not the "sacrificing" but rather the "ascending" that is primarily in view as the repeated occurrence, and crucially, this is accomplished by analogical and inflectional means, and not the derivational marking of the D-stem. It is the G-stem of ܐܙܠ in 1Sam 1.3 that should be seen as the principal event habitually undertaken since it is appears within the scope of the heavily marked temporal modifier for regularity (i.e., ܒܟܠ ܫܢܐ ܫܢܐ). Such habituality also accords with the inflection of ܐܙܠ as an active participle, a conjugation routinely used to mark habitual aspect.[568] On the contrary, the D-stem of ܕܒܚ in this passage is the second member of a pair of infinitival verbal complements residing in a subordinate clause indicating the purpose of the event denoted by the independent clause headed by ܐܙܠ. Thus the primary frequentative or habitual thrust of this passage arises from the G-stem verb ܐܙܠ and not the D-stem of ܕܒܚ, and thus should be rejected as evidence for a "constant" nuance of the D-stem.

The notion that ܕܒܚ in the D-stem denotes "constant" sacrifices is further subverted by the very next verse in 1Sam 1.4, although not cited by the Sokoloff lexicon. Here, the D-stem of ܕܒܚ occurs, but just like 1Sam 1.3, the verb is employed in a manner that is clearly not referring to a "constant" activity despite customary action being present in the context:

ܘܗܘ ܝܘܡܐ ܚܕ ܘܐܙܠ ܐܠܩܢܐ ܘܝܗܒ ܠܦܢܝܢܐ ܐܢܬܬܗ. ܘܠܟܠ ܒܢܝܗ ܘܒܢܬܝܗ ܕܒܚ ܚܠܩܐ. *P*-1Sam 1.4

"A day came and Halkanah sacrificed (D-stem) and he gave to Peninnah his wife. And to all of her sons and her daughters he gave portions."

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568. The active participle of ܐܙܠ is translating the Hebrew וְעָלָה, the *wĕqatal* inflection of which Joüon-Muraoka say, "can also be found with the meaning of frequentative or durative 'imparfait' after any verbal form or nominal clause which has previously situated the action in the past" (Joüon, *A Grammar of Biblical Hebrew*, §119*v*; 402) and later in contrast to the *qatal*, "the aspect of the qatal is that of a single and instantaneous action, the aspect of w-qataltí is that of a repeated or durative action" (Ibid., §119*x*; 403).

Here, the D-stem of ܕܒܚ resides in the opening clause of a verse that is introduced with the temporal adverbial expression ܗܘܬ ܝܘܡܐ, a calque of the idiomatic Hebrew phrase וַיְהִי הַיּוֹם, "it was on/it happened on a certain day,"[569] that is meant to underscore a particular event of "sacrificing" and not a customary action. Nevertheless, habituality is clearly intended in the denotation of the Hebrew underlying the *Peshiṭta* translation here, but critically, this applies to what would regularly be done with the sacrifice subsequent to its completion, namely, Elkanah would give portions to his wives and children. Thus, the customary action in 1Sam 1.4 involves not the "sacrificing" via the D-stem of ܕܒܚ, but rather the distribution of the portions from that which was sacrificed. This is particularly transparent in the *Peshiṭta's* Hebrew *Urtext* where זבח is inflected as a *wayyiqtol* (וַיִּזְבַּח), a tensual form used most often for the simple past and never for customary action,[570] yet rather than following this form with another *wayyiqtol* to drive the main line of the narrative forward, the immediately subsequent clause is governed by the verb-form וְנָתַן, an epexegetical *wĕqatal* supplying background information on what was regularly done to the sacrifice.[571] The *NET*, through the use of parentheses, is alone correct amongst English translations of the Hebrew text of 1Sam 1.4 in capturing the particularity of the "sacrificing" event denoted by the *wayyiqtol* form as opposed to the customary, contextual information supplied by the following *wĕqatal*: "The day came, and Elkanah sacrificed. (Now he used to give meat portions to his wife Peninnah and to all her sons and daughters. But to Hannah he would give a double portion because he loved Hannah, although the Lord had not enabled her to have children…)."[572] This means that in contradistinction to the suggestions of the lexica, not only is the D-stem of ܕܒܚ used in a manner that is unambiguously non-habitual (i.e., to translate וַיִּזְבַּח), but even the habituality

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569. That this temporal meaning is intended is also confirmed by the fact that this very same Syriac phrase is also used in the *Peshiṭta* New Testament for καὶ ἐγένετο.

570. On this point Cook states, "The examples presented in grammars of *wayyiqtol* as expressing irrealis mood or non-past events are all suspect. Most should be translated as simple past or perfect (…) and/or have textual problems (…) (Cook, *Time and the Biblical Hebrew Verb,* 265).

571. On the customary/habitual use of *wĕqatal* see n.573 above along with Waltke-O'Conor who say, "suborinate *wqtl* represents an imperfective situation within the single event" (*IBHS*, §32.2.3e, 533; cf., the translation of 1Sam 1.4–5 by the same authors at §33.2.1d; 550).

572. *NET*. While the *New English Translation* utilizes parentheses to underscore the epexegetical nature of the *wĕqatal* וְנָתַן, which continues the *wayyiqtol* וַיִּזְבַּח, Auld's commentary on 1-2 Samuel utilizes indents to make the same point:

> "And the day came
> and Elkanah sacrificed;
> and he would give to Peninnah his wife and to all her sons [and her daughters] portions."

Commenting on this translation Auld later remarks that "many of the verbs in vv. 4b– 7 are either *w–qṭl* or simple *yqṭl* (connected or unconnected frequentatives): 'he would give [2x];…'" (G. A. Auld, *I & II Samuel: A Commentary* [Westminster: John Knox Press, 2012], 21, 28).

of the underlying Hebrew in the near context is not enough to coerce a customary reading of the verse in Syriac.

Furthermore, not only do the examples adduced by the Sokoloff lexicon fail to demonstrate a "constant" nuance for the D-stem of ܕܒܚ, but conversely, in contexts where habitual and/or customary sacrifice is clearly in view, it is the G-stem of ܕܒܚ that is routinely employed. This is the case in *P*-Lev 17.5 (so also in *P*-Lev 19.5, 22.29) for example:

P-Lev. 17.5 ܗܠܟ ܕܢܝܚ ܒܢܝ ܐܝܣܪܝܠ ܕܢܫܩܠܘܢ ܕܒܚܝܗܘܢ ܕܐܢܘܢ ܕܒܚܝܢ[573] ܒܓܘ ܒܪܝܫܐ ܘܢܥܠܘ ܐܢܘܢ ܠܩܕܡ ܡܪܝܐ ܦܬܚ ܡܫܟܢܐ ܕܡܘܥܕܐ ܠܘܬ ܟܗܢܐ ܘܢܥܒܕ ܐܢܘܢ ܠܩܘܪܒܢ ܕܡܪܝܐ ܘܗܘ ܕܒܚܐ ܕܫܠܡܐ ܕܒܚܝ ܐܢܘܢ ܠܡܪܝܐ.

"In order that the sons of Israel [should] bring their sacrifices which they are sacrificing (G-stem) in the open field—they should bring them before the Lord to the entrance of the tabernacle to the priest [at the appropriate time] in order that they sacrifice (G-stem) them, the whole offerings, to the Lord."

Taken together with the critiques of Sokoloff above, what this evidence suggests is that the habitual and/or frequentative nuances of ܕܒܚ are marked by the inflectional morphological forms realizing viewpoint aspect such as the imperfect and participle, and not the derivational morphology of the D-stem as this lexicon proposes. This is an important point relative to the use of the *Hebrew G-stem* : *Syriac D-stem* of זבח : ܕܒܚ at *P*-Ps 4.6 because the context of that verse clearly implies regular, habitual "sacrifices of righteousness" (זִבְחוּ זִבְחֵי־צֶדֶק : ܙܒܚܘ ܕܒܚܝ ܙܕܩܐ ܘܒܛܚܘ ܒܡܪܝܐ). However, based upon the evidence it is not the Syriac D-stem that is responsible for marking this habitual/frequentative aspect of ܕܒܚ, but rather the root's inflection into the imperative, with its morphological and aspectual affinity with the imperfective *Aspekt* of the *yiqtol* conjugation that licenses the event-external pluractionality of the verse.[574] As a result, although the clauses זִבְחוּ זִבְחֵי־צֶדֶק : ܙܒܚܘ ܕܒܚܝ ܙܕܩܐ ܘܒܛܚܘ ܒܡܪܝܐ under consideration here do in fact denote habitual action, this is owed to the inflectional morphology of the conjugation and not the derivational verbal stem. Therefore, a "constant" nuance attributable to the D-stem of ܕܒܚ in *P*-Ps 4.6 along the lines suggested by the lexicon of Brockelmann/Sokoloff must be rejected as a potential impetus for the variation in the verbal stems affecting זִבְחוּ : ܙܒܚܘ. As a result, the original conclusion that the use of the Syriac D-stem of ܕܒܚ for the Hebrew G-stem of זבח in *P*-Ps 4.6 is not due to pluractionality remains.

573.

574. The potential for the imperative to denote incomplete action such as frequentativity/habituality in a manner similar to the *yiqtol* is highlighted by Hatav who states, "all the directives [i.e., jussives, imperatives, and cohortatives] are connected to *yiqtol* not only in their semantics but also in their form" (Hatav, *Semantics of Aspect and Modality*, 150).

P-Pss 27.6

With what was just gleaned from the analysis of the *Hebrew G-stem* : *Syriac D-stem* analogy with זבח : ܕܟܫ in *P*-Ps 4.6, we now turn to their pairing in *P*-Ps 27.6. Unlike 4.6, here both verbs attest a *singular* AGENT along with a *plural* PATIENT. Because the same AGENT is responsible for the action affecting a set of plural PATIENTS in both Hebrew and Syriac (i.e., וְאֶזְבְּחָה תְרוּעָה : ܘܐܕܒܚ ܬܪܥܐ), here is a case where the achievements זבח : ܕܟܫ can be potentially conceived as referring to an action iterated in such close succession that it takes on the aspectual contour of a single, internally complex event, thus meeting criteria for event-internal pluractionality as described by Wood above.[575] The use of the Syriac D-stem for the Hebrew G-stem in the context of *P*-Ps 27.6 where such a valency pattern is in fact attested is even more suggestive of a pluractional reading in light of the fact that no G-stem forms of ܕܟܫ in the entirety of the *Peshiṭta* Hebrew Bible combine a singular AGENT with a plural PATIENT. Thus the possibility that this event was construed by the Syriac translators as an instance of event-internal pluractionality and therefore responsible for the *Hebrew G-stem* : *Syriac D-stem* analogy involving זבח : ܕܟܫ at *P*-Ps 27.6 must be taken seriously.

However, the contention was also made above that verbs from זבח : ܕܟܫ, when denoting events of "sacrificing" within a cultic context, pattern closer to Vendlerian accomplishments in their ability to pass diagnostics designed to flag the [+DURATIVE] feature of such verbs. In the present context, the Psalmist desires to offer the "sacrifices" in question "in His [the LORD's] tabernacle" (בְּאָהֳלוֹ : ܒܡܫܟܢܗ), a clear reference to the cultic epicenter of the Hebrew Bible where offering an animal involved a prescribed initial ritual leading up to the [+TELIC] moment of its killing. In such events, both the "run-up" process as well as the culmination of an animal's killing fall within the denotation of an event of "sacrifice." These considerations make it unlikely that the marking of event-internal pluractionality was intended for in possessing the [+DURATIVE] feature, such "sacrificing" events necessarily constitute separate, discrete actions rather than a single event composed of a series of [+TELIC] sub-events. The event-external orientation of the context of *P*-Ps 27.6 is further suggested by the fact that זבח : ܕܟܫ are both in the imperfect conjugation,[576] the primary morphological means for expressing habitual or frequentative action in these languages.

The unlikelihood of pluractional marking via the Syriac D-stem for the G-stem of זבח at *P*-Ps 27.6 is further suggested by the broader distribution of ܕܟܫ in the *Peshiṭta* Hebrew Bible. Of the 128 occurrences of the root, 108 are in the D-stem, or just over 84%. The overwhelming preference for the D-stem for verbs from ܕܟܫ accords with the findings of Kouwenberg who demonstrated a

575. See n.333 above as well as the discussion on achievement verbs with singular AGENTS and plural PATIENTS in §5.2.3.1.2.1.

576. The Hebrew is formally a cohortative.

"close association between the use of the D-stem and the concept of high transitivity"[577] such that "Generally speaking, the greater the effect of an action on the patient, the stronger the tendency to use the D-stem."[578] Thus, the predilection for ܕܒܚ to appear in the D-stem is not surprising given that it is scarcely possible to conceive of an event higher in transitivity than one of "sacrificing" where every hallmark of Givón's prototypical transitivity is represented:

> a. **Agent**: The prototypical transitive clause involves a volitional, controlling, actively-initiating agent who is responsible for the event, thus its salient cause.
>
> b. **Patient**: The prototypical transitive event involves a non-volitional, inactive non-controlling patient who registers the event's changes-of-state, thus its salient effect.
>
> c. **Verbal modality**: The verb of the prototypical transitive clause codes an event that is perfective (non-durative), sequential (non-perfect) and realis (non-hypothetical). The prototype transitive event is thus fast-paced, completed, real, and perceptually-cognitively salient.[579]

Thus, the strong preference for the D-stem of ܕܒܚ is likely related to its function of marking highly transitive events, even to the point of becoming a nearly lexicalized form/function gram for every event of "sacrificing" in the language of the *Peshiṭta*.[580] So the choice of the Syriac translators to render the G-stem of זבח with a D-stem of ܕܒܚ means that they were simply conforming to the more general preference for that particular root/stem combination attested across the *Peshiṭta*, especially in light of the penchant for marking highly transitive situations with the D-stem.

Yet prior to completely ruling out pluractionality as an impetus for the use of the D-stem of ܕܒܚ for the G-stem of זבח, another avenue of potential event-internal pluractionality is possible depending on the nature of the "sacrifices" referred to in Ps 27.6. Unlike the literal, material sacrifices in Ps 4.6 discussed above, the context and meaning of the genitival phrase "sacrifices of a shout of joy"[581] (זִבְחֵי תְרוּעָה) serving as the direct object of the G-stem of זבח suggest that it is far from a given that this "odd phrase, attested only here,"[582] denotes literal sacrifices. While many

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577. Kouwenberg, *Gemination in the Akkadian Verb,* 92.

578. Kouwenberg, *The Akkadian Verb and Its Semitic Background*, 275.

579. T. Givón, *Functionalism and Grammar* (Amsterdam: John Benjamins, 1995), 76; emphasis original.

580. According to the PESHOT-T digital corpus prepared by M. Abegg and J. Lund for Accordance Bible Software (Altamonte Springs, FL: OakTree Software, Inc., 2018), there are 23 instances of ܕܒܚ in the G-stem, but the *CAL* and Mosul Edition are together in parsing three of these as D-stem forms. Taken together, this means that there are 20 G-stem forms of ܕܒܚ in the *Peshiṭta* translation of the Hebrew Bible, with only one of these being a finite form, an imperative at *P*-Lev. 22.29. The remaining 19 G-stem forms consist of four infinitives (Judg. 16.23. 1 Sam. 10.8, Isa. 56.7, 57.7), and 15 active participles (Ex. 8.22, Lev. 17.5, 19.5, 1 Sam. 2.13, 15, 2 Sam. 15.12, Psa. 50.23, Isa. 65.3, 66.3, Ezek. 34.3, 39.17, 19, Hos. 13.2, Ezra 4.2, 6.3; eight of these are plural in number and so are unambiguously in the G-stem). In addition to these, the *Peshiṭta* New Testament vocalizes three out of its seven attestations of ܕܒܚ as G-stems, viz., Mark 14.12, 1 Cor. 10.20, and Heb. 9.28.

581. *HALOT*, s.v. תְּרוּעָה, 4:1789.

582. N. L. DeClaissé-Walford, R. A. Jacobson, and B. LaNeel Tanner, *The Book of Psalms*, (Grand Rapids: Eerdmans, 2014), 266.

English translations and commentaries take זִבְחֵי תְרוּעָה as an adverbial genitive[583] represented by the *NRSV's*, "sacrifices [*with*] shouts of joy,"[584] it is more probable that the correct understanding of the phrase זִבְחֵי תְרוּעָה is as a metaphor for a song of praise offered to the Lord couched in sacrificial language. If this were to be the case, then the [+DURATIVE] feature that can be potentially added to the lexical semantics of achievement verbs via pragmatic implicature would no longer stand in the way an event-internal interpretation. This is significant because it is this [+DURATIVE] feature in combination with the [+TELIC] nature of accomplishments that precludes them from an event-internal pluractional interpretation. As a result, should this event of "sacrifice" not be referring to a cultic animal offering where the [+DURATIVE] feature has been added to the *Hebrew G-stem* : *Syriac D-stem* pairing of זבח : ܕܒܚ via context, then these achievement verbs with single AGENT and plural PATIENT remain eligible for event-internal pluractionality. In order to assess whether or not this is the case, it is important to take into consideration the wider context of Ps 27.6, the passage in which the clause containing זבח : ܕܒܚ occurs.

Ps 27.6 begins with the macro-syntactical locution וְעַתָּה,[585] indicating the result of the fervent and desperate longing expressed in the previous sentence beginning in verse 4, viz., a desire to "dwell in the house of the LORD all the days of my [the Psalmist's] life" (שִׁבְתִּי בְּבֵית־יְהוָה כָּל־יְמֵי חַיַּי). Thus, the "sacrificing" (אֶזְבְּחָה : ܐܶܕܒܰܚ) to be done "in His tabernacle" (ܒܡܫܟܢܗ : בְּאָהֳלוֹ) in verse 6 are a result and consequence of having had the "one thing" requested (ܘܫܐܠܬ : אַחַת שָׁאַלְתִּי) in verse 4 granted. This request though, namely, to "dwell in the house of the LORD all the days of my life," is clearly metaphorical in spite of the references to the tabernacle for it makes little sense to understand the Psalmist's desire to dwell each and every day (כָּל־יְמֵי חַיַּי) in the "house of the LORD" (בְּבֵית־יְהוָה) literally, as if the author wishes to make the tabernacle his permanent abode. Rather, such a request is:

> ...to be understood *figuratively*, as equivalent to, "being an inmate of God's house," "to stand towards Him in a confidential relation," "to enjoy His favour." The cause of this figurative language is, that the tabernacle, and afterwards the temple itself, bore a

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583. More specifically, what van der Merwe, et. al. refer to as a genitive of "entity–manner" (see C. H. J. van der Merwe, J. A. Naudé, and J. H. Kroeze, *A Biblical Hebrew Reference Grammar* [Sheffield: Sheffield Academic, 2002], §25.4.5(2); cf., *IBHS*, §9.5.2, 146.

584. Representative examples include Jewish Publication Society's *Tanakh Translation*, *NASB, HCSB, NLT, NIV, ESV,* and *NET.* This is also the interpretation of Rashi in his Psalms commentary who says that the זִבְחֵי תְרוּעָה are "sacrifices over which they sing [*'oměrîm*] a song" (M. I. Gruber, *Rashi's Commentary on Psalms* [Philadelphia: The Jewish Publication Society, 2007], 276) and also that of Ibn Ezra whose idiomatic paraphrase of the Hebrew, translated into English by Meir and Strickland, makes clear that the former saw these sacrifices as literal but accompanied by praise (i.e., an adverbial genitive): "I will offer in His tabernacle sacrifices with trumpet sound" (Abraham Ibn Ezra, *Rabbi Abraham Ibn Ezra's Commentary on the First Book of Psalms: Chapters 1-41*, 200).

585. On the status and function of וְעַתָּה as a macro-syntactic sign see W. Schneider, *Grammar of Biblical Hebrew*, R. L. McKinion, revised and trans. (New York: Peter Lang, 2015), §54.

> symbolical character, represented the connection between God and His people who dwelt with Him spiritually there…[586]

As a result, it would be quite natural to suppose that the cultic language of sacrifice which occupies the second strophe of Ps 27.6 is also figurative. Extending the metaphorical orientation of these passages to the sacrifices (זִבְחֵי תְרוּעָה) in question would mean that the Psalmist desires to "sacrifice" (זבח : ܐܟܣ) "sacrifices [*comprised of*] a shout of praise," an objective genitive of content, rather than "sacrifices [*with*] a shout of joy," an adverbial genitive. Not only does such a reading conform to the context of the Psalm, but furthermore, in the Hebrew Bible whenever תְּרוּעָה is used for a "shout of joy" that accompanies an action it is always prefixed with *beth instrumenti*[587] and is never adverbial accusative, which would be necessary here should these sacrifices be literal.[588] On the contrary, when a *nomen rectum* in the construct state, תְּרוּעָה always stands in an attributive relationship to its *nomen regens*, particularizing the substantive it modifies (e.g., Nu 29.1) and at no time in the Hebrew Bible does this syntagm denote the manner with which an action is accomplished.[589]

A final point that indicates that the "sacrifices of a shout of a joy" (זִבְחֵי תְרוּעָה) of the Hebrew text of Ps 27.6 are a metaphor for songs of praise is the syntax of the final two clauses of the verse, viz., אָשִׁירָה וַאֲזַמְּרָה לַיהוָה. The first of these clauses is comprised of a single verb, אָשִׁירָה that is immediately coordinated to the verb of the second by means of the conjunction *wāw*, וַאֲזַמְּרָה לַיהוָה. That these two verbs are joined via the *Wāw* conjunction without intervening material indicates that while syntactically governing separate clauses, they nevertheless form a verbal hendiadys[590] constituting a single semantic idea akin to, "I will *sing praise* to the LORD." The significance of this verbal hendiadys for the present purposes is that its syntax is conceptually connected to the immediately preceding clause that is governed by the G-stem form of זבח that the Syriac translates with the D-stem. That these final two clauses of Ps 27.6 are bare *yiqṭol* forms asyndetically juxtaposed to the clause governed by וְאֶזְבְּחָה means that they stand in an

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586. E. W. Hengstenberg, *Commentary on the Psalms*, Vol. 1, P. Fairbairn and J. Thomson, trans. (Edinburgh: T & T Clark, 1851), 454ff; original emphasis.

587. These occur at 2 Sam. 6.15, Ezek. 21.27, Amos 1.14, 2.2, Ps. 33.3, 47.6, Job 33.26, Ezra 3.12, 1 Chr. 15.28, 2 Chr. 15.14. In one instance תְּרוּעָה does appear in an instrumental context *sans beth instrumenti*, but nevertheless as the *nomen rectum* of a construct noun that does in fact have the prefixed preposition, i.e., הַלְלוּהוּ בְצִלְצְלֵי־שָׁמַע הַלְלוּהוּ בְּצִלְצְלֵי תְרוּעָה׃ (Ps 150.5).

588. For the adverbial meaning of Hebrew substantives with accusative function see *IBHS*, §10.2.2, 169; cf., the "accusative of means" of Williams (R. J. Williams and J. C. Beckman, *Williams' Hebrew Syntax*, 3rd Ed. [Toronto: University of Toronto Press, 2007], §53, 20).

589. See, for example, see the Hebrew text of Lev 23.24b, 25.9a, Nu 29.1c, and Ez 3.13a.

590. Although not without their issues, for treatments of verbal hendiadys in the context of Tiberian Hebrew see Lambdin, *Introduction to Biblical Hebrew*, 238–40 and B. T. Arnold and J. H. Choi, *A Guide to Biblical Hebrew Syntax* (Cambridge: Cambridge University Press, 2003), 148–9.

epexegetical or explanatory relationship to it. In poetic corpora, Michal has demonstrated that a series of *yiqṭol* forms functions in a manner similar to a chain of consecutive *wayyiqṭol*s in narrative, where the sense of each successive verb-form is logically dependent upon the immediately preceding unit of predication. In such syntactical arrangements, these verbs do not, "eine Handlung bezeichnen, die nicht selbstgewichtig ist, die in Beziehung zu etwas anderem steht und in dieser Beziehung ihre Bedeutung hat, kurz: die abhängig ist."[591] Thus, the verbal hendiadys in the last pair of clauses of verse 6 (i.e, אָשִׁירָה וַאֲזַמְּרָה לַיהוָה) gives "the particulars or details, component or concomitant situations"[592] of the preceding verb, which in this case is the very G-stem form that is translated with the D-stem of ܕܒܚ. This means that the semantics of the *Hebrew G-stem* : *Syriac D-stem* forms of זבח is further qualified by this pair of bare *yiqṭol* verbs that are to be understood as a single semantic unit referring to the "singing of praise." Taken together, all of these considerations point to the fact that rather than literal "sacrifices," the Psalmist at Ps 27.6 is in fact using the G-stem of זבח to metaphorically refer to the offering of songs of praise in response to having been delivered from the "evildoers who came to devour my flesh" in 27.2.

This metaphorical character of the sacrifices in the Hebrew text of Ps 27.6 seems to also have been the understanding of the *Peshiṭta* translators who rendered the object phrase זִבְחֵי תְרוּעָה with ܕܒܚ̈ܐ ܕܫܘܒܚܐ. The use of ܫܘܒܚܐ for תְּרוּעָה relieves the ambiguity of the difficult and enigmatic Hebrew at Ps 27.6 in that it is a term routinely employed in musical contexts all throughout the *Peshiṭta* and in subsequent Syriac liturgical writings in reference to hymns. In fact, ܫܘܒܚܐ is so closely associated with hymns of praise that it came to be used as a technical term for a subdivision of the Psalter and the Syriac version of the early Christian hymn *Gloria Patri* came to be known eponymously as simply, the ܫܘܒܚܐ.[593] In addition to the distribution of ܫܘܒܚܐ in Syriac literature, the syntax of the *Peshiṭta* at Ps 27.6 also rules out the adverbial notion that these are literal "sacrifices" to be "[*accompanied by/done with*] praise." In the *Peshiṭta*, when ܫܘܒܚܐ is used to denote that an action is done with, or accompanied by, praise, it is always prefixed with *beth instrumenti* and is never a direct object functioning adverbially to indicate the manner or means by which the action of its governing verb is accomplished. Thus while the precise meaning of the Hebrew genitival phrase, זִבְחֵי תְרוּעָה serving as the object of וְאֶזְבְּחָה is perhaps somewhat ambiguous due to the rarity of the lexeme תְּרוּעָה, the Syriac translation is much more transparent in intending "sacrifices [*comprised*] of praise" rather than "sacrifices [*accompanied by/done with*] praise" through its lexical and syntactic choices.

591. D. Michel, *Tempora und Satzstellung in den Psalmen* (Bonn: H. Bouvier u. Co. Verlag, 1960), 128.

592. *IBHS*, 551.

593. See A. J. Maclean, *A Dictionary of the Dialects of Vernacular Syriac* (Oxford: The Clarendon Press, 1901), s.v. ܫܘܒܚܐ, 300.

The nature of the sacrifices in Ps 27.6 is significant for our purposes because an event of "praise" is a Vendlerian activity despite being denoted here by the roots זבח : ܕܒܚ, which in other contexts are clearly achievements. Such type-shifting[594] is common when the valence pattern of an achievement attests a singular AGENT and plural PATIENT for as Dowty states: "The presence of an indefinite plural NP or mass NP can render a sentence that would otherwise by an [achievement] into an activity."[595] With respect to pluractionality, it was shown above in §5.2.3.1.2.1 that it is also this very valence pattern that allows Vendlerian achievements, despite being marked [+TELIC] and thus inherently event-external when repeated, to be construed as event-internal, repetitive situations. Since achievements lack the DURATIVE feature, when repeated in quick-succession on a single occasion they are able to be conceptually grouped into a single, internally complex series of [+TELIC] sub-events that may be bundled within the temporal bounds of a single event. It is because of this that they are consistent with the event-internal pluractionality that receives morphological marking for plural events in languages possessing such mechanisms, and also why Dowty underscores their patterning with Vendlerian activities when iterated over a set of indefinite plural objects.

As a result, using the D-stem of ܕܒܚ for the G-stem of זבח in *P*-Ps 27.6 may be a case where the Syriac text is more explicit than the Hebrew in underscoring that the event intended here is an activity of "praise" as opposed to literal sacrifice. Through the use of its verbal morphology, the *Peshiṭta* is according greater salience to the set of repeated, sub-eventual phases inherent to "praising" events in a manner analogous to the difference between the denotation of "leaves" versus "foliage" cited above. Such event-internal pluractionality of the verbs of "praise" were discussed at length in §6.1.1.1.1.1 which demonstrated that they are attested exclusively in the D-stem in both Hebrew and Syriac and stand alongside the other *verba dicendi* in their preference for the heavy marking of the D-stem. It is therefore possible that not only did the *Peshiṭta* translators desire to remove the ambiguity of the difficult Hebrew by explicitly referring to an event of "praise" by means of their translation of זִבְחֵי תְרוּעָה with ܕܒ̈ܚܐ ܕܫܘܒܚܐ, but they further adjusted the verbal morphology of ܕܒܚ to the D-stem vis-à-vis the G-stem of זבח to match the heterogeneous "praising" event being denoted.

In sum, despite only appearing in the Syriac D-stem throughout the sample corpus, ܕܒܚ is unequivocally attested in the G-stem elsewhere in the *Peshiṭta*, suggesting that the translators'

594. See n.274 above.

595. Dowty, "The Effects of Aspectual Class," 39. Here Dowty's original quote has "accomplishment" for "achievement," but this seems to be a mistake as his illustrative examples are all achievements. Irrespective of Dowty's original intent here, he notes the shift from achievement to activity with plural indefinite and mass-noun objects in several other publications as well. See *Idem.*, *Word Meaning and Montague Grammar,* 63 and "Studies in the Logic of Verb Aspect and Time Reference in English," 30ff.

deviation from the G-stem of זבח in their Hebrew source text at *P*-Ps 27.6 is meaningful and an intentional mark for a linguistic function. While it is clearly the case that an event of "sacrificing" is an example of the type of highly transitive situation that was shown to be routinely marked by the D-stem in CHAPTER 5, the nature of the "sacrifices" denoted in *P*-Ps 27.6 offers another possibility. In using הכמ for a metaphoric reference to "praise," a heterogeneous activity exclusively denoted by D-stem verbs in Hebrew and Syriac, the stem's penchant for marking event-internal pluractionality is also a possibility.

6.1.2.1 *Hebrew G-Stem Achievements Translated with Syriac D-Stem Achievements: Conclusion*

In testing the Hebrew G-stem achievements for the presence of the event-internal pluractionality that has the potential to be marked with the Syriac D-stem, only זבח : *הכמ in *P*-Pss 4.6 and 27.6 met the syntactical conditions required for such a function. In *P*-Ps 4.6, the grammatical subject of זבח along with its objects were plural, a valency pattern that precludes event-internal pluractionality with a [+TELIC] verb. This is because while the action of an achievement may be repeated over the plural set of individual objects, the plural subject means that each iteration of the action belongs to its own separate event. Thus, זבח : *הכמ at *P*-Ps 4.6 is an example of event-external, rather than event-internal, pluractionality. While the type of pluractionality marked by the D-stem was ruled out by the plural subject, the lexica nevertheless suggest a "constant" or "habitual" nuance for the D-stem of הכמ. However, it was shown that the examples typically adduced to justify such an interpretation do not support this view, and in fact, any "constant" or "habitual" meanings that are present are licensed by the inflectional as opposed to derivational morphology of the verb. These findings were consistent with the conclusions reached in CHAPTER 5.

As for the *Hebrew G-stem* : *Syriac D-stem* analogy involving זבח : הכמ in Ps 27.6, its singular subject and plural objects are potentially consistent with event-internal pluractionality. That achievements lack the DURATIVE feature is what allows them to be bundled into a singular, internally complex pluractional event when distributed over a set of plural grammatical objects. However, the underlying absence of the DURATIVE feature in the semantics of achievements is also what allows other clause constituents to add the feature when denoting [+ DURATIVE] situations by implicature. The cultic context of Ps 27.6 implies a ritual "sacrifice" that therefore includes a run-up phase prior to the [+TELIC] culmination of the "killing" event. As such, the "sacrificing" done to the multiple PATIENTS of Ps 27.6 refers to separate events rather than a single, internally complex event. Because of this, pluractionality does not provide a sufficient relation *R* able to explicate the *Hebrew G-stem* : *Syriac D-stem* analogy involving זבח : הכמ pair in *P*-Ps 27.6.

Nevertheless, should the "sacrifices of a shout of joy" (זִבְחֵי תְרוּעָה : ܕܒ̈ܚܐ ܕܫܘܒܚܐ) of Ps 27.6 refer metaphorically to song of praise, then the Syriac's substitution of the D-stem for the G-stem of their *Urtext* is in keeping with the broader pattern of using the D-stem for verbs of "speaking" and "praising." With the G-stem of ܕܒܚ available to the Syriac translators as evidenced by its use in the broader *Peshiṭta*, the choice of the D-stem here could be due to the internal due to a desire to conform the verbal morphology of the translation to the typical morphological denotation of "praising" events. As such, the translation technique of the *Hebrew G-stem* : *Syriac D-stem* involving זבח : ܕܒܚ pair in *P*-Ps 27.6 has the potential to have been motivated by the pluractional marking of the Syriac D-stem, in this case to give salience to the heterogeneous sub-phases of an atelic activity.

In conclusion, while Vendlerian achievements have the potential to denote event-internal pluractionality consistent with the type normally associated with the Semitic D-stem, in the sample corpus three out of the five Hebrew G-stem verbs that are translated with a Syriac D-stem form appear in syntactic environments where event-internal pluractionality is prohibited, thus precluding a pluractional relation R for $S : T_D$. The other two G-stem achievements in the sample corpus, זבח : ܕܒܚ at *P*-Pss 4.6 and 27.6, govern plural grammatical objects and so may license a pluractional interpretation. However, זבח : ܕܒܚ at *P*-Pss 4.6 also attests a plural grammatical subject, making each event in the denotation of the verbs from these roots event-external in nature, an event construal that is marked by inflectional rather than morphological means in the Semitic verbal system. The analogy of זבח : ܕܒܚ at *P*-Pss 27.6 may be eligible for event-internal pluractional since these roots form verbs with a singular grammatical subject and plural object, yet this is would be contingent upon a particular interpretation of the Hebrew. What all five Hebrew G-stem achievements that are translated with a Syriac D-stem have in common is that they are each used to denote situations that closely conform to a prototypical transitive clause and thus are employing a function of the D-stem other than pluractionality.

6.2 Conclusion

Since the results of the present chapter in many respects represent the culmination of the entire thesis, a more detailed explanation and summary of CHAPTER 6 has been reserved for the conclusion of the entire work appearing in the next and final chapter in §§7.1–4. This has been done to avoid repetition and so that the results obtained in here can be set within the context of the broader work.

What appears below is an abridged summary of the results from the chapter that can be used in conjunction with the conclusions of §§7.1–4.

Hebrew G-Stem Activities Translated with Syriac D-Stem Non-Activities

Hebrew G-Stem Activity : Syriac D-Stem State

מרה	*ܡܪܐ	Ps 5.11
חסה	*ܚܣܐ	Pss 5.12, 7.2, 11.1, 17.7, 25.20
חוּשׁ	*ܚܘܫ	Ps 22.20

Hebrew G-Stem Activity : Syriac D-Stem Achievement

תמך	ܬܡܟ	Ps 16.5

Functional Relation *R* in *S* : T_D: Syriac D-stem a consequence of lexical choice often in agreement with Greek version in the face of difficult Hebrew *Vorlage*.

Hebrew G-Stem Activities Translated with Syriac D-Stem Activities

Group 1: *Heterogeneous* Hebrew G-stem Activities Translated with *Heterogeneous* Syriac D-stem Activities

דבר	*ܡܠ	Pss 5.7, 15.2, 28.3
דרשׁ	*ܒܥܐ	Ps 10.4
הלך	*ܗܠܟ	Pss 1.1, 15.2, 23.4, 26.1, 26.11
לעג	*ܣܚܩ	Ps 2.4
שׁיר	*ܙܡܪ	Pss 13.6, 27.6

Functional Relation *R* in *S* : T_D: Fine grained event-internal pluractionality.

Group 2: *Homogeneous* Hebrew G-Stem Activities Translated with *Heterogeneous* Syriac D-Stem Activities

סמך	*ܣܡܟ	Ps 3.6
תמך	*ܬܡܟ	Ps 17.5
נחה	*ܢܚܐ	Pss 5.9, 27.11

Functional Relation *R* in *S* : T_D: Event-internal pluractionality triggered by continual energy investment on the part of the agent.

Group 3: *Homogeneous* Hebrew G-Stem Activities Translated with Syriac D-Stem Activities Unrelated to Pluractionality

חנן	ܬܫܝ	Pss 4.2, 6.3, 9.14, 25.16, 26.11, 27.7, 30.11
שׁמר	ܢܛܪ	Pss 16.1, 17.8

Functional Relation *R* in *S* : T_D: Semantic opposition between G- and D-stem with attendant increase in semantic transitivity.

Hebrew G-Stem Achievements Translated with Syriac D-Stem Achievements[596]

Ps 4.6	זבח	זִבְחוּ זִבְחֵי־צֶדֶק	ܕܒܚ*	ܘܫܪܘ ܕܒܚܐ ܕܙܕܩܐ
Ps 6.3	רפא	רְפָאֵנִי	ܐܣܝ*	ܐܣܝܢܝ
Ps 25.11	סלח	וְסָלַחְתָּ לַעֲוֹנִי	ܫܒܩ*	ܘܫܒܩ ܠܝ ܥܠ ܚܛܝܬܝ
Ps 27.6	זבח	וְאֶזְבְּחָה בְאָהֳלוֹ זִבְחֵי תְרוּעָה	ܕܒܚ*	ܘܐܩܪܒ ܒܡܫܟܢܗ ܕܒܚܐ ܕܬܪܥܝܬܐ
Ps 30.3	רפא	וַתִּרְפָּאֵנִי	ܐܣܝ*	ܘܐܬܐܣܝܬܢܝ

Functional Relation *R* in *S* : T_D: D-stem chosen to marking highly transitive situations.

596. Entire clauses shown due to potential effect of plural arguments on potential pluractional achievements.

CHAPTER 7

CONCLUSIONS

This study has examined the pluractional function of the Syriac D-stem as attested in a sample corpus from the *Peshiṭta* version of the Psalms. This was done in order to clarify the ambiguous relationship between the Semitic D-stem and the various notions of plurality that have been catalogued amongst the its functions since the inception of Semitic grammatical description. Such a task required an approach that was statistically meaningful, methodologically robust, and moored in general linguistic theory. The considerable length and detail dedicated to the first four chapters of the thesis were intended to provide the methodological and statistical rigor to substantiate the deductive results obtained in CHAPTERS 5 and 6, the most important of which are detailed below.

7.1 Event-Internal Pluractionality and Semitic Derivation

By means of contrasting the descriptions and representative examples of the D-stem by ancient grammarians with those of their 19th and 20th century counterparts, CHAPTER 5 first of all demonstrated that the plurality originally associated with the form is best understood as plural action, or in the nomenclature of Newman, "pluractionality." In their descriptions of the D-stem, the early Arabic and Arabic speaking Hebrew grammarians described a phenomenon in the verbal domain whereby verbal lexemes are capable of denoting a plurality of action or events in a manner analogous to plural entities or objects. Based upon a survey of the relevant linguistics literature, the various ways in which an event may be considered plural was then delineated and applied to the Semitic verbal system.

The principal result to arise out of this discussion was that the two categories of plural action from the definitive work on the subject by Cusic were shown to run parallel to the two different morphological domains of the Semitic verbal system. It was demonstrated that Cusic's event-external pluractionality, which includes the repeated action classes of iterativity, frequentativity, and habituality, is marked in Semitic morphology by the inflectional system of conjugations. By contrast, Cusic's event-internal pluractionality, which refers to event iterations that comprise the sub-phases of a larger macro-event, was shown to be marked by the derivational system of Semitic morphology, and more particularly, the D-stem. This conclusion aligned with

the behavior of other languages of the world possessing morphological means for marking event plurality that overwhelmingly utilize reduplication for event-internal pluractionality.

Nevertheless, despite sharing many of the same morphological mechanisms for event-internal pluractionality marking, it was also shown that languages differ with respect to which events they construe as pluractional, and this primarily along what Cusic termed "the granularity parameter." A coarse-grained construal of an event obscures its internal phasality in deference to its external unity, while a fine-grained construal is more sensitive to the internal phases of an event, often displaying the heavy morphological marking typically reserved for event-internal pluractionality. Thus in a manner analogous to "rocks" versus "gravel," an event of "walking" is a coarser-grained construal than an event of "taking steps." This distinction was shown to have significant explanatory power for the $S : T_D$ analogies in the sample corpus (see §7.3 below).

7.2 Event-Internal Pluractionality and Lexical Aspect

Another important result from the intersection of Cusic's categories of pluractionality and the Semitic D-stem involved Vendler's classes of lexical aspect as schematized by Olsen. A verb's lexical aspect, or the relationship that obtains between the event or state in its denotation with the temporal interval over which it takes place precludes some verbal lexemes from an event-internal pluractional interpretation. For example, it is impossible for stative verbs to exhibit pluractionality because they do not denote events, while repeated accomplishments are by definition event-external since they entail a run-up phase culminating in a result state that, when iterated, always constitutes a separate event. On the other hand, since Vendlerian activities consist of a series of linearly ordered changes that can be construed as a sequence of micro-events subsumed within a single macro event, activities do readily lend themselves to event-internal pluractional interpretations. Finally, achievement verbs, which denote punctual telic events, can be repeated in such a way that they too can take on an event-internal pluractional nuance when governing a set of plural grammatical objects. In such instances, the event denoted by the achievement verb is distributed over each individual member of a plural set of grammatical objects that are conceptually grouped into a single, albeit internally complex, event.

The elucidation of the relationship between event-internal pluractionality and lexical aspect is important for at least two reasons. The first is its ability to explain two notoriously challenging linguistic phenomena related to the Semitic D-stem. The distinction between the G- and D-stem of intransitive activity verbs that show seemingly little difference in their meaning (such as those from הלך) can be explained by recourse to the interaction of event-internal pluractionality and lexical aspect. As activities, these verbs are decomposable into a series of

micro-iterations and, depending on the degree of salience accorded these internal phases, may be construed as event-internal pluractionals. The G-stem of these verbs is used for events that are construed as an undifferentiated, homogeneous whole, while in the D-stem the repetition of their internal phases are emphasized. Furthermore, while the Semitic D-stem has often been associated with plural verbal arguments, the most attention has been paid the D-stem verbs' penchant for governing plural grammatical objects. The reason for this is again due to the intersection of lexical aspect and event-internal pluractionality. Many of the D-stem verbs governing plural grammatical objects belong to Vendler's achievement class, which by means of distributivity, can be iterated over a plural set of grammatical objects in a manner that takes on the phasic structure of pluractional activity verbs.

A second critical application of the relationship between event-internal pluractionality and lexical aspect is the linguistic constraints it places upon a verb's eligibility for licensing event-internal pluractionality. These strictures have the effect of circumscribing the function that the D-stem's morphology was meant to mark on a given verbal lexeme. A Vendlerian activity or achievement occurring in the D-stem have the potential for a pluractional interpretation, while a state or accomplishment in the D-stem is an indication that another function of the form had most likely been intended. While beyond the scope of the present study, it is no coincidence that states and accomplishments in the D-stem nearly always exhibit the transitivity increasing operation of factitivity rather than pluractionality. On the other hand, the proscription of various verb classes from an event-internal pluractional interpretation on account of their lexical aspect is a critical result immediately relevant for ascertaining how the Syriac translators may have employed their D-stem to mark pluractionality in the sample corpus.

7.3 Vendler Activities and Event-Internal Pluractionality

While CHAPTER 5 provided the linguistic foundations required for the implementation of the methodology for testing a sample corpus of translated Syriac for the pluractional D-stem as outlined in the first four chapters, CHAPTER 6 put these into practice. This began with the observation that of the 58 instances where a Hebrew G-stem verb was translated with the Syriac D-stem in the sample corpus, 38, or 65%, belong to a lexical aspect capable of licensing event-internal pluractionality.

Looking at the data more closely revealed that of the 38 Hebrew G-stem verbs that receive a Syriac D-stem verb in translation and are eligible for an event-internal pluractional interpretation, all but eight are translated with a Syriac verb that is of the same lexical aspect as its source text. Of these eight departures in lexical aspect, seven represent instances where a Syriac

stative verb in the D-stem was used for an Hebrew activity verb in the G-stem. Since stative verbs are not capable of denoting pluractionality, it was clearly not the desire of the Syriac translators to mark pluractionality in using their D-stem for the Hebrew G-stem. The one remaining instance where a Hebrew G-stem activity failed to be translated with a Syriac verb of the same lexical aspeect involved an achievement. Since this Syriac D-stem achievement did not govern a plural grammatical object, it too was clearly not used in order to mark pluractionality.

What is interesting about these departures of lexical aspect on the part of the Syriac is that each one occurs as part of an attempt to translate a Hebrew *Vorlage* whose vocabulary and/or syntax is very difficult. In every case, the verbal lexemes chosen by the Syriac translators are much closer to that of a Greek version than to the MT, likely indicating that the translators consulted the Greek vis-à-vis the difficult Hebrew. As a result, none of these instances of $S : T_{\text{D}}$ show any evidence that the Syriac D-stem was employed with the desire to morphologically mark a sense of pluractionality latent in the Hebrew *Urtext*. Despite the absence of pluractional marking, it is nevertheless interesting that these departures of lexical aspect reveal textual and interpretative issues between the *Peshiṭta* and its Hebrew *Vorlage*.

7.3.1 *Event-Internal Heterogeneous Activities in the Hebrew G-Stem*

By far the most significant results of CHAPTER 6 arose from the analysis of Hebrew G-stem activities that are translated with Syriac D-stem activities. It was first shown that activity verbs fall into two sub-classes: homogeneous and heterogeneous activities. The former refers to activities that adhere to the sub-interval property by virtue of the absence of any perceivable internal structure or sub-phases within the events they denote. Contrarily, the latter class of activity verbs concerns events that *are* comprised of a series of relatively pronounced and salient changes that constitute the sub-phases of the macro-event of which they are a part. This distinction is an important one because the analysis of CHAPTER 6 demonstrated that Syriac is much more sensitive to the presence of the internal sub-phases characteristic of heterogeneous activity verbs than is Hebrew, which manifests in a greater propensity for Syriac to mark such verbs with the D-stem. Put in the terms of Cusic's granularity parameter, since Hebrew employs its default G-stem morphology for both homogeneous as well as heterogeneous activities, it betrays a coarser-grained construal of events, reserving the heavy marking of the D-stem for a more narrow spectrum of denotations. Syriac on the other hand marks verbs denoting internally complex events with its D-stem much more readily, placing Syriac in the category of languages more finely-grained in their event construals. However, the most important implication of this latter point is that Syriac's consistent marking of heterogeneous activity verbs with the D-stem demonstrates that it is event-internal pluractionality that is the primary plural denotation intended by the use of the form. In

this conclusion we agree with Lupu's assessment that "Pluractional markers usually interact with activity predicates by pluralizing the phases of action on a given occasion…"[597]

This behavior remained consistent even when the Hebrew text has a homogeneous G-stem activity verb that the Syriac translates with a heterogeneous D-stem activity. What is interesting in these cases is that although the Hebrew G-stem verb in the source text is not denoting an internally complex event, the semantics of the D-stem verb used in translation required a sustained or intermittent investiture of energy input on the part of the AGENT to transpire. It is this sustained investment of agentival energy that appears to have triggered the heavy marking of the D-stem in a manner analogous to that which is done for event-internal pluractionality. It is important to underscore that this continual, or repetitive, investment of energy into an event is not to be equated with the heightened degree of energy that the 19th and 20th century grammarians of the Semitic languages mistakingly claimed for the D-stem,[598] but rather is a slight variation of the event-internal pluractionality evinced between heterogeneous Hebrew G-stem verbs translated with the Syriac D-stem. The conclusion that this class of Syriac D-stem activity verbs are examples of event-internal pluractionality not only accords with the early grammarians' notion of "more of an activity"[599] as found in their explanations of the form, but also enjoys support in the way with which a similar linguistic phenomenon elicits reduplication in Chadic as noted by Součková.[600]

7.3.2 *Event-Internal Pluractionality and Verbal Stem Distribution*

If what is being claimed here with respect to Syriac's finer-grained construal of events exhibiting internal phasic complexity is correct, then its effects ought to be reflected in the verbal stem distributions attested in Hebrew and Syriac. At this point it should be recalled that this is precisely what was shown to be the case in CHAPTER 3 and in fact provides an explanation for the difference in Hebrew G-stem and Syriac D-stem verbs as attested in the sample corpus. In CHAPTER 3 it was shown that in the sample corpus the Hebrew G-stem is used markedly more often than the Syriac G-stem and this at the same time the Syriac D-stem is used much for often than the Hebrew D-stem. This was a feature of the data characteristic not just of the sample corpus, but also that of the entire book of Psalms as well as the entire Hebrew Bible. These data suggest that Syriac's propensity to mark internally complex activity verbs with the D-stem is a linguistic feature of the

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597. Lupu, "Semantic Patterns," 164.

598. See discussion on p.178ff.

599. Ryder, *The D-Stem in Western Semitic*, 13.

600. See n.522.

Syriac language more generally and not simply a trait of the particular D-stem verbs appearing in the sample corpus.

7.3.3 *Event-Internal Pluractional Activities and Lexicalization*

Chapter 6 also revisited the central point of chapter 4 that examined the D-stem roots in the data set culled from the sample corpus that only appear in that form either in *P*-Pss 1–30 or in the entire *Peshiṭta*. These Syriac D-stem-only roots raise the question of whether the choice of the D-stem on the part of the Syriac translators was due not to a desire to mark event-internal pluractional events, but rather simply due to the these verbs having been lexicalized in the D-stem.

However, attributing the D-stem-only verbs in the sample corpus to "lexicalization," as it is often invoked in Semitic studies, for these particular D-stem verbs is potentially misleading. This is because "lexicalization" properly conceived is the consigning to the lexicon of a form whose semantics is unpredictable and/or more restricted than its morphology would otherwise suggest. On this point Leech states, "at the outset of its institutional existence in the language, a lexical entry usually denotes a more limited area of reference than is theoretically allowed for by the lexical rule. The whole process by which an institutionalized lexical meaning diverges from the 'theoretical' meaning specified in a lexical rule may be termed *petrification* (a term which, I hope, will suggest both the 'solidifying' in institutional form of a lexical entry, and the 'shrinkage' of denotation which often accompanies this process)."[601] In essence then, "lexicalization" (Leech's "petrification") involves the semantics of a lexical item being associated with the *signifiant* in an idiosyncratic way that does not conform to the lexical and grammatical rules of the *langue*. That such an idiosyncratic association of form and semantics requires a separate entry in the lexicon at once calls to mind the arbitrariness of the *signe*, the bond between the *signifié* and *signifiant*, that was famously observed by Saussure. However, as Lévi-Strauss observes, "the linguistic sign is arbitrary a priori, but ceases to be arbitrary a posteriori" and later, "When we consider vocabulary a posteriori, that is, after it has been constructed, words lose a good deal of their arbitrary character, for the meaning that we give them is no longer solely a function of convention."[602] It is this non-arbitrary a postiori association of the *signifié* and *signifiant* that led to Saussure's notion of "motivated" *signes* which admit to, "the presence of degrees of arbitrariness" such that it is "always

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601. Leech, *Semantics: The Study of Meaning*, 226.

602. C. Lévi-Strauss, *Structural Anthropology*, C. Jacobson and B. Grundfest Schoepf, trans. [Harmondsworth: Penguin, 1977], 91; 93.

proportional to the ease of syntagmatic analysis and the obviousness of the meaning of the subunits present."[603]

Thus to say that a given Syriac verb only appearing in the D-stem has been "lexicalized" in that form is not to suggest that the function of the stem into which it has been "petrified" did not meaningfully contribute to its semantics. Rather, what the analysis of the D-stem-only verbs in the sample corpus and beyond demonstrated is Leech's semantic "shrinkage" where the root and stem combination has been circumscribed in the *parole* to denote certain activities that are nevertheless suitable for the event construal of those activities. The petrification of these verbs in the D-stem is a result of the appropriateness of the form-function nexus of these particular verbs. As a result, even though it may be correct to refer to some of the Syriac verbs under consideration here as having been "lexicalized" in the D-stem, this should not understood to mean that the function(s) of the stem into which a root has been "petrified" cease marking the function(s) they otherwise would on a different verbal lexeme. What the data in CHAPTER 6 found is that even though certain verbs in the sample corpus only appear in the D-stem they nevertheless often continue to mark event-internal pluractionality. In this way, such forms are better conceived as "partially motivated" in the parlance of Saussure rather than simply dismissed as having been "lexicalized."

7.3.4 *Non-Pluractional Syriac D-Stem Activity Verbs*

The final set of Hebrew G-stem activity verbs considered in CHAPTER 6 were those that exhibit homogeneous semantics, but are translated with a Syriac activity verb failing to denote any pluractionality. In these cases the Syriac D-stem was chosen both to elicit a different function of the D-stem as well as to mark an opposition to the semantics of its G-stem counterpart. The Syriac roots undergirding the verbs in these instances exhibited slightly different semantic nuances between their G- and D-stem forms, with the former either being stative or denoting events that are abstract and semi-ergative, registering an effect in the grammatical subject rather than object. On the other hand, the D-stem forms of these roots are dynamic, concrete, and highly transitive in that they denote a transfer of verbal force from their AGENTS to a highly affected PATIENT. Thus, the D-stem of these Syriac roots were chosen as fitting translations of their dynamic G-stem counterparts in the Hebrew. In this behavior the Syriac D-stem verbs in question more closely conform to the transitivity increasing factitive function often associated with the D-stem and show no traces of pluractional marking.

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603. Saussure, *Cours de Linguistique Générale*, 131; 133

7.4 Hebrew G-stem Achievements Translated with Syriac D-stem Achievements

One species of pluractionality for which a linguistic account was provided in CHAPTER 5 that did not figure heavily in the textual analysis of CHAPTER 6 was distributivity. The potential for plural arguments to license an event-internal pluractionality consistent with D-stem marking is contingent upon an achievement predicate having a singular grammatical subject and plural object. Of the five Hebrew G-stem achievement verbs that are translated with a Syriac D-stem, only one possessed the singular subject and plural object required for event-internal pluractionality. Even in this instance, a pluractional interpretation was possible only under a highly nuanced pragmatic reading of the event in question.

These results are interesting, especially when set in context against the broader data concerning direct objects in the sample corpus. Out of the 62 Hebrew clauses in the sample corpus where a *Hebrew* D-stem verb is translated with a Syriac D-stem verb, twelve, or 19.35%, include a plural direct object. However, of the 425 clauses where a Hebrew *G-stem* is translated with a Syriac G-stem verb, 54 or 12.7% have a plural direct object. The comparatively little difference in the plural direct object occurrence rate between the *Hebrew D-stem : Syriac D-stem* clauses and the *Hebrew G-stem* : *Syriac G-stem* clauses confirms how little impact plural objects appear to have had on the Syriac translators' choice of the D-stem for Hebrew G-stem verbs. Thus, while the Syriac D-stem appears to be quite sensitive to the internal complexity of heterogeneous activity verbs, the presence of plural direct objects appears to do little to elicit the marking of the D-stem irrespective of the lexical aspect of the verb involved.

7.5 Opportunities for Further Research

By using the contributions from general linguistic science as applied to data from a sample corpus of the *Peshiṭta*, this study has clarified the nature and type of plurality marked by the Syriac D-stem. While this was done with respect to translated Syriac, the hope is that the results obtained here can be used to help clarify, confirm, or falsify the function of the Semitic D-stem in languages beyond Syriac. Thus, one obvious opportunity for further research is the application of the results obtained here to other members of the Semitic family of languages. The thesis began with an aspiration "to discover how human languages are alike and how they differ, and to propose and

test theories that explain the similarities and differences,"[604] a task made possible only when specialists in other languages revisit and hone what has been offered here.

A second and no less important opportunity for further research presented by the current study would involve elucidating the other functions that are routinely associated with the D-stem. Just as often as the Semitic D-stem figures in discussions of pluractionality, it is also implicated in a notions of causativity, particularly the agentive increasing operation known as factitivity. Clearly the D-stem is used for verbs of lexical classes beyond just those that license a pluractional interpretation and so an opportunity exists to examine the D-stem's function in those instances and importantly, whether these "other" functions of the D-stem co-vary with the event-internal pluractionality that has been highlighted here. A good bit of data has already been collected by the present author that unfortunately could not make it in to the present work that suggests this to be the case, but there exists opportunities to confirm this intuition as well as explore the linguistic mechanisms that pluractionality and these other functions share that might allow them to be colocated within a single morphological form.

604. Bybee, Perkins and Pagliuca, *The Evolution of Grammar*, 1.

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