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Syriac Rhetorical Particles: Variable Second-Position Clitic Placement

Patrick Brendon Pearson

A thesis submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of

Master of Arts

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ABSTRACT

Syriac Rhetorical Particles: Variable Second-Position Clitic Placement

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Investigation on second-position clitic phenomena has steadily increased since Wackernagel's (1892) observations. Researchers have applied contemporary clitic typology to various Semitic languages though Syriac has received little attention. This thesis identifies a group of Syriac rhetorical particles and describes their categorization as clitics, versus words or affixes. It establishes each of the Syriac particles as second-position clitics and provides evidence of this conclusion from a state-of-the-art digitized corpus of Syriac literature. Extending previous Syriac analyses, this thesis describes the nature of attachment of these second-position clitics as enclisis to either the first word or the first constituent/phrase of their domain. This variable clitic attachment behavior has been previously attested only in three other unrelated languages: Serbo-Croatian, Luiseño and Ngiyambaa. I discuss the analysis and application of these discoveries and their implications for future Syriac and linguistic research.

Keywords: Syriac, rhetorical particles, clitics, second position, corpus

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1. Introduction

Syriac is a Semitic language composed of a very rich and voluminous literature with manuscripts dating back to the 2nd century AD.[1] Most of the earliest Syriac literature is of a liturgical nature including translations and commentary on the Old and New Testaments and related religious writings. Syriac literature also covers theology, history, poetry, language grammars, and lexicography. The 20th century witnessed a revival of Syriac literature, including a surge of dictionaries, grammars, translations and commentary on previous writings. In more recent years, the majority of this text has been digitized and made searchable with various analytical tools which greatly facilitate Syriac language research. A few of the organizations whose research has benefited this thesis include: the Hebrew Union College with its Comprehensive Aramaic Lexicon Project (CAL), the Dukhrana Bible Research and its various analytical tools, and particularly, the BYU Neal A. Maxwell Institute Center for the Preservation of Ancient Religious Texts with its digitized manuscripts and Syriac electronic corpora.[2] Yet despite the historical preservation of such an abundant literature, very little principled research has been undertaken in Syriac linguistics.

This is particularly true with respect to the grammatical category of clitics: with rare exception I have found almost no discussion of Syriac clitics in all of this literature.[3] Additionally, I have not found any typological discussion of Syriac clitics involving parse trees, complex syntactic processes, phonological or morphological theory, or semantic or pragmatic research. Most languages with the amount of extant literature that Syriac has—possibly even less—have undergone years of research in all of these areas, with various solutions and approaches to the same questions. Even related Semitic languages have undergone such investigation. Any minimal effort of research on clitics typically yields multiple approaches explaining language-specific phenomenon, appealing to the phonology, morphology, syntax, semantics, or pragmatics (or a combination of these approaches).

In this thesis I will argue that Syriac has a class of second-position clitics and will demonstrate that these clitics have not been researched extensively in either field of contemporary linguistics or Semitic language research. Additionally, I will demonstrate that

[1] ISO language codes are [ISO 639-3:syr] and [ISO 639-3:sem], respectively.
[2] http://cal1.cn.huc.edu/index.html, http://www.dukhrana.com/, http://cpart.maxwellinstitute.byu.edu/, respectively.
[3] The one exception is research from Doron & Assif (2000) which will be discussed in chapter 2.

traditional Syriac research (undertaken by Syriac lexicographers and grammarians) lacks contemporary linguistic application; including cross-linguistic comparison and exploration of state-of-the-art corpora. I therefore apply contemporary linguistic typologies and corpus analysis to the Syriac question and explore this class of discourse particles concerning their clitic-like properties.

Specifically, I identify nine Syriac particles which I propose exhibit similar conjunctive, adverbial, and rhetorical properties. I argue that these Syriac rhetorical particles are second-position clitics which display variation in their attachment to either the first full word or the first constituent in their domain. This will place Syriac among a rare group of genetically unrelated languages demonstrating this same phenomenon. Hence this thesis will contribute to contemporary linguistics by incorporating Syriac research into ongoing research on clitic typology.

The research will be presented in the subsequent chapters as follows: chapter 2 will present the necessary background and introductions to clitic typology, the Syriac language and previous literature on Syriac rhetorical particles and cliticization. Chapter 3 will present the analysis portion of the research, including established linguistic tests to assist in classifying Syriac particles as clitics (versus affixes and independent words), and to connect previous findings on Syriac particles with contemporary linguistic typology and ideology. Finally, in chapter 4 I will present new data regarding Syriac clitics and the resulting application from new Syriac corpora and research tools. Although corpus analysis is the main source for Syriac data and investigation, it will be void of statistical conclusions and frequency information. The corpus is utilized for analyzing Syriac information which has not been digitally available to previous research. The results argue that Syriac is analogous to languages like Serbo-Croatian, Luiseño and Ngiyambaa, demonstrating variation of clitic attachment to either the first constituent or to the first phonological word in their domain, and not strictly limited to one or the other of those options.

2. Clitic Typology and Discussion

In the first subsections of this chapter I give an overview of cliticization and discuss clitic typology as a foundation to determine the grammatical class of the Syriac particles under investigation in this thesis. In section 2.4 I introduce the Syriac language before presenting and reviewing prior literature on Syriac particles and cliticization.

2.1. **Clitics: an Overview**

For ages grammarians and linguists alike have attempted to limit or describe a "word" with a singular definition—often regarded as the smallest unit that makes up a sentence or forms an utterance. However, without some contrasting category or some comparable object, the historical issue of defining a lexical item as a "word" in any given language is complicated at the very least. Phonetic, orthographic, and morphosyntactic restrictions, and morphological/ inflectional categories (e.g., tense, aspect, mood, gender, and agreement) vary from language to language, rendering the task of defining a 'word' universally, nearly impossible. As it relates to cliticization I view the cross-linguistic complexities of defining a "word" as a three-part issue: distinguishing the *orthographic word* from a *phonological word* and a *grammatical word.* Orthographic words come into consideration as writing conventions from language to language are inconsistent and can vary drastically. Consequently, orthographic separation by white space cannot be the sole determiner for defining a word. For example, synthetic languages have a very high morpheme-per-word ratio (versus analytic or isolating languages):

(1) West Greenlandic "Word" (Polysynthetic Language) (Fortescue 1994)

a. anigu-ga-ssa-a-junna-a-ngajal-luinnar-simassa-galuar-put
avoid-PASS-PART-FUT-be-no.longer-almost-really-must-however-3PL.indic
'They must really almost have become unavoidable but . . .'

Example (1) shows what would be considered a single "word" if orthography, or a single orthographically connected lexical item, were the sole determining characteristic of a word in West Greenlandic. However, the semantic content is very complex and this orthographically connected sentence would be written and separated into several separate "words" in other languages (as the English translation demonstrates). Thus, orthographical boundaries cannot be a

sole determiner for defining a word cross-linguistically. Additionally, in their cross-linguistic typology on defining a word, Dixon & Aikhenvald (2003) argue that *phonological words* and *grammatical words* are two additional elements which need differentiation. They offer the following as definitional criteria:[4]

(2) Phonological Word (Dixon & Aikhenvald 2003)

A phonological word is a phonological unit larger than the syllable (in some languages it may minimally be just one syllable) which has at least one (and generally more than one) phonological defining property chosen from the following areas:

a. Segmental features – internal syllabic and segmental structure; phonetic realisations in terms of this; word boundary phenomena; pause phenomena.
b. Prosodic features – stress (or accent) and/or tone assignment; prosodic features such as nasalisation, retroflexion, vowel harmony.
c. Phonological rules – some rules apply only within a phonological word; others (external sandhi rules) apply specifically across a phonological word boundary.

(3) Grammatical Word (Dixon & Aikhenvald 2003)

A grammatical word consists of a number of grammatical elements which:

a. always occur together, rather than scattered through the clause (the criterion of cohesiveness);
b. occur in a fixed order;
c. have a conventionalised coherence and meaning.

Phonological and grammatical words are often synonymous, or coincide, but this is not always the case (Lehiste 1964; Dixon & Aikhenvald 2003; Aikhenvald 2007). For instance, various languages have clitics which are categorized as grammatical words on their own but they cannot form a phonological word without attaching to a required host, e.g. English *–'ve* in *should've*. This basic understanding of the notion of 'word' is crucial within a typological study on cliticization.

Distinguishing independent words from other lexical categories like inflectional or derivational affixes is often not as complicated as creating an all-encompassing definition for each. Affixes, for example, are grammatical items which are bound morphemes and cannot constitute a word on their own. They can affix to the end of their host (a suffix), to the beginning

[4] See also Hall & Kleinhenz (1999).

(a prefix), in medial position inserted into their host (an infix), and additionally as a two part affix which surrounds their host by affixing to the beginning and to the end (circumfix). In essence, they are morphemes which cannot exist independent of a host, and consequently have no meaning independent of attachment (Trask & Stockwell 2007). When contrasting these different lexical categories it is fairly clear how words are distinguished from affixes. However, due to the disparate nature of clitics and their properties, this clarity dissipates with clitics.

The categorical status of clitics derives from neighboring elements and involves being placed somewhere between different linguistic interfaces, e.g., syntax-phonology, phonology-morphology, morphology-syntax. In addition, they lie somewhere on a continuum between displaying the properties of independent words (grammatical and phonological) on one end and those of affixes on the other. Generally speaking, clitics are considered grammatical words which require a host and do not form complete phonological words on their own. The purpose here is not to give an exhaustive analysis of what constitutes a clitic, or to delve into the realm of universal classification in defining the 'exact mixture' of universal rules or parameters for cross-linguistic cliticization. For an extensive overview, history, and description of cliticization research and classification see Nevis et al. (1994), Zwicky (1994), Halpern (1998), Anderson (2005a), and Spencer & Luís (2012a), among others.

Therefore for the purposes of this thesis, I will define a clitic as a prosodically deficient or non-prominent word which is bound phonologically to a required host. In other words, clitics are bound phonologically like affixes while functioning syntactically like independent words. They are typically unstressed, although the notion of clitics being incapable of bearing stress is rejected by some (Zwicky 1985; Spencer & Luís 2012b). When researching cross-linguistic cliticization and typology, problematic questions arise like: When a clitic displays more affix-like properties than those of an independent word, is it still a clitic? Or, is it an atypical affix, but still an affix distinguishable from independent words on a gradient scale? The opposite is at issue as well: When a clitic moves further from resembling an affix and has more properties of a function word, is it still a clitic that simply displays prominent function word properties? Or, is it now an atypical function word but no longer a clitic?

I compare this gradient scale to terms of colors—specifically primary, secondary and tertiary. Red and yellow are primary colors *usually* with agreed definitions—similar to the

grammatical categories of an independent word or an affix.[5] Red and yellow are both primary colors and subsequently can be combined to make a range of other colors—one of which is orange. However, how is a secondary color like orange determined to actually be orange? Is it only orange if it consists of an equal quantity of both primary colors, i.e., red and yellow? When it has a little more red than yellow, is it a darker orange, or a lighter red? Are the tertiary colors of yellow-orange and orange-red shades of the primary colors, or variants of the secondary? Similarly, clitics are defined negatively (i.e., a lexical item is a clitic, if it is determined to not have certain word-like properties or affix-like ones) and the distinguishing boundaries blur quickly, having more features to consider than distinguishing colors (Gerlach & Grijzenhout 2001).

The necessity of binding phonologically to a host causes clitics to display an atypical syntactic distribution for independent words and which slightly differs from the similar phonological attachment of affixes to a required host. The main difference is that clitics exhibit a *promiscuous* attachment to a required host, whereas affixes usually select the hosts to which they are bound—the promiscuous clitic attachment is often termed as high selectivity. High selectivity and low selectivity regarding clitic host selection is discussed further in chapter 3. However, these cursory descriptions aside, clitics do not form a homogeneous class and what constitutes and defines a clitic in one study, varies from others in many ways. Still, researchers do predominantly converge in distinguishing different types of clitics, as is attested throughout the literature.

In the next subsection I will briefly present various ways in which clitics act at different linguistic interfaces and the respective approaches framed from each. Following in section 2.3 I discuss different types of clitics and the parameters which assist in determining their distinction. However, these are introductory and the majority of this thesis will focus on the linear and structural positioning of a specific type of clitic, second-position (2P), which is described within the categorizing parameters in the literature. Subsection 2.3.1 details these second-position clitics and their distinctions and characteristics relating to the Syriac rhetorical particles under investigation in this thesis.

[5] used casually as common knowledge of colors for analogy and without delving into color theory or language/cultural-specific situations

2.2. **Clitics and the Interfaces**

In addition to clitics not being absolute—described in relation to some sort of continuum between the properties of a full independent word and those of an affix—there is much debate on the underlying mechanics of how they become clitics or by what means their clitichood is determined. Researchers have set out to apply different subsystems of the grammar to explain the salient features which clitics portray. Different approaches appeal to the phonology, morphology, syntax, discourse (or interfaces of each) to account for the clitic properties of lexical items. In the next subsections I briefly survey how clitics interact with the phonological, morphological and syntactic components of the grammar.

Each section discusses two main points: the first addresses description and details the interaction of clitics and the respective subsystem of the grammar (e.g., morphology, phonology, etc.). The second addresses structure and position and the way in which each subsystem or interface accounts for the interactions, creation, structure and features of the clitics. This is by no means an exhaustive and detailed synopsis of all of the information and literature on clitics interaction with different interfaces; see further Franks (2000) and Gerlach & Grijzenhout (2001).

2.2.1. Clitics and Phonology/Prosody

A clitic's prosodic requirement for a host makes it nearly impossible to discuss cliticization without the phonology of the language. Much debate exists in the literature on the nature of the prosodic structure and deficiency of clitics. Franks (2000) explains on the one hand that the majority of research considers clitics to be integrated into—or attached to—a prosodic word or a phonological phrase. On the other hand, others have proposed that clitics should be distinguished and inserted as a separate "clitic group" into the prosodic hierarchy (Nespor & Vogel 1986; Hayes 1989):

(4) Clitic Group in Prosodic Hierarchy (Adapted from Selkirk 1996)

	Utt	utterance
	IP	intonational phrase
>>	***CG***	***clitic group***
	PhP	phonological phrase
	PWd	prosodic word
	Ft	foot

σ syllable

Interestingly, the clitic group's insertion into prosodic hierarchy by others is denied by Selkirk, from whom the prosodic hierarchy originates (Selkirk 1996).

Many researchers have used phonology as the main motivating factor for explaining clitics' structure and position within specific domains and sentences. This does not preclude syntax or other elements of the grammar from a prosodic account—after all clitics behave syntactically like independent words—but that their structure and position result only from the phonological factor of the grammar. These principled approaches discuss the syntax-phonology interface and explain that the clitics' positioning is determined post-syntactically via prosodic mapping. I will discuss some of the implications and argue a different opinion to one such prosodic approach to Syriac cliticization hereafter in section 2.5.1.

Mixed accounts involving a sort of tandem approach involving both syntax and phonology exist as well (e.g. Inkelas & Zec 1995). Of these mixed accounts however, the most widely discussed is that of Halpern (1995) on Serbo-Croatian. The premise of this approach is that the phonology is a 'last-resort' of sorts and "can move clitics if and only if their prosodic requirements are not satisfied, and it can move them only the minimal amount necessary to satisfy those requirements" (Schütze 1994). Halpern labels this 'Prosodic Inversion' (PI in the literature) and explains it as follows:

(5) Prosodic Adjunction of Clitics (Halpern 1995)

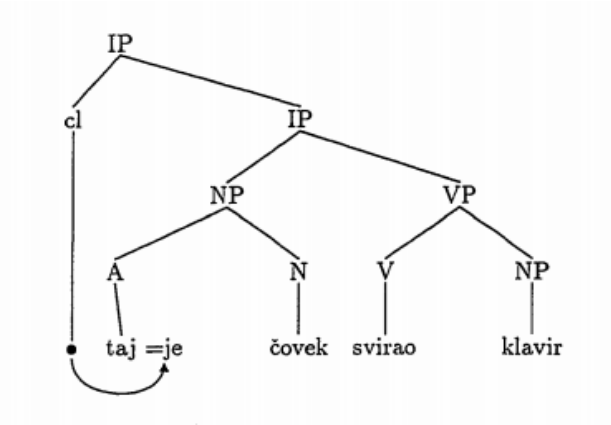
For a clitic X, which must have a prosodic host ω to its left (respectively right),

a. if there is a ω, Y, comprised of material which is syntactically immediately to the left (right) of X, then adjoin X to the right (left) of Y.
b. else attach X to the right (left) edge of the ω composed of syntactic material immediately to its right (left).

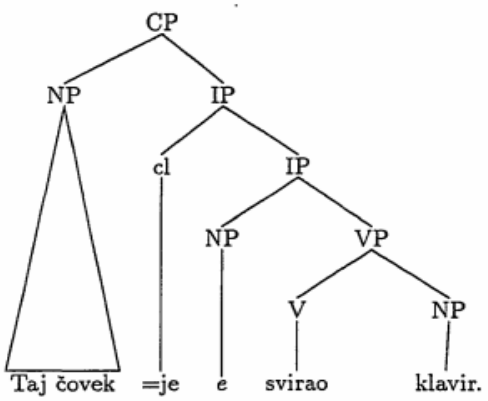
Prosodic Inversion permits that a clitic may "trade places" with a prosodic unit or prosodic word. Halpern argues that these clitics are initial in their domains and as a consequence of the mapping between prosodic and syntactic structures, they move until adjacent to a suitable—and required—prosodic host. Along with the description and basic understanding of Prosodic Inversion comes its application to real language data. Serbo-Croatian data was targeted as it

displays two variable outputs (both (6a) and (6b) are grammatical) for clitic placement following either the first phonological word or syntactic constituent:

(6) Prosodic Inversion vs. Constituent Fronting (Halpern 1995)



a. Taj ***=je*** čovek svirao klavir.
that ***AUX*** man played piano



b. Taj čovek ***=je*** svirao klavir
that man ***AUX*** played piano

Example (6a) demonstrates Prosodic Inversion in Serbo-Croatian while (6b) displays the allowable contrasting example of constituent fronting.[6] In (6a) the clitic (***je***) is at the beginning of its clause and moves minimally to the right until it is adjacent to a required prosodic host (Spencer & Luís 2012b). Serbo-Croatian additionally allows that clitics follow a syntactic daughter, therefore (6b) displays the NP constituent fronting to the left of the clitic (***je***) in order to fulfill the clitic's requirement for a prosodic host. Spencer & Luís (2012b) and Bošković (2001) discuss various problems which arise when explaining cliticization according to Halpern's arguments. However, despite the issues with Prosodic Inversion, it maintains a very prominent status when discussing phonology within clitic typology. For more on clitics and phonology see Selkirk (1980, 1984), Kleinhenz (1998), Hall (1999), and Doron & Assif (2000).

2.2.2. Clitics and Morphology

Similar to the phonology component, morphology is a large factor to consider in clitic analysis. One question particular to morphology is whether clitics constitute an independent morphological category, similar to the phonological proposal for 'clitic group', or whether they are possibly atypical but belong to already established categories like "word" and "affix" (Franks

[6] In the glosses (=) signifies the point and direction of clitic attachment.

2000). The majority of clitic research (not only that which pertains to morphology) investigates this question at least to some extent.

Linguistic tests have been established in the literature directly in response to these types of questions (Zwicky & Pullum 1983; Zwicky 1985; Miller 1992). They serve as a guide to identify certain distinguishable characteristics in grammatical items, often analyzed on a continuum. These tests have caused many lexical items to be reanalyzed and subsequently re-categorized after thorough analysis (Zwicky 1985; Ortmann & Popescu 2000; Monachesi 2000). I apply these typological tests to the Syriac particles under investigation in section 3.3 to best determine their categorical status and salient features. Further prominent clitic interactions with morphology (which are outside the scope of this thesis) include: clitic clustering and sequences (Simpson & Withgott 1986; Progovac 2000; Cardinaletti 2008), Distributed Morphology (Halle & Marantz 1993; Bonet 1995; Harris 1995) and Optimality Theoretic analysis (Legendre 1996, 1999, 2000; Gerlach 1998; Billings 2002; Anderson 2005a).

2.2.3. Clitics and Syntax

Though clitics are defined in relation to both syntactic and phonological properties, there is also always some element of syntax involved in clitic typology. Syntactic accounts typically have some phonological component and claim that the clitic's syntactic properties are fully responsible (or at least partially in mixed approaches) for their linear and structural positioning. I discuss in detail in the next subsection the different types of clitics in the literature and their respective positioning within their domains. One type of clitic is found consistently in second position of a given sentence or clause, hence the term 'second-position clitics'. These clitics usually have the option of attaching and affixing to a phonological word or an entire syntactic constituent or daughter (see section 2.3.1).

Syntactic approaches to clitic placement become rather technical very quickly. The underlying assumption here is that clitics' hosts are selected and determined by the syntax, whether by moving the clitic directly or by moving the host. At issue is where the clitics come from and where they go. As with morphology, Serbo-Croatian is heavily investigated syntactically as well, involving multiple approaches and frameworks. Progovac & Franks (1994) and Progovac (2000) lead this group with claims of clitic position in the syntax (in the C node) and their required hosts moving to the specifier of the CP node or the complement of the C'

node. They argue against the relevance of prosodic words and claim that stress is not necessarily required and does not suffice for determining clitic hosting. Wilder & Cavar (1993) follow Progovac but under Minimalist and Chomskyan assumptions, while Penn (1999) takes a Head-Driven Phrase Structure Grammar approach to the syntax-prosody interface.

Further cross-linguistic syntactic research relating to clitic typology include: movement and base generation (Kayne 1975; Jaeggli 1982; Uriagereka 1995), and clitic-doubling (Kaiser 1992; Auger 1993; Miller & Sag 1997; Müller & Riemer 1998).

One focus of this thesis is to address the linear and structural position of Syriac particles and to attempt to define their grammatical category. These Syriac particles interact with multiple syntactic, phonological, and morphological components of the grammar. Prior to analyzing the Syriac particles and their specific classification, I survey the different types of clitics in the following section. I will show that Syriac particles' salient features are characteristic of a specific clitic type detailed in previous literature.

2.3. **Clitic Types and Parameters**

Cross-linguistic investigation and research on clitics has yielded different types of clitics, which I discuss throughout this section. A particularly influential view on two types of clitics (which is widely accepted in the literature) is Zwicky's distinction between simple and special clitics.[7] For the sake of space I briefly summarize each as follows:

Simple clitic: A clitic which is phonologically reduced from a free morpheme, affixed to a neighboring host, but whose distribution follows the morphosyntactic tendencies of the full form.

Example: He will > He'll—[hiwil]/[hil]/[hl]

Special clitic: A clitic which is phonologically bound to a neighboring host but which displays special, or atypical, syntactic properties regarding its location and attachment.

Example: *Te doy el carro*
(Spanish) 2S give.1S the car

Te lo doy
2S CL.it give.1S

"I give you the car"

[7] However, some researchers do argue against the existence of special clitics (Bermúdez-Otero & Payne 2011).

Similar to the special and simple clitic distinction, Halpern (1992) and Nevis et al. (1994) differentiate these as "bound word" clitics or "lexical/phrasal clitics", while Anderson (2008) distinguishes simple and special clitics as phonological and morphosyntactic clitics, respectively. Although widely used throughout the literature, these binary clitic distinctions do not adequately identify all possible cross-linguistic clitic types and therefore are limited in a discussion on clitic typology. Hereafter I will not distinguish between these clitic properties. It suffices here to state that the Syriac particles display a "special" syntactic property regarding their linear and structural position (discussed throughout the thesis). Hereafter in this section I will however briefly discuss other taxonomies and classification models for differentiating clitic types as these categorize clitics in relation to their linear and structural positioning.

Others have followed Zwicky's model to distinguish different clitic types. Klavans (1985) and Anderson (2005) set out to identify all possible cross-linguistic types of clitics with respect to their linear and structural placement. Klavans's (1985) foundational taxonomy, from which much research is derived, is one of the first to construe specific binary parameters in a universal attempt to identify all possible clitic-host possibilities. Her three binary parameters attempt to show all possible clitic positions:

(7) Klavans's Cliticization Parameters (Klavans 1985)

- Parameter I (Dominance): **INITIAL/FINAL**

  A clitic attaches to an INITIAL or FINAL constituent dominated by a specified phrase.

- Parameter II (Precedence): **BEFORE/AFTER**

  A clitic occurs BEFORE or AFTER the host chosen by parameter 1.

- Parameter III (Phonological Liaison): **PROCLITIC/ENCLITIC**

  A clitic is proclitic or enclitic to its phonological host.

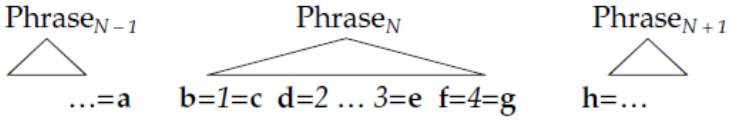
These three binary parameters give eight different possibilities for clitic types and Klavans identifies a language which exemplifies each parameter combination. Her taxonomy is relevant to the present study because it shows the predictability of the unique structure of second-position clitics under investigation. However, her taxonomy additionally demonstrates that no single combination of parameters predicts all second-position placement possibilities; TYPE 3 and TYPE 4 are both capable of producing what are defined as second-position clitics:

(8) Klavans's Predicted Clitic Types (Klavans 1985)

	PARAMETER 1 INITIAL/FINAL	PARAMETER 2 BEFORE/AFTER	PARAMETER 3 PROCLITIC/ENCLITIC	EXAMPLE
TYPE 1	Initial (under N')	Before	Enclitic	Kwakwala NP markers
TYPE 2	Initial (under N')	Before	Proclitic	Greek article
TYPE 3	Initial (under S)	After	Enclitic	Ngiyambaa enclitics
TYPE 4	Initial (under S)	After	Proclitic	Tepecano = *an*
TYPE 5	Final (under S)	Before	Enclitic	Nganhcara clitics
TYPE 6	Final (under S)	Before	Proclitic	Sanskrit pre-verbs
TYPE 7	Final (under V[— T])	After	Enclitic	Spanish pronominal clitics
TYPE 8	Final (under S)	After	Proclitic	Greek negative *ou* =

Billings (2002) details Klavans's framework in his analysis on phrasal clitics and replaces some of her key terminology with his own. I will use the terminology given in his description as it adds clarity to the same parameters given by Klavans. Specifically, instead of Klavans's *Dominance*, *Precedence* and *Phonological Liaison* parameters, Billings describes the same binary parameters with *Anchor*, *Orientation* and *Affixal Polarity*, respectively. In addition, he includes a diagram which visually depicts the different clitic positions determined by the three binary parameters (given alphabetically as a-h rather than numerically as 1-8 given by Klavans):

(9) **Billings's Diagram of Clitic Parameters** (Billings 2002)[8]



a. INITIAL BEFORE SUFFIXAL Kwakw'ala
b. INITIAL BEFORE PREFIXAL Articles in Modern Greek
c. INITIAL AFTER SUFFIXAL Ngiyambaa =ndu
d. INITIAL AFTER PREFIXAL Tepecano =an

[8] modified from Halpern (1995)

e. FINAL BEFORE SUFFIXAL	Nganhcara
f. FINAL BEFORE PREFIXAL	Sanskrit pre-verbs
g. FINAL AFTER SUFFIXAL	Spanish pronominal clitics
h. FINAL AFTER PREFIXAL	Classical Greek negative ou=

Billings explains: "Phrase$_N$ is the relevant phrase—either a clause or a nominal expression—over which the clitic takes scope, whereas 1 through 4 are possible anchor elements within Phrase$_N$. This entails four positions: (a-b) being initial; (c-d), second position; (e-f), penultimate; and (g-h), final." Again, these clitic types (represented by a-h) are analogous to TYPES 1-8 in Klavans's predictions. The clause/expression (over which the clitics take scope) can also be referred to as the domain of the clitic. This is the terminology (*domain*) used in Syriac literature (and I will reference the 'domain of the clitics' throughout the thesis, rather than the 'clause over which the clitics take scope'. This further information based on Klavans's parameters concludes that parameters 1 and 2 are syntactic, while parameter 3 has a prosodic purpose. Therefore, parameter 1 (*anchor/dominance*) refers to either the initial (1) or final (4) element within the given phrase (Phrase$_N$), parameter 2 (*orientation/precedence*) describes the clitic's location before or after the result of parameter 1, and parameter 3 (*affixal polarity/phonological liaison*) describes the direction of attachment of the clitics to their host (proclitic or enclitic). Parameter 3 might seem redundant because the host is already determined by parameter 2 in situations like (b) and (c) where the before/after criteria is the same as the proclitic/enclitic status. However, examples like clitic type (d) demonstrate that a clitic can be anchored to the first element, follow the first element, and still be proclitic by attaching to the next element in the phrase.

Although Klavans's approach is foundational and has influenced much thought and research in cliticization, Billings (2002) states that her framework is "empirically flawed" and argues for a different approach to produce a more restricted set of attested clitic types. He explains that her taxonomy is haunted by two serious problems: failure to distinguish certain types of clitics and a scarcity of facts to attest as much as half of the eight clitic types. Additional researchers similarly agree that all eight types aren't attested (Marantz 1988; Sadock 1991; Spencer 1991; Anderson 1992, 2005). Consequently, Billings offers a constraint-based approach to determine clitic types (which I discuss in chapter 4) in place of Klavans's binary parameters.

However, despite the limitations of Klavans's taxonomy to provide attested examples and language confirmation, the terminology and the binary parameters are beneficial to any typological discussion on cliticization (especially for already discovered and researched types). I

argue in this thesis that the Syriac particles are in fact type [c] clitics by anchoring to the first element in their domain, following this anchor, and further encliticize to their required host [INITIAL, AFTER, ENCLITIC]. Although type [d] clitics are also found in second position, I will argue that the Syriac clitics under investigation are not proclitic to the second element in their domain, thus this type is ruled out.

Another distinguishing characteristic which yields a further type of clitic involves the different types of hosts (*anchors*) to which the clitics attach. Some clitics are positioned with regard to a syntactic head of a phrase and must adjoin to this head regardless of the head's position in the clitic's domain. In the literature these are referred to as 'head-adjacent' clitics. Information on head-adjacent clitics will be given in chapter 4. I will also show in chapter 3 that Syriac clitics do not follow this pattern of attaching only to a syntactic head but rather attach promiscuously to any word or constituent. Hereafter in the following subsections of this chapter I will present research on second-position cliticization without specific regard to distinguishing head-adjacent clitics from their counterparts.

2.3.1. Second Position (2P)

The majority of research on cliticization examines pronominal and verb-adjacent clitics to varying extents. However, recent literature has extended the century-old discoveries credited to Jakob Wackernagel concerning cross-linguistic application. Wackernagel (1892) was one of the first to further enrich the already challenging task of defining a clitic by presenting clitics which showed very idiosyncratic syntactic features in addition to their irregular phonological behavior.[9] Wackernagel observed a class of grammatical items in the oldest Indo-European languages which consistently followed the first full word in their phrase, thus in second position (2P). His influential observation and analysis consequently has led to 'Wackernagel clitic' being a synonymous term for a clitic in second position.[10]

What defines 'second position' in 2P clitic typology is the fuel that feeds most of the written literature on the topic. Languages are not all homogeneous, however, and therefore the spirit and definition of Wackernagel's Law—and consequently 'second position'—have been extended for cross-linguistic application. Second-position clitics are almost exclusively enclitics

[9] Wackernagel followed Duval (1881) which precedes his analysis by a few years.
[10] This is also known as a Wackernagel's Law clitic (Halpern 1998).

and therefore suffixal, attaching to the end of their hosts.[11] However, there is a lack of cross-linguistic consensus regarding the content of the *anchor* (or host) to which the 2P clitics encliticize. In many languages including Ancient Greek, Sanskrit, and Tagalog, the host to which the second-position clitics attach is the first full *word* in a phrase:

(10) (Ancient) Homeric 2P Clitic Attachment (2W) (Taylor 1990)

a. theios =***moi*** enupnion ēlthen Oneiros
divine ***me***-D dream came Oneiros
'divine Oneiros came ***to me*** in a dream'

In (10) second-position is described as the clitic following the first phonological word or lexical item in the sentence. This is also known as (2W) since it constitutes the second word in the phrase.[12] This is the canonical form of a Wackernagel clitic and resembles the century old Indo-European observations.

In other languages like Warlpiri, Czech, and Slovene the clitics do not follow the first word but do follow the first constituent or syntactic daughter:

(11) Slovene 2P Clitic Attachment Options (2D) (Spencer & Luís 2012b)

a. in moje srce ***je*** bilo veselo
and my heart *AUX*.3SG be.LPART happy
'and my heart was happy'

b. *in moje ***je*** srce bilo veselo
and my *AUX*.3SG heart be.LPART happy

Spencer & Luís explain that Slovene clitics can only be positioned after a full phrase. Example (11b) shows that if the clitic ***je*** interrupts the noun phrase *moje srce* 'my heart' the output is ungrammatical, while (11a) is perfectly fine because the clitic follows the full noun phrase. This is typical of second-position clitics which must follow a full syntactic phrase, referred to as (2D) throughout the literature for second-daughter (syntactic).

A further tactic of second-position clitic placement is apparent in a rare class of genetically unrelated languages. These languages display variable clitic attachment to either the

[11] The main exceptions are head-adjacent clitics, specifically verb-adjacent clitics; see 4.3.
[12] Some researchers use 1W and 1C for first word and first constituent, respectively (Schütze 1994). I follow the 2W/2D distinction of Halpern (1995) and Spencer & Luís (2012b).

first full word or syntactic phrase in their domain (2W/2D). In these languages, the clitics are consistently located in second position even when the surrounding constituents can alternate and appear in any order. Warlpiri in the past has been included in this category (Hale 1973; Halpern 1995; Doron & Assif 2000). However, in more recent research Legate (2008) reanalyzes Warlpiri second-position clitics as predominantly following only a constituent (2D); see also Spencer & Luís (2012b). Thus far the only documented languages which are uncontentiously characterized by this variable 2P attachment are Luiseño, Ngiyambaa, and Serbo-Croatian:

(12) Serbo-Croatian Variable Clitic Attachment (2W/2D) (Browne 1974)

a. [Taj] ***mi*** ***je*** [pesnik] napisao knjigu.
that.MASC.NOM ***m***e.DAT ***is*** poet.NOM wrote.MASC book.ACC
'That poet wrote ***me*** a book.'

b. [Taj pesnik] ***mi*** ***je*** napisao knjigu.
that.MASC.NOM poet.NOM ***me***.DAT ***is*** wrote.MASC book.ACC
'That poet wrote ***me*** a book.'

Examples (12a) and (12b) show the variable attachment of the Serbo-Croatian clitics ***mi*** and ***je***. In (12a) the clitics follow the demonstrative *taj* 'that' (interrupting the NP *taj pesnik*), while in (12b) they attach to the complete noun phrase while maintaining grammaticality. Browne (1974) gives these examples as semantically identical sentences which only differ with respect to the placement of the clitics (Spencer & Luís (2012) come to a similar conclusion for language minimal pairs displaying a 2W/2D alternation). I will argue in chapter 4 that Syriac rhetorical particles behave similarly to the second-position clitics found in Serbo-Croatian, Luiseño, and Ngiyambaa (I will give examples of each) by displaying variation of attachment to the first word or to the first constituent of their domain (2W/2D).

Since the status and definition of 'second position' regarding Syriac particles has not been thoroughly resolved in the past, I turn my attention to this area of research.

Well researched languages with much extant literature and defined clitic groups have little agreement on the best approach to explain their language-specific cliticization. Determining which approach (and possible framework) would best account for Syriac second-position clitic placement is an extremely challenging task for future research. Data concerning Serbo-

Croatian—as one of the most researched and oft-cited languages in 2P clitic literature—depict a possible path towards determining the best approach for Syriac.

Nevis et al. (1994) created a reference of all research relating to clitic typology including a total of 37 approaches to Serbo-Croatian 2P clitics from 1890-1991. I present 12 additional studies since their bibliography's publication in the table below. This table is a small representation of second-position literature addressing Serbo-Croatian 2P clitics and visually demonstrates the disparate and contrasting approaches undertaken in recent years. Serbo-Croatian researchers investigate similar questions and clitic types to those investigated in this thesis.

(13) Second Position Clitic Investigation in Serbo-Croatian (1991-present)

Phonology	Syntax	Morphology	Other
Shokeir 2006	Penn 1999	Schütze 1994	Diesing 2009
Stjepanovic 1998	Progovac & Franks 1994		Yu 2008
Halpern 1995	Wilder & Cavar 1993		Billings & Konopasky 2002
Zec & Inkelas 1991			
Radanović-Kocić 1988, 1996			

Now that I have sketched a background and foundation for clitic typology, more specifically for second-position clitics, I transition the focus to the Syriac language and particles under investigation.

2.4. **Syriac Language Overview**

Syriac is a dialect of Aramaic originating from Edessa (Urfa in modern Turkey). Aramaic belongs to the Semitic language family. Syriac has a very rich and extant literature dating back to the second century AD. Though non-religious writings exist, the vast majority of Syriac literature is theological in nature. Among the notable literary works and authors are the Syriac translations of the Bible (known as the Peshitta), the Diatessaron, and the homilies, poetry, hymns and prose

of Ephrem the Syrian (d. 373), Aphrahat (fl. 4th century), Jacob of Serugh (d. 521), and Jacob of Edessa (d. 708). For a detailed and more complete overview of the history of Syriac literature; see Wright (1894), Brock (1997), and Muraoka & Brock (2005).

Syriac is not an isolating language and as a Semitic language is typologically classified as an introflexive language which displays 'nonlinear' and 'nonconcatenative' morphology (Velupillai 2012).[13] This classification and distinction from isolating languages will be important in forthcoming sections discussing morphological tests to determine the categorical status of the Syriac rhetorical particles.

In addition, Syriac has its own unique script with varying methods of notation. I will utilize the Estrangelā (ܐܣܛܪܢܓܝܠܐ) script throughout this thesis when displaying Syriac text and will additionally follow the romanization guide listed in Appendix 1 when transliterating the Syriac characters.

2.5. **Prior Research on Syriac Rhetorical Particles and Cliticization**

The majority of prior Syriac studies and Syriac linguistic literature addresses a broader sense of linguistics, specifically pertaining to the Syriac language—something that might be included in a grammar or language commentary. Among this broader sense of Semitic linguistic research on Syriac are publications on lexical items and usage (Wertheimer 2005; Tucker 2012; Butts 2013), grammar and syntax (Goldenberg 1983, 1990, 1991; Joosten 1998; Wertheimer 2002), and a wide variety of other research pertaining to loanwords (Brock 1976b; Joosten 1998), lexicography and translation (Lyon 1994; Brock 2003), and even historical change (Brock 1990; Butts forthcoming).

However, despite these publications on Syriac grammar and language usage, scant research addresses Syriac clitics, which are often called rhetorical particles. Many genetically related Semitic languages have undergone such investigation—with quite possibly less extant literature: Arabic (Fehri 1999; Hoyt 2006; Soltan 2006), Amharic (Kramer 2009; Workneh 2011), Hebrew (Graf & Ussishkin 2003; Danon 2008), Maltese (Tucker 2012; Shwayder 2014), Tigre (Rose 1998; Tosco 1998), and Tigrinya (Kifle 2012; Gebregziabher 2013).

I have only found three somewhat related approaches and discussions on Syriac discourse particles which in some form reflect current clitic and linguistic typological analysis. Although I

[13] also referred to as root-and-pattern morphology

claim they do not adequately explain and depict the phenomena, they are beneficial as an introduction to the Syriac linguistic literature and establish a background for further Syriac particle discussion and classification. The three studies which I will summarize in the following subsections are respectively:

- Doron & Assif (2000): A prosodic approach to the syntax-phonology interface of Syriac second-position particles, investigating six of the nine Syriac rhetorical particles analyzed in this thesis.
- Kuty (2001): An attempt to discredit a lexicographer's reference to the Syriac particle ***den*** always occurring in second-position but without relating the facts to how 'second-position' is defined in contemporary clitic typology.
- van Peursen & Falla (2009): A more recent lexicographic publication and commentary on the syntax and semantics of two Syriac discourse particles (***den*** and ***ger***), detailing another understanding of 'second-position' uncommon to contemporary clitic typology.

2.5.1. Doron & Assif on Syriac Rhetorical Conjunctions

Doron & Assif (2000) apparently present the first and only approach to cliticization in Syriac that specifically utilizes linguistic terminology and cross-linguistic analysis. They identify a total of eight Syriac conjunctions and investigate, to some extent, six of those eight. They report that two of them—***man*** and ***ʿwd***—are not discussed "due to the scarcity of their occurrence". The corpus which they use is evidently the largest utilized for Syriac clitic research until this thesis. They draw from the original Syriac texts of Julian the Apostate and Addai, as well as searching out examples of the rhetorical particles in the Syriac translations of the Peshitta Old and New Testaments, apocryphal books of the Old Testament and the Sinaitic and Curetonian versions of the New Testament. They show that these particles are conjunctions of a rhetorical nature (RCNs throughout their analysis), briefly giving examples and definitions of the six particles researched.

Before giving their own analysis, they list brief accounts of the main approaches to second-position clitic placement which appeal to various syntactic, morphological and prosodic approaches. They follow Selkirk (1984, 1986) to explain this syntax-phonology interface. They primarily distinguish 'projecting clitics' (those which attach to a constituent) from 'non-projecting clitics' (those which attach to the first word) and further assert that the 'reordering' of the rhetorical conjunctions' positioning is not a syntactic operation, but a prosodic one. They

dismiss a syntactic operation (raising a constituent higher than the clitic) as "it is impossible to maintain that the word at the left…is moved there by a syntactic transformation". In addition, they rule out a syntactic lowering operation to the right of the clitic, Halpern's aforementioned Prosodic Inversion (PI) approach (refer to section 2.2.1).

In their research they propose to distinguish projecting clitics from non-projecting clitics and state that the Syriac particles are the latter: "syntactically, they are phrase-initial, and phonologically, they follow the first word of their domain". They mention that the output of these two different types of clitics is very different, but offer very little explanation on their terminology and understanding. Apparently, for sake of clarity, they do offer a footnote directing the reader to a previous investigation on the syntax-phonology interface.[14] They conclude their research by saying that the positioning of the rhetorical conjunctions within their domain is due to "prosodic mapping from syntactic constituents to phonological domains".

Doron & Assif are so far the only researchers to take a principled approach to Syriac clitics, not only regarding the syntax-phonology interface. They cover analogous and contrasting cross-linguistic research and theories and have greatly extended corpus investigation to include multiple volumes of literature. Still, for the size of the corpus they utilize, they give a very limited number of examples to underscore their approach. They claim that Syriac RCNs immediately follow the first prosodic word in their domains, but never really discuss examples in the corpus where one of the particles follows a constituent consisting of more than one prosodic word (which I will show *do* exist). On the contrary, they state definitively that "[o]f the three thousand or so examples [they] have examined, [they] have not found a single example which contradicts this claim. In no example do RCNs immediately follow a constituent which consists of more than one word" (101). Kuty (2000), van Peursen & Falla (2009) and subsequent research that I present in this thesis show that the Syriac clitics can, and do, follow more than one word in many situations.

Despite its problems, Doron & Assif's investigation is rather innovative as the first linguistic approach to Syriac language research addressing clitic typology. They appeal to the syntax, prosody, and orthographic intonation cues and markings to detail arguments for why these particles are enclitic, rather than proclitic to the following word. They also give the first

[14] Unfortunately this paper is no longer available: "This was a more detailed version of the paper we had written, but unfortunately it has since been lost." (Edit Doron, personal communication, 2014).

Syriac sentences that I have seen which are glossed according to contemporary linguistic research standards and show the particles' domains within many of these sentences. They also present, albeit rather briefly, arguments for considering these particles as clitics rather than as affixes.

2.5.2. Kuty on *den*

Kuty investigates the placement of the particle ***den*** using the Peshitta New Testament as his corpus. He attempts to show that the particle ***den*** is not always limited to second-position within a clause. This counters remarks by various Syriac linguists and lexicographers—Nöldeke & Euting (1898), Brockelmann (1899), Ungnad (1992)—who agree that this class of particles usually occurs in second position after the first stressed unit. It is important to understand Kuty's interpretation of 'second' for the particle's placement. His understanding is based entirely on orthography without regard to prosodic words or contiguous constituents, simply counting each orthographical word one by one to determine the linear position.

Kuty's understanding is actually beneficial to my proposal because it presents evidence of a disconnect between traditional Syriac research and contemporary linguistic approaches, which I propose to connect and clarify to some degree. As previously discussed, contemporary typology and research on cliticization details cross-linguistic evidence showing that 'second-position' has more than one definition or explanation in the literature.

The bulk of his research details in a very systematic way all the situations discovered in which ***den*** does or does not occur in second-position (orthographically second in the sample sentences), which I have summarized:

(14) Kuty's research on ***den***

***den* in second position**	***den* not in second position**
in verbal clauses, after the verb	after enclitics and their predicate it cannot separate
in nominal clauses/after subject predicate	after adverb ܐܦ (*ʾp*) is not separated from what it modifies
fronting of clauses	when ܟܠ (*kl*) is not separated from what it modifies
noun + N/ADJ/NUM/ combinations	in phrase initial repetitive constructions
discontinuous proleptic pronoun constituents	the negative ܠܐ (*lʾ*) is not separated from what it negates
apposition and other complex constituent splitting	the combination of ܘܝ + ܠ (*wy* + *l*-), "woe unto", is not separated

Although he presents situations in which ***den*** occurs in second position, the purpose of the research is to show that this is not the default position (as others have assumed). His understanding of 'second position', again based purely on orthography, facilitates his conclusion that ***den*** "is not in the least restricted to the second position…it occurs in third, fourth—and at times even fifth—position".

He concludes by stating that the results are rather inconclusive but that ***den*** seems to default to second position, while being challenged by a linear and phonological parameter. The linear challenge is caused by certain contiguous sequences not being able to separate while the phonological restrictions are caused by the "tendency of shorter words to keep ***den*** away from the second slot". Unbeknownst to Kuty, this phenomenon in Syriac of following a single word or following an entire constituent is attested in other languages and is fairly consistent rather than chaotic.

The first main issue with Kuty's research is the limited corpus used; the Peshitta is only one small portion of a vast literature. The second is that the majority of his research, as explained before, seems to have been done with the lack of familiarity to second-position clitic typology and literature. Linguistic research on various languages has shown that a second-position clitic does not always have to be a true Wackernagel clitic (i.e., immediately following the first word in a phrase) but can be in 'second position' by following a syntactic daughter or constituent—including contiguous phrases like those seen in Syriac (Halpern 1995; Spencer & Luís 2012b). Furthermore, the notion of a contiguous constituent being moved and the impossibility of extracting information within that constituent is not new to syntactic theory. Similar phenomena involve syntactic islands, constituents from which certain items cannot be extracted. Halpern (1995) states that "certain syntactic structures are, in a sense, islands to clitic placement, though the reverse sense." He calls these islands for clitic placement "fortresses" and gives examples of fortresses for Serbo-Croatian, Luiseño and Tagalog. By assuming that clitics can occur in second position after a multi-word constituent, the majority, if not all, of Kuty's counterexamples to the second-position status of ***den*** can be explained rather well—even if this position follows the third or fourth orthographic word in a phrase.

His research and willingness to find all of the 'exceptions' has showcased the need for a unified principled approach to explain these particles' positioning and status. This thesis argues that Syriac rhetorical particles vary in their attachment to a single word or a contiguous syntactic

phrase and rather than being problematic, it conflates both situations to second-position placement. By extending Kuty's analysis beyond the particle ***den*** to eight other clitics I will show how they follow similar 'fortresses', either being in second position after a constituent (2D), or following a single prosodic word, hence occupying second position after the first word (2W) as well.

2.5.3. van Peursen & Falla on *den* and *ger*

Van Peursen and Falla explore the syntactic and semantic aspects of two Syriac particles, ***den*** and ***ger***, but focus mainly on the semantics for their lexicographic research; I will only present the relevant information in their syntax section. The Syriac corpus that they investigate is the Peshitta New Testament and appeal to the other extant versions of the same text, the Sinaitic and the Curetonian, where needed.

Their first syntactic focus addresses the particles' part-of-speech and grammatical category. They show inconsistency in prior terminology as ***ger*** is referred to as a 'conjunction' (Brockelmann 1899; Costaz 1955; Falla 1991; Ferrer & Nogueras 1999) as well as a 'clausal conjunction' (Payne 1957). They additionally show that the particle ***den*** displays a greater inconsistency in the literature as a 'conjunction' (Brockelmann 1899; Ferrer & Nogueras 1999), a 'conjunctive particle' (Falla 1991), or some type of adverbial (Nöldeke & Euting 1898; Costaz 1955; Duval 1881). They further explain that although both of these particles can connect the relationship between clauses, they also have another internal function "within the clause that is adverbial rather than conjunctive". They propose to recognize them as having dual syntactic functions, adverbial and conjunctive, and labeling them accordingly. The resulting label is 'conjunctive adverb', which is an adaptation of other terminology used for similar words: 'connective verb', 'connective particles', 'cue phrases' and discourse connectives'.

The second focal point in their syntax section is the positioning of both particles within the clause. They don't take any specific principled approach or allude to any syntactic theory, but they discuss prior conclusions on the positioning while establishing their own terminology. They define 'phrase atoms' as "the smallest indivisible units of a phrase…[which are] elements that cannot be subdivided into smaller units" (68). The term 'phrase atoms' seems analogous to Halpern's non-separating 'fortresses', though this term is unique to Peursen.[15] The discussion

[15] with one apparent exception in a paper discussing Hebrew (Talstra 2002)

then follows Kuty (2001), explaining Kuty's 'exceptions' for the second-position placement in terms of phrase atoms. Throughout the remainder of the section they present numerous phrase atoms preceding the particles and even give examples of the phrase atoms' skeleton:

- First phrase atom = Preposition + Preposition + Noun [***den***]
- First phrase atom = Preposition + Construct Noun + Noun [***ger***]
- First phrase atom = Construct Noun + Construct Noun + Noun [***ger***]

As with Kuty, one of the main weaknesses of van Peursen and Falla's research is the restricted corpus, something they acknowledge in their conclusion. The other apparent issue is the terminology used throughout the study, showing yet again a large disconnect. A gap seems to separate Syriac linguistic research from traditional applied and theoretical linguistic research evidenced by divergent terminology to describe similar phenomena. This divergence is not caused by a lack of language specific terminology, but rather to the a lack of established terminology apparent in most cross-linguistic research on clitic typology, (i.e., clitics, 2P, 2W, 2D, fortresses, domain, etc.). The Syriac research never branches into cross-linguistic typology research on second-position cliticization or principled linguistic approaches that might contribute to a better overall understanding of the language. Like Kuty, van Peursen and Falla illustrate the need of a principled approach and investigation to explain these particles. An appeal to different linguistic interfaces in line with current research on clitic typology to predict and explain these particles' positioning would greatly benefit lexicographers and Syriac researchers in the future.

Given the sizable amount of Syriac extant literature one would expect multiple linguistic analyses to a multitude of linguistic questions. However, as depicted from the list of prior literature in this chapter, very little investigation has been undertaken specifically regarding cliticization. In the following chapter I reanalyze some of this prior literature and their respective claims in light of new evidence from corpus investigation and contemporary linguistic methodology.

3. Analysis

In this portion of the thesis I set out to apply contemporary clitic typology to previous conclusions and investigation on Syriac literature. In doing so I establish nine Syriac rhetorical particles (SRPs) as clitics and I distinguish them from other grammatical classes, (see section 3.3). I first apply a series of linguistic tests to distinguishing them from affixes, applying the Zwicky & Pullum (1983) criteria. I next apply similar tests and criteria to the Syriac particles to distinguish them from independent words (Zwicky 1985; Miller 1992). I begin by describing the corpus utilized throughout the following chapters, a new resource that showcases previously unresolved phenomena and provides further evidence for second-position placement of Syriac clitics.

3.1. **Syriac WordCruncher Corpus**

The BYU Neal A. Maxwell Institute Center for the Preservation of Ancient Religious Texts (CPART) has provided significant resources for this thesis. In particular, the corpus which I use throughout the next two chapters was made available through the digitized texts accessible from the Center. Previous studies have limited their resources to the Peshitta and a few native Syriac texts. The size of this corpus greatly exceeds any previous corpus efforts for Syriac and contains approximately 6,000,000 words. For purposes of clarity I will refer to the corpus used throughout this thesis as the Syriac WordCruncher Corpus (SWCorpus). WordCruncher is a searchable eBook reader specifically designed with students and scholars in mind and has greatly facilitated scholastic research on Syriac particles with the digitized texts currently available.[16] The list of all texts included in the SWCorpus is rather large, and is available via download.[17]

I add notes here on the Syriac sentences taken from the SWCorpus. I will not put a morphemic gloss in all examples given in the following sections since the majority of the examples are for observing the position of the Syriac particles and therefore the semantic content is not essential to this analysis. The Syriac particles (explained in the following section) will be outlined with a dotted box in the Syriac text, and where given, the glosses and transliterations will display bold and italic text for the particles (e.g., ***den***, ***ger***). In order to better visualize the phenomena discussed, I have added extra white space between the Syriac words. Additionally,

[16] http://www.wordcruncher.com
[17] http://linguistics.byu.edu/thesisdata/PearsonSWCDocuments.xls

the romanized transliterations will only include the transliteration of Syriac characters in the sentences (specifically not including transliterated vowel diacritics) unless specifically needed (as in the case of each Syriac particle) or the transliterated Syriac is borrowed from a different source.

3.2. **Syriac Rhetorical Particles**

Prior research from biblical scholars, lexicographers and linguists has focused on a few of the prominent Syriac rhetorical particles (SRPs) which I investigate throughout this thesis. These include analyses on the particle ***den*** which explore its syntactic positioning, historical change, and semantic content (Brock 1976a; Joosten 1988; Kuty 2001; van Peursen & Falla 2009; Butts forthcoming). Research on the particle ***ger***, which is another prominent Syriac particle, includes similar analyses of its syntax, semantics, and origin (Brock 1976a; Joosten 1998; van Peursen & Falla 2009). Discussion on the particle ***man*** and its derivation from Greek come from Butts (2013). Turner's (2012) recently published discourse analysis details new conclusions on the particle ***kay*** and its syntactic context within the Peshitta Old and New Testaments. Additional research is extended to the particle ***lam*** by Joosten (1998), and Morrison (2014) details the most recent lexicographic research on SRPs by exploring the particle ***lam*** as well.

Utilizing the SWCorpus I have identified nine Syriac rhetorical particles (SRPs) in the literature as clitics. In what follows, I will motivate this choice and show that this exceeds what has been detailed in previous literature. In doing so, I also present new linguistic contexts and examples via the SWCorpus for the clitics under discussion. Hereafter I will be analyzing their clitic-like properties and their tendency to consistently appear in second position of their domain.

(15) Syriac Rhetorical Particles (SRPs)

Gloss[18]	Syriac Particles	Romanization[19]
indeed, on the one hand	ܡܢ	***man***
then, thereupon; emphasizes interrogatives and particles	ܗܝ	***den***
indeed, therefore, truly, for	ܓܝ	***ger***

[18] Glosses are taken from the Comprehensive Aramaic Lexicon (CAL): http://cal1.cn.huc.edu/index.html.
[19] For consistency, I will use these romanizations in *all* examples (even standardizing previous literature borrowed).

enclitic emphasizing particle, enclitic particle marking direct speech or part of a quotation	ܠܡ	***lam***
because, for; interrogative, dubitative	ܟܝ	***kay***
therefore, namely (that is to say)	ܟܝܬ	***kayt***
thus/therefore, now/now then	ܗܟܝܠ	***hokyl***
until now, still (while); not yet	ܥܕܟܝܠ	***ᶜdkyl***
so, now, therefore (Luke 16:11)	ܥܘܕ	***ᶜwd***

Although this thesis presents data from the largest class of SRPs identified thus far, Doron & Assif (2000) discuss the properties of six of the nine SRPs listed in (15)—***den***, ***ger***, ***lam***, ***kay***, ***kayt***, and ***hokyl***:

(16) Syriac Rhetorical Particles previously studied[20] (Doron & Assif 2000)

a. abgar ***den*** malko yatir men kul noš mᶜoq =wo ᶜ1a(y)-w
Abgar ***but*** king more than every man grieved.PART.MS =was.3MS on-him

b. neqrub ***hokyl*** neḥud sedr-oh d= melt-an
will.come.near.1P ***therefore*** will.join.1P sequence-GEN(3FS) of word(F)-GEN(1PL)

c. lo ***ger*** marpe aloho ido b= marᶜit-eh
not **for** slacken.PART.MS god hand off flock-his

d. kmo ***lam*** zabnin bᶜit
how many ***q-u*** times wished.1S

e. ḥnan ***kay*** bcire w= hedyuṭe
we ***mod*** poor-ones and simple-ones

f. en ***kayt*** kad b= arᶜo ita(y)-w =wo yešuᶜ mor-an
if **i.e.** when in earth BE-GEN(3FS) was.3MS Jesus Lord-our

In addition to these six particles, Doron & Assif mention the existence of two additional particles (***ᶜud*** and ***man***) but do not include any information or examples due to the scarcity (or non-existence) of these particles in their corpus. I offer such examples here from the SWCorpus,

[20] ***q-u*** for ***lam*** implies 'quote-unqoute', ***mod*** is for 'modal expressions' of feelings (doubt, desire etc.), and ***i.e.*** for ***kayt*** implies 'that is to say/i.e.' (Doron & Assif 2000)

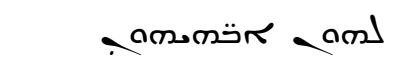
additionally adding the particle *ᶜdkyl* to the same group, as research in the SWCorpus showed it to have similar properties (both rhetorical and clitic-like):[21]

(17) Three additional particles from the SWCorpus[22]

a. *ᶜud*

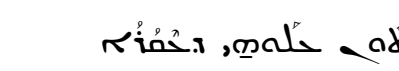
[23]

"And why, ***forsooth***, do the children of the blind see"

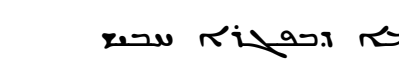
 [24]

"Because of this, ***indeed***, those who forsook their fathers"

b. *ᶜdkyl*

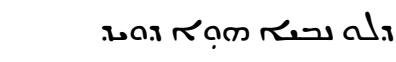
 [25]

"You have not ***yet*** approached the root"

 [26]

"But as many as are ***still*** enclosed in the body"

c. ***man***

 [27]

"***Indeed***, foolish people among the Jews and others claim that David was not a prophet..."

[28]

"***Likewise also***, these filthy dreamers defile the flesh, despise authority, and blaspheme against the glory"

Example (17c) requires a brief note and explanation. The particle in the first sentence is usually translated as "indeed", very similar to the rhetorical nature of ***den*** and ***ger***. However, the particle

[21] Although these nine particles do not definitively constitute a closed class, the likelihood of finding others appears minimal, especially since the SRPs consistently interact with each other and I have found no additional SRPs.
[22] Reminder on Syriac examples: For best visualization I have added extra white spaces between the Syriac words. The Syriac particles are identified by square dotted boxes and in the translations as bolded and italicized text. Other than the Syriac particles, romanized transliterations will only include the transliteration of Syriac characters (not including transliterated vowel diacritics) unless specifically needed or borrowed from a different source.
[23] PS. Melito (p. 50)
[24] (Early (pre 400)/Ps.-Melito of Sardis (cureton). draft 1.1//Page 30)
[25] (Book of Steps 20.4 (Kmosko edition)
[26] (John the Solitary/First Dialogue with Thomas (1.2.1.1)/Page 10/1)
[27] 63100: IshPs (Ishodad of Merv on Psalms)
[28] Jude 1:8 Dr. George Lamsa's English Peshitta translation.

man in the second sentence is part of the ***man…den*** construction which has the meaning of 'on the one hand…on the other". I include both uses of the particle as Butts (2013) treats them both as the same particle introduced from early Greek, but with a slightly different meaning when interacting with ***den***. This is actually not surprising as Arabic and other Semitic languages have a very large group of phrasal verbs (verb+particle or preposition) which, depending on the particle, express a different meaning (e.g., English *turn in, turn on, turn out*).

I propose that all nine of these Syriac lexical items form a unified class of rhetorical particles, displaying similar adverbial and conjunctive properties. The similarity in meaning and rhetoric of the particles is evident by comparative investigation of different Syriac versions of the four gospels in the New Testament. Three of the main Syriac versions of the four gospels are the Curetonian, the Sinaitic and the Peshitta. Comparing the same excerpts from different versions of the gospels shows how many of these rhetorical particles had similar meaning and function to the respective writers:

(18) Three Syriac versions of Luke 16:11 with Particle Variations[29]

a. **Peshitta**

ܐܢ ܗܝܢ ܐܝܬ ܐܢܫ ܠ ܡܗܝܡܢ ܒܡܡܘܢܐ ܥܠܝܠܐ ܗܠ ܒ ܠܟ ܠܡܢ ܕܫܪܐ ܢܗܝܡܢ ܠܟ

b. **Curetonian**

ܐܢ ܗܝܢ ܐܝܬ ܐܢܫ ܠ ܡܗܝܡܢ ܒܡܡܘܢܐ ܥܠܝܠܐ ܗ ܒ ܠܟ ܠܡܢ ܕܫܪܐ ܢܗܝܡܢ ܠܟ

c. **Sinaitic**

ܐܢ ܗܝܢ ܐܝܬ ܐܢܫ ܠ ܡܗܝܡܢ ܒܡܡܘܢܐ ܥܠܝܠܐ ܗ ܒ ܠܟ ܠܡܢ ܕܫܪܐ ܢܗܝܡܢ ܠܟ

"If ***therefore***, you are not faithful with the wealth of iniquity, who will believe that there is any truth in you?"[30]

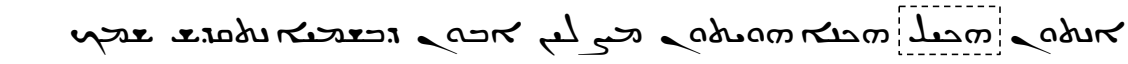
(19) Three Syriac Versions of Matthew 6:9 with Particle Variations

a. Peshitta

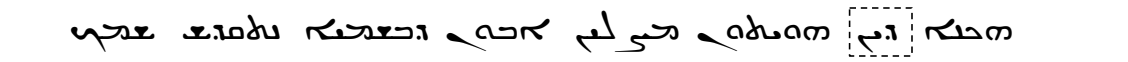
ܗܟܢܐ ܨܠܘ ܐܢܬܘܢ ܒܗ ܒ ܐܒܘܢ ܕ ܒ ܗܠ ܒ ܕܫܡܝܐ

[29] Comparative Syriac New Testament research made possible via the Dukhrana Biblical Research Peshitta tool.
[30] Dr. George Lamsa's English Peshitta translation

b. Curetonian



c. Sinaitic



"***Therefore*** pray in this manner: Our Father in heaven, hallowed be thy name."[31]

Without delving into the semantics and surrounding elements' content, (18) and (19) show that the three Syriac particles ***den, ʿud,*** and ***hokyl*** have been used interchangeably in the same Syriac passages of the different versions, translated as 'therefore'. Bearing in mind that translation sometimes only result in approximations, the semantic relation and similarity displayed in these examples might not necessarily be as prominent in the original Syriac as it appears in the translated English text. However, considering the great care (specifically concerning semantics and pragmatics) of Biblical and religious translations, combined with the apparent need for a Syriac particle in each example, and the translation of each, I argue that this observation is a noteworthy conjecture. I have not found any comparative investigation of the four gospels' particle and clitic usage in the literature. Although I will not pursue this further in this thesis, additional research in this area could elucidate these particles' semantic relations.

In addition to the shared semantics of the SRPs demonstrated in examples (18) and (19), Doron & Assif (2000) discussed the grammatical and rhetorical properties of six of the SRPs. I have grouped and listed their observations:

(20) SRPs: Salient Features

- SRPs can be omitted in every case without reducing grammaticality.
- ***den*** marks a discontinuous transition (beginning of new discourse or a change/contrastive topic).
- ***ger*** gives evidence or justifies previous discourse, similar to English *for*.
- ***kay*** is added to expressions of doubt, desire and interrogation.[32]
- ***hokyl*** means 'therefore'.
- ***kayt*** means 'that is to say'.
- ***lam*** functions like the expression 'quote unquote' in English.

Hereafter I will show further morphological and syntactic parallels which the SRPs share by applying contemporary linguistic typological tests to the particles. Specifically, I propose to

[31] Dr. George Lamsa's English Peshitta translation
[32] Turner (2012) adds that it is a dubitative, interrogative or emphatic particle.

show that morphologically they are clitics (rather than words or affixes) and that syntactically they occur in the second position of their domain.

3.3. **Categorizing Syriac Particles: Clitic, Word, or Affix?**

Cross-linguistically, much discussion has arisen about whether clitics constitute their own grammatical class or whether they should be included in an already established category like 'word' or 'affix', though exhibiting atypical properties of those classes. In their seminal investigation on the English negative contraction *–n't* (*not*), Zwicky & Pullum (1983) establish cross-linguistic criteria to help distinguish clitics from affixes. They show that *–n't* is not an enclitic as most had previously presumed and give six criteria to distinguish clitics from affixes. Miller (1992) offers an additional criterion which I will include in this analysis.

However, Zwicky & Pullum's research only addresses half of the question since clitics also contain word-like properties in addition to the affix similarities and distinctions which they propose. Consequently, Zwicky (1985) offers similar tests to distinguish clitics from independent words. His criteria include phonological, accentual, and syntactic criteria. Zwicky (1985) additionally shows that most languages have a class of 'particles' which he argues should not be considered clitics, but rather words. Although the nine Syriac lexical items are labeled as rhetorical particles throughout the literature, I will show that they are in fact clitics. I will do so by first applying typological tests for differentiating Syriac clitics from affixes. In the subsequent subsection, I will apply similar typological criteria to the SRPs for differentiating clitics from independent words. However, prior to presenting these typological tests I note (similar to Zwicky (1985)) that they are diagnostic tests labeling symptoms and similarities and not staunchly definitive as one would imagine the results of tests being. Since the properties of clitics, affixes, and words differ cross-linguistically, these tests attempt to identify the clitic-like properties in relation to affix or word-like features. As previously discussed, clitics are typically identified on a continuum or gradient scale. Therefore, mixed results from these tests do not definitively categorize an element as one or another, but define them as more closely similar to one specific category when compared against the properties which the other two display.

3.3.1. Clitic versus Affix

The distinction between affixes and clitics has been a prominent topic of discussion in research on the morphological categorization of clitics and clitic typology (Carstairs 1987;

Joseph 1988; Yadav 1991; Ortmann & Popescu 2000; Kari 2002; Heggie & Ordóñez 2005). Zwicky & Pullum's criteria (1983), as well as a criterion from Miller (1992), are the main diagnostics for investigating a lexical item's tendency towards cliticization. The criteria are listed in (21), summarized by Spencer & Luís (2012b).

(21) Criteria Distinguishing Clitics from Affixes

- **Criterion A:** Clitics can exhibit a low degree of selection with respect to their hosts while affixes exhibit a high degree of selection with respect to their stems.
- **Criterion B:** Arbitrary gaps in the set of combinations are more characteristic of affixed words than of clitic groups.
- **Criterion C:** Morphophonological idiosyncrasies are more characteristic of affixed words than of clitic groups.
- **Criterion D:** Semantic idiosyncrasies are more characteristic of affixed words than of clitic groups.
- **Criterion E:** Syntactic Rules can affect words, but cannot affect clitic groups, due to lexical integrity.
- **Criterion F:** Clitics can attach to material already containing clitics, but affixes cannot due to closure.
- **Criterion G:** If an item must be repeated on each conjunct in a coordinate structure, then it must be an affix and cannot be a [post-lexical clitic] PLC. If an item must fail to be repeated on each conjunct in a coordinate structure, then it must be a PLC and cannot be an affix.

I next address each criterion in turn with Syriac-specific observations.

Criterion A: Degree of host selection

Affixes display a very high degree of selection, usually attaching to a specific class or category—or specific elements within a class, sometimes arbitrarily. For example, English plural +*s* attaches only to nouns. Clitics on the other hand are not nearly as selective and can attach to virtually any linguistic element without regard to their host's category. Syriac rhetorical particles demonstrate a very low degree of host selectivity by attaching to almost any linguistic category. Examples taken directly from the SWCorpus illustrate this type of host selection for the SRPs:

(22) Syriac Particle Host Selection (Low Selectivity)

a. Attachment to verb (***lam***) and attachment to particle (***ger***)[33]

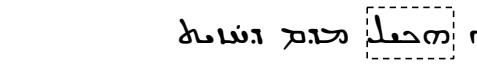
ܐܡܪ ܠܡ ܓܝܪ ܐܠܗܐ

ʾmᶜr ***lam ger*** ᶜlhᶜ

[33] (Ephrem the Syrian/Hymns on Faith/IV/ܒܪܫܝܬ ܕܝܢ ܥܒܕܐ 6 ܒ/2)

"***For*** God said"

b. Attachment to demonstrative pronoun (***hokyl***)[34]



hn^{c} ***hokyl*** mrn d-ḥzyt

"This thing ***therefore*** that I saw"

c. Attachment to prepositional phrase (***ger***)[35]

mn qdm ***ger*** hn^{c} zbn^{c} qm hw^{c} twd^{c}

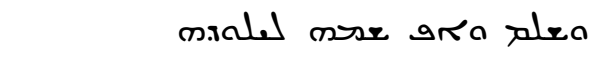
"***For*** some time ago Theudas rose up"

d. Attachment to conjunction (***den***)[36]

brm ***den*** mškḥ^{c} l-m-hwd^{c}

"***But*** nevertheless it is possible to be done"

e. Attachment to adverb (***kay***)[37]



km^{c} ***kay*** šw^{c} w-šlm w-^{c}p šmh l-ylqd-h

"How much his name agrees with and corresponds to his Begetter"

This clitic-like attachment of the SRPs differs from the host selection of the established class of Syriac inflectional affixes. The examples in (22) demonstrate that the SRPs can attach to almost any host which precedes them. Contrastingly, Syriac inflectional affixes display affixation to a specific grammatical class in a very highly selective nature. Example (23) presents the Syriac inflectional affix to create the infinitive form of a verb. The affix is /m-/ (ܡ) and it prefixes directly—and only to verbs:

(23) Syriac Inflectional Affix: High Selectivity of Host (Coakley 2013)

---

[34] (Ephrem the Syrian/Letter to Publius/1/25 ܐܡܪ ܐܠܗܐ ܗܘܐ ܕܐܬܪ ܕܐܬܪ ܕܐܬܪ

a. ܡܟܬܒ

m-ktb
m-write

'to write'

b. ܠܡܣܓܕ ܫܠܡ

slqt l-m-sgd
m-worship

'she went up ***to worship***'

c. ܡܫܬܘ ܡܫܬ

m-štp štqu
m-be.quiet

'they were completely ***silent***'

Each of the Syriac examples in (23) show the prefix *m-* affixing directly to a verb. Example (23c) shows that in addition to forming an infinitive form of the verb (seen in (23a) and (23b)) it can also create a participle. This type of semantic idiosyncrasy is another property of affixes (which I discuss in criterion D). By contrasting the examples in (23) of an inflectional affix's relationship with its host and the examples in (22) with the attachment of SRPs to their hosts, one can see the restrictions of selecting a host for Syriac affixes that are not present in the SRPs. Therefore, this criterion indicates that SRPs are clitics, rather than affixes. Muraoka & Brock (2005) address inflectional and derivational affixes in Syriac in a more detailed manner (see also Coakley 2013).

Criterion B: Arbitrary gaps

The general tone of this criterion is that consistency is essential for clitic-like characterization. For example, the English plural suffix *+s* exhibits arbitrary gaps in its paradigm as it does not affix to and pluralize all types of nouns (e.g., *childs). The Syriac particles are consistent regarding their host attachment and relationship. For example, ***lam*** is a presentative and asseverative particle which introduces direct speech, citations, quotes, or borrowed language (mostly from the Bible) and can consistently attach to any host while still retaining its semantic content and purpose (Morrison 2014). I have not found any evidence of arbitrary gaps involving Syriac rhetorical particles in the SWCorpus and therefore I propose that this criterion is at least weak evidence towards a clitic categorization for SRPs.

Criterion C: Morphophonological idiosyncrasies

This criterion covers the general tendency that morphophonological idiosyncrasies and irregular constructions occur within affixed groups more often than with clitic groups. The hosts to which each of the SRPs attaches are not affected morphophonologically, nor do the hosts cause any morphophonological variation or change when interacting with each SRP. Therefore, the SRPs behave more clitics than affixes.

Criterion D: Semantic idiosyncrasies

The conclusion is much the same here as for morphophonological idiosyncrasies. Each SRP is described throughout the literature based on their rhetorical nature and does not display any idiosyncratic semantic property depending on their location or attachment (Joosten 1988; Doron & Assif 2000; van Peursen & Falla 2009; Butts 2013). Consequently, this is another criterion which strengthens the analysis of SRPs as clitics rather than affixes.

Criterion E: Syntactic Rules and Lexical Integrity

This criterion holds that syntactic rules can affect affix-word combinations but do not affect clitic=host combinations (Zwicky & Pullum 1983). Spencer (2000) explains that words are typically closed units inaccessible to syntactic processes 'looking inside' them. Miller (1992) offers additional observations of lexical integrity with regards to cliticization from a Phrase Structure Grammar standpoint. He proposes that affixes are lexically attached to their hosts (stems) and inserted together under a single node in the syntax and therefore an affix+host combination is treated as a single word in the syntax. On the other hand, for him clitics and their hosts never constitute a single syntactic word.

As an example for this criterion, Fuß (2005) discusses I-to-C movement resulting from subject-verb inversion in Standard French. He states that syntactic rules in Standard French affect the hosts of the subject clitics but do not affect the subject clitics themselves; in the sense that the subject clitics do not follow the verb moving to C:

(24) French Verb-Subject Inversion

a. Tu attends qui?
you await who

b. Qui attends-tu?
who await-you

"Who are you waiting for?"

This holds true for SRPs. The particles' position is dependent on a phonological rule placing them in second or a phrase-final position and not attaching to a specific word class. Since the SRPs can attach to virtually any host, the syntactic rules that might affect their hosts do not affect the Syriac particles and the Syriac host+particle combinations are not treated as a single syntactic word. New examples taken from the SWCorpus illustrate this:

(25) SRP Clitic-Host Relationships (***den***)

a. [38]

ʾmr l-hwn ***den*** (h)w[39]
said to-them ***then*** he

hw ***den*** ʾmar l-hwn
he ***then*** said to-them

"Then he said to them"

b. [40]

mr-n ***den*** ʾmar
Lord-our ***then*** said

[41]

ʾmar ***den*** mr-n
said ***then*** Lord-our

"Then our Lord said"

Examples (25a) and (25b) demonstrate a similar phenomenon to the subject-verb inversion attested in Standard French. These Syriac examples show that ***den*** stays in a fixed position in the sentences regardless of the free ordering of its surrounding lexical items and hosts. Consequ-

[38] (Hagiography/Death of Constantine II (VatSyr37))
[39] (ܠ) [l-] is an example of a prepositional prefix which displays similar limitations of host selection previously seen with (ܡ) [m-].
[40] (Book of Steps/Col. 48/1)
[41] (Book of Steps/Col. 101/193)

ently, this criterion offers additional evidence that ***den*** (and the other SRPs) behave like clitics in respect to lexical integrity and syntactic rules.

Criterion F: Closure (clitic attachment)

This diagnostic distinguishes clitics and inflectional affixes from independent words, since clitics can attach to other clitics while inflectional affixes generally cannot. This was one of the essential criteria in Zwicky and Pullum's (1983) conclusion that the English contraction *-n't* is an affix despite previous assumptions. The negative contraction is limited in its ability to attach to other clitics (e.g., *must've'*nt*, *he'll'*nt*). The SWCorpus shows Syriac particles occurring in concatenated sequences (clusters) quite often:

(26) Particle Sequences in the SWCorpus (clitic clusters)

a. ܥܡܪ ܠܡ ܓܝܪ[42] (***lam ger***)

ᶜmar ***lam ger*** ᶜlhᶜ

b. ܘ-ܡܢ-ܘ ܟܝ ܕܬܩ ܡܢ ܕܝ ܗܘ ܕܝܕܗ[43] (***kay den***)

w-mn-w ***kay den*** hw d-tqn mn tdyhwn

c. ܓܪ ܐܦ ܟܝܬ ܗܘ ܓܪ[44] (***ger kayt***)

ᶜp ***ger kayt*** ᶜp hw dwyd

This concatenated sequence given in (26) shows various SRPs linked together (known in the literature as a clitic cluster). If the particles were inflectional affixes they would close off the ability of further attachment (phonological) to them. This is clearly not the case as these particles consistently are paired together in sentences throughout the literature and thus supports the clitic status of each SRP. I have not found any evidence in the SWCorpus which demonstrates that the linked relationship of the SRPs is interruptible. SRPs behave similarly to ungrammatical sequences in English like 'he*'ll'**nt**'ve* and 'we'*d'**nt**'ve*', where the affix *–n't* cannot interrupt an English enclitic sequence (i.e, -*'ll've* and -*'d've*). In Syriac, one does not find sequences where an example like ***=ger=kayt*** in (26c) is interrupted by anything that is not an SRP (e.g., ***=ger-**

[42] (Ephrem the Syrian/Hymns on Faith/IV/ܡܐܬܐ ܕܝ ܗܘܦܐ 6 ܒ–ܡܐܬܐ ܕܝ ܗܘܦܐ 6 ܒ/4)
[43] (Early (pre 400)/Titus of Bostra, Against the Manichaeans/Titus of Bostra, Against the Manichaeans)
[44] (Seventh to tenth Century/Jacob of Edessa, Letters)

(h)wo=kayt). In addition, prefixes like (ܠ) [l-] are prohibited from affixing directly to the SRPs (*l-***den*).**

Although beyond the scope of this thesis, investigation into clitic clustering in Syriac would be very beneficial to both contemporary Syriac and linguistic investigation regarding clitic typology. These sequences are abundant in the literature. Doron & Assif (2000) state that there is no semantic difference or consequence regarding their order (***lam/den, den/lam***). However, I question this conclusion when looking at further evidence from the SWCorpus. Take for example the following construction where three Syriac particles occur in the same string:

(27) Three-element SRP Cluster

a. ܗܘܢܘ ܕܝܢ ܠܡ ܥܕܟܝܠ ܐܦܠܐ ܠܚܛܗܐ ܕܡܬܚܙܝܢ[45]

honaw ***den lam ᶜdkyl*** ᵓoploᵓ laḥtaheᵓ dmetḥzeen

"That is, while you have not yet conquered even the visible sins…"[46]

The particle ***lam*** is a quotative particle, representing a rhetorical marker introducing (or stating a previous) quoted element from some other source. If ***lam*** is moved to follow either particle in (27)—or both—would that mean that the clitics are understood as pertaining to the quoted element or outside it? I have not seen any investigation into these types of questions and it points to the need for further linguistic investigation into these Syriac language constructions. The SWCorpus contains many minimal pairs showing alternating ordering in clitic clusters which could greatly benefit semantic research on Syriac particles and clitic typology.

Criterion G: Coordination to each conjunct

Clitics typically do not have to be iterated on each conjunct, thus differentiating them from most inflectional affixes. Miller (1992) argues this criterion for coordination on conjuncts as a defining argument on the clitic/affix distinction. This criterion is based on his claims that true affixes must always be repeated on each conjunct whereas clitics take wide scope over conjuncts. Wintner (1998) utilized this criterion in his analysis on Hebrew, a related Semitic language. Wintner surveyed the clitic/affix distinction concerning the Hebrew definite article ***ha***. Utilizing this criterion, he concluded that the Hebrew definite article is an affix and not a clitic because it does not take wide scope and is repeated on each conjunct. I have not come to the

[45] (Book of Steps 20.4 (Kmosko edition))
[46] Translation from Kitchen & Parmentier (2004:213).

same conclusion on Syriac since SRPs' repetition on each conjunct is not required. Syriac rhetorical particles take wide scope over their domain and do not need to be repeated on each lexical item in a conjoined phrase (Doron & Assif 2000).

Regarding this specific criterion, Spencer & Luís (2012b) point out that this is not a fool-proof criterion as there are languages with affixes which demonstrate wide scope (Turkish, French and Italian to name a few). These however would be atypical affixes, because Spencer & Luís consider the inability to take wide scope over conjoined phrases a prototypical property of affixes.

In summary, the combination of tests applied to each of the Syriac particles demonstrates that the SRPs' clitic-like properties overwhelm any affixal properties which they may have. They have a low degree of host selection; they display no arbitrary gaps or morphosyntactic or semantic idiosyncrasies; and syntactic rules do not affect them. In addition, they may attach to other clitics and take wide scope over their domain, not having to attach to each individual conjunct. Based on Zwicky & Pullum's criteria, the SRPs exhibit clitic tendencies for every diagnostic. I summarize the previous subsections' conclusions concerning the clitic or affix properties observed in the Syriac examples and discussion in (28):

(28) SRPs: Clitic versus Affix

Criteria	Clitic	Affix
A: Host selection	Display a low degree of host selection	Display a high degree of host selection
B: Arbitrary Gaps	No arbitrary gaps	Inconclusive[47]*
C: Morphosyntactic idiosyncrasies	No morphosyntactic idiosyncrasies	Inconclusive*
D: Semantic idiosyncrasies	No semantic idiosyncrasies	Display semantic idiosyncrasies
E: Lexical integrity	Syntactic rules do not apply	Syntactic rules do apply
F: Closure	No closure to other clitics	Inconclusive*
G: Coordination/Scope	Non-mandatory coordination (displays wide scope)	Inconclusive*

[47] *'Inconclusive' here means that the data in the previous sections did not investigate these features of affixes.

3.3.2. Clitic versus Independent Word

Zwicky (1985) established distinguishing tests to differentiate clitics from independent words. Clitics exhibit affix-like and word-like properties so the need to define their position on the continuum between these two categories (words and affixes) is appropriate. The relevant tests are presented and I will pursue them in the following subsections as follows:

- Phonological Criteria
- Accent Criterion
- Affix-like Criteria (distinguishing words from affixes)
- Syntactic Criteria

Phonological Criteria

Since a clitic attaches to an independent word forming a prosodic unit, the first set of criteria is purely phonological. Zwicky (1985) lists a total of three separate criteria under this category:

- Internal/External Sandhi:
  An element affected by or conditioning a sandhi rule should be a clitic.

- Word/Phrase Domains in Prosodic Phonology:
  If an element counts as belonging to a prosodic word for purposes of accent, tone, or length assignment, then it should be a clitic. However, if an element belongs to a prosodic phrase for these same purposes, it should be an independent word.

- Word/Phrase Domains in Segmental Phonology:
  If an element counts as belonging to a prosodic word as a result of phonological rules like vowel harmony, then it should be a clitic.

Sandhi is a linguistic phenomenon which displays sound changes at word and morpheme boundaries. Zwicky (1985) says that: "an element affected by or conditioning a sandhi rule, otherwise known to be internal should be a clitic, not an independent word. An element affected by or conditioning a sandhi rule otherwise known to be external should be an independent word, not a clitic." This criterion is rather straightforward in Syriac as the Syriac particles do not affect—nor are affected by—sandhi rules. The morphophonology does not change when involving the Syriac particles with the surrounding lexical items and their lack of allomorphy and phonological irregularity indicate a clitic-like property for SRPs (Doron & Assif 2000). Contrastingly, evidence of sandhi rules affecting independent words in Syriac exists throughout

the literature. The Syriac letters ܒ ܓ ܕ ܟ ܦ ܬ (bgdkpt) exhibit two possible pronunciations in the literature: 'stopped' (hard) and 'spirantized' (soft) (Coakley 2013). Although these six consonantal stops usually become fricatives internally in individual words, these sandhi rules are also operative externally at the beginning of a word when the previous (uttered in consecutive speech) ends in a vowel or a spirantized consonant (Lipiński 2001).

Given the scarcity of available Syriac prosodic data, the latter two phonological criteria fall outside the scope of this thesis. Syriac is predominantly a written language and I am unaware of any extensive research addressing prosodic word structure and the distinction of SRPs' word and phrase domains within prosodic phonology and segmental phonology. Although there is much phonological information which can be extrapolated from the extensive diacritic markings in the literature, there is insufficient information on the prosodic structure of Syriac clitics. Some languages' rules, like Chamorro, for governing and defining clitic placement are primarily a result of prosodic units and phonological output (Anderson 2005; Bermúdez-Otero & Payne 2011). I will show in the subsequent sections that the SRPs do not appear to rely on prosodic structure for their categorization but rather their categorization as clitics is defined in relation to a specific linear and structural position (second position).

Accent Criterion

The accent criterion has almost become the singular deciding factor in most literature for determining the status of a linguistic element as a clitic. The criterion is that clitics have the characteristic of not bearing stress or accents on their own, while those that do bear accent on their own are typically independent words. Zwicky notes that it is the general rule-of-thumb for the proposed distinction between independent words and clitics but that "it should never…be used as the sole (or even major) criterion for a classification, though it can support a classification established on other criteria". Spencer & Luís (2012b) come to the same conclusion that this criterion should not be the sole determiner as there are exceptions to the generalization that clitics are unaccented.

Although no specific research exists on the prosody of specific Syriac particles, some evidence argues that they are unaccented, bearing no stress. The literature consistently labels the particles as enclitics and acknowledges that they cannot occur in isolation; requiring a host with which they form prosodic units (Doron & Assif 2000; van Peursen & Falla 2009). Syriac

literature could benefit from future research in this area. For the purpose of classification, I propose that these Syriac particles are unaccented lexical items since they cannot stand alone, they require a prosodic host, and they can be omitted without affecting grammaticality (Doron & Assif 2000).

Independent Word versus Affixation

This category of tests differs from the rest (i.e., syntax, phonology and accent) as its purpose is to distinguish words from affixes (rather than specifically identifying clitic-like properties). The previous section was to show in which ways the Syriac particles differed from affixes and showcased their more prominent clitic and word-like properties. The evidence from the previous section shows that the SRPs are not words but display clitic-like properties with respect to sandhi rules and accent criteria.

The purpose of this subsection is to distinguish the affix-like properties from the word-like ones. Some overlap exists here with the previous section distinguishing affixes from clitics, though additional analysis is applied here. They involve binding, closure, construction, ordering, distribution, and complexity.

Binding: This criterion states that "if an element is bound, and especially if it cannot occur in complete isolation, it should be a clitic; if free, and especially if it occurs in complete isolation, it should be an independent word" (Zwicky 1985). Although the Syriac literature does not specifically address whether Syriac particles can occur in isolation, evidence from the SWCorpus and some Syriac researchers strongly indicates this is not the case. Doron & Assif (2000) state that the Syriac particles "form a prosodic unit with the preceding, not the following word". Evidence exists of SRPs occurring at the end of two word sentences, but the SRPs cannot occur in complete isolation and are bound phonologically to some other element. Since the SRPs are non-obligatory (for grammaticality) rhetorical particles and require a host for attachment, they cannot occur in isolation. After searching through the SWCorpus and much Syriac literature, I have not found a single example that indicates the ability of the SRPs to occur in complete isolation.

Closure: This criterion follows from the previous. Since SRPs attach prosodically to their hosts (which precede them) the question is whether anything can subsequently attach to the Syriac particles. This is similar to criterion F for distinguishing clitics from affixes and the

conclusion is much the same. Syriac particles do allow other particles to attach to them and do not close of the possibility of further cliticization, a strong feature of clitics.

Construction: Zwicky (1985) states that "we should expect that, if the distribution of an element is correctly stated in terms of its ability to combine with single words, it will be a clitic: and also that, if the distribution of an element is correctly stated in terms of its ability to combine with (potentially) multi-word phrases, it will be a full word". Since his research, many have concluded that clitics can attach to single words, multi-word phrases and even alternate between the two (Klavans 1985; Halpern 1995; Billings 2002; Anderson 2005; Spencer & Luís 2012b). Application of this criterion yields mixed results for SRP attachment. On one hand, they are clitics because they attach to single words, while on the other hand they are analyzed as full words because they attach to multi-word phrases. However, these mixed results are not problematic to SRPs' categorization as clitics. Cross-linguistic evidence demonstrates clitic attachment to either (or both) multi-word constituents and single prosodic words, (see 2.3.1).

Ordering: This criterion is somewhat complicated when considering Syriac rhetorical particles. Zwicky states that "an element that is strictly ordered with respect to adjacent morphemes is almost surely a clitic (or an affix)". The Syriac particles display a strict ordering (second-position within their domain); however, they also display a free order when attaching to other Syriac particles (e.g. ***den/lam, lam/den***). Interestingly, Zwicky notes the complexity of this criterion and that occasionally certain types of clitics display some freedom regarding their ordering. Typifying this complexity, Zwicky mentions Tagalog, which has a class of second-position particle clitics very similar to the Syriac particles under investigation. This is yet another criterion which is inconclusive regarding the clitic-like or word-like status of the Syriac rhetorical particles. The conclusion is of mixed results as the SRPs are clitic-like (displaying a strict ordering), while (according to Doron & Assif (2000)) also displaying word-like properties by showing a free ordering.

Distribution: The distribution criterion closely resembles Criterion A regarding host selection in Zwicky & Pullum (1983). Zwicky (1985) states that "affixes typically have a single principle governing their distribution" (e.g., English +ness with adjectives, +ing with verbs etc.), whereas clitics are much less selective with regards to their hosts. I refer to data presented in examples (22) and (30) which display the SRPs' very low-selectivity regarding their hosts.

Complexity: This criterion argues that "a morphologically complex item is probably an independent word". Words are typically composed of multiple morphemes, whereas affixes—and clitics—tend to be very simple. The Syriac rhetorical particles under investigation are not morphologically complex in any way, with no internal structure. Their structural simplicity is a strong indicator that they do not constitute independent or function words.

Syntactic Criteria

The syntactic criteria for distinguishing clitics from independent words comes from Zwicky's observation that "[a] word can serve as a syntactic constituent, and therefore can be subject to syntactic processes; a clitic, however, is only a proper part of a word-like construct, and should be immune to such processes" (1985). The analysis in the following subsections continue with the task of syntactically distinguishing clitics from independent words by using deletion, replacement and movement tests.

Deletion

This criterion "follows that, in an X+Y combination, if either X or Y is deletable under identity, then X or Y are words; neither is a clitic". Syriac rhetorical particles are not deletable in this type of construction. The key to this criterion is to understand Zwicky's reference to 'deletable under identity'. He mentions that this implies something very different than a simple 'free deletion' of deleting any element in any sentence. What it implies is a form of ellipsis where in an X+Y combination (X being in a separate domain than Y) either X or Y can be deleted (e.g., 'my desk is bigger than his [*desk*]'). If either is deleted, then they are both words. Due to the clitic-like nature of the SRPs they are not iterated on each conjunct and therefore ellipsis does not occur. I have not located any examples which contain the same SRP in two separate but consecutive constituents. Consequently, this criterion is not altogether relevant to this Syriac discussion because I have not located this specific X+Y construction in the SWCorpus. However, my conjecture is that the fact that the SRPs cannot participate in any ellipsis process (or are immune to it in some way) would indicate a more clitic-like similarity than a word.

Replacement

Zwicky states that "[I]n an X+Y combination. If either X or Y is replaceable by a pro-form, then X and Y are words: neither is a clitic". Much research has been undertaken specifically regarding pronominal clitics, hence the prominence of this criterion. However, SRPs are not pronouns (or even nouns for that matter) and cannot be replaced by a pronoun of any sort. It is difficult to imagine a construction containing a rhetorical particle that could be replaced by a pronoun in any language (e.g., '*so*, can you go?' vs. *'*you*, can you go?'). Given that the SRPs cannot be replaced by a 'pro-form' they further demonstrate clitic-like behavior, rather than properties of independent words.

Movement

"[I]n an X+Y combination, if either X or Y can be moved without the other [and meaning held constant], then X and Y are words; neither is a clitic" (Zwicky 1985). In this specific clitic=host relationship, the Syriac particles would be considered 'Y', while their hosts would represent the 'X'. The key wording here is "if either", which suggests that X and Y can result in different classification but if either moves, both are considered independent words.

The hosts (to which the clitics attach) can possibly move to some other portion of the sentence if—and only if—some other element of the phrase is topicalized or fronted—thus becoming the new host to the particles. The Syriac particles are strictly barred from phrase-initial position. In addition, the particles are syntactically peculiar as they must be located with respect to a specific word (phonological) or phrase-final edge (syntactic daughter), which severely restricts their movement.

According to this criterion therefore, since the hosts (X) to which the particles attach can move without the clitics, both Y (the particles) and X (hosts) are considered independent words. Similar to the deletion criterion, this is not detrimental to the classification of these Syriac particles, since clitics can—and usually do—display word-like properties in addition to displaying affix-like features. Although this criterion categorizes SRPs as independent words, languages containing second-position clitics demonstrate this same phenomenon of a clitic's host being able to move while the clitics stay in second position. Perhaps second-position clitics are an exception to the movement criterion due to their prosodic attachment to almost any host. Future research is needed in this regard.

I summarize all of the criteria distinguishing words from clitics in (29)—including the affix-like tendencies in the clitic portion to distinguish them from words. The table shows conclusive evidence to argue that the Syriac rhetorical particles are clitics, rather than independent words.

(29) SRPs: Clitic versus Independent Word

Criteria	Clitic	Independent Word
Phonological: Sandhi	Sandhi rules do not affect Syriac particles	Sandhi rules affect words in Syriac
Accent/Stress	Accentually dependent	Accentually Independent
Binding	Bound element, cannot occur in complete isolation	Not bound, can occur in isolation (e.g., ʾmar (*he said*))
Closure	Closure to affixation	Words allow clitic attachment and affixation
Construction	Bound to single words/multi-word phrases (construction)	Bound to multi-word phrases (construction)
Ordering	Strictly ordered/Free ordering within clitic clusters[48]	Free ordering
Distribution	No single principle governing distribution	No single principle governing distribution
Complexity	SRPs are not morphologically complex	Concatenative morphology makes Syriac words complex
Deletion (Syntactic)	Not subject to deletion	Subject to deletion
Replacement (Syntactic)	Cannot be replaced with pro-form	Inconclusive*[49]
Movement (Syntactic)	Clitic is not subject to movement	Host is subject to movement

From the foregoing we conclude that SRPs behave more like clitics than either affixes or independent words. The only caveats against definitive clitic status are a few observations on their word-like properties (multi-word phrase attachment, free ordering and subject to deletion). However, since Zwicky's analysis much research has been done within clitic typology showing that many languages have clitics that attach to multi-word phrases (i.e., Slovene, Warlpiri, Serbo-Croatian, Ngiyambaa, and Czech); see Klavans (1985) and Billings (2002). In addition, much research exists on the specific ordering within clitic clusters (Progovac 2000; Cardinaletti 2008).

[48] Further research might conclude that the clitics obey some ordering constraints within clitic clusters—little investigation has been undertaken regarding this topic for Syriac.

[49] 'Inconclusive*' here means that the data in this section did not investigate the Syriac words being replaced by pro-forms.

Lastly, I hypothesize that further investigation into the rhetorical nature of the Syriac particles compared to cross-linguistic data displaying similar phenomena will show that most rhetorical particle clitics can be subject to deletion. Considering all of the evidence, I conclude that the Syriac particles constitute a group of clitics. Doron & Assif (2000) listed similar conclusions to the clitic-like status of SRPs (but provided no analysis, data, or discussion addressing their conclusions):

- Their relative order is not fixed (nor does ordering affect meaning).
- They show no host preference.
- There is no need for repetition on each conjoined phrase.
- There is no evidence of allomorphy or phonological irregularity.

Thus, these previous sections provide a needed analysis including examples and evidence for categorizing SRPs as clitics (versus affixes or words). Hereafter I will work under the assumptions that each Syriac particle under investigation is a clitic. The investigation now turns towards the task of identifying the clitic type and exploring properties of these Syriac clitics.

3.4. **Further Analysis of Previous Literature**

Further questions arise after determining whether a lexical item is a clitic; this includes syntactic positioning, clitic clustering, and whether the clitics are best analyzed phonologically, morphologically, syntactically, or in some other domain. Within Syriac linguistic literature the debate is whether these clitics are in a fixed position in the syntax, i.e., second position, and if so, exactly how 'second-position' is defined—appealing to their morphosyntactic and phonological features. Having classified the nine SRPs as clitics I can now analyze their specific linear order and structural positioning using the SWCorpus.

In the following subsections I explore linear order and second position for Syriac. This will lead to further discussion and linguistic application in chapter 4, proposing a new analysis for second-position clitics in Syriac and how this 'second position' is best defined.

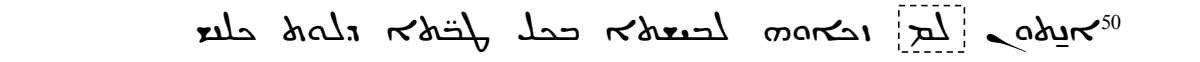
3.4.1. Second Position in Syriac

The previous discussion has shown syntactic positioning of the SRPs at the edge of the first element of the sentence, specifically in relation to the first phonological word. Recall Billings's diagram in chapter 2 (example (9)), where clitic types a-h are predicted from possible combinations of the three binary parameters. I argue that Syriac rhetorical particles are type [c]

clitics [INITIAL, AFTER, ENCLITIC]. Numerous examples from the SWCorpus show SRPs attaching to various hosts in phrase-initial position. The SRPs' positioning in relation to the initial portion of their domain covers the first parameter to determine second-position status (INITIAL). The second and third parameters show whether the SRP precedes or follows the anchor determined by parameter 1 (BEFORE/AFTER) and whether the clitic is proclitic or enclitic to their required prosodic host. Since the SRPs are represented in the orthography as separate lexical items, it is difficult to distinguish the directionality of their attachment as proclitic or enclitic to their respective anchor. However, the first and second parameters [INITIAL, AFTER] are more easily discernable from examples taken from the SWCorpus. These examples demonstrate that the particles consistently follow the initial element of the phrase:

(30) SRP Positioning in the SWCorpus

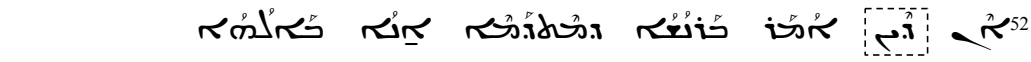
a. [NP =clitic] (***lam***)

 [50]

ʾtwn =***lam*** zkʿwh l-byshtʾ b-kl ṭbto dlwt kl-nsh
you.2MP ***CL*** conquer. 2MP to-evil by-all good towards all-people

"Overcome evil by doing all kinds of good to everyone"[51]

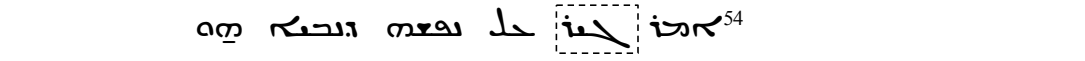
b. [CNJ =clitic] (***den***)

 [52]

ʾn =***den*** ʾmr brnšʾ d-mtdmʾ ʾnʾ b-ʾlhʾ
if =***but*** says.3MS person that-imitate.1M.PART I as-God

"***But*** if a person says, 'I will imitate God…"[53]

c. [VP =clitic] (***ger***)

 [54]

ʾmr =***ger*** ʿl nfš-h d-nbyʾ =(h)w
say.3MS ***indeed*** concerning self-3MS that-prophet =was.3MS

"He does ***in fact*** say himself that he was a prophet"[55]

[50] (Book of Steps/Col. 29/1)
[51] Kitchen & Parmentier 2004:15
[52] (Book of Steps/Col. 101/823)
[53] Kitchen & Parmentier 2004:264
[54] (Book of Steps/Col. 4/1)
[55] Kitchen & Parmentier 2004:4

d. [PP =clitic] (***kay***)

ܡܢܘ ܟ ܡܫܟܚ ܕܢܝܚ[56]

mn-w =***kay*** mškaḥ d-niḥ^{ʿ}
from-3MS ***then*** be.able.3MS.PART of.MS-live.3MS

"Who then can be saved?"

Each sentence in (30) shows one of the SRP clitics in second position immediately following the first anchor in its phrase, (i.e., a noun phrase, a conjunction, a prepositional phrase and a verb phrase). Examples (30c-d) depict the SRPs arguably following what constitutes an entire phrase in Syriac (*ʾmr* and *mn-w*, respectively). Thus it is difficult to define the SRPs in relation to the first element of their phrasal domain since they follow an entire phrase. Therefore, examples (30a-b) provide the needed distinguishing evidence to determine the SRPs as following the initial anchor in their domain. In (30a) the domain of ***lam*** begins with the NP 'you conquer' and ***lam*** follows the first element (ʾtwn) of this phrase, interrupting the noun phrase in this case. Similarly in example (30b), ***den*** interrupts the prepositional phrase 'if (he) says' and follows the first anchor of the PP, resulting in the parameters of [INITIAL, AFTER].

The third parameter concerns the direction of attachment for the Syriac particles, since each SRP requires a phonological host. Evidence points towards these SRPs as encliticizing to the anchor which precedes them, rather than procliticizing forward. The most noteworthy observations concern the orthographic and diacritic markings in the extant literature. Prosodic markings in the literature have many functions including: direct speech marking, dismay, emphasis, exclamation, faster reading, interjection, lamentation, pause, praise, prolongation, stress, and wonderment (Kiraz 2012; Fabri et al. 2014). Doron & Assif (2000) provide some essential observations of SRPs' salient features and enclitic nature:

(31) Enclitic Properties of SRPs (based on Doron & Assif 2000)

- They are prohibited from initial position within their domain (Duval 1881; Nöldeke & Euting 1898; Brockelmann 1899).

  (this rules out type [b] clitics from Billings)

- They are in final position in one word sentences: *šuloma* ***=ger***.
  'For that is the end.'[57]

[56] (Matthew 19:25, KJV Translation)
[57] Apocalypse of Baruch 69:5, mentioned by Nöldeke & Euting (1898)

- Intonational diacritics which denote a pause "never immediately precede the [SRPs], but…immediately follow one."

  (this rules out all proclitic types: [b], [d], [f], [g])

- Parenthetical phrases are not inserted between the SRPs and the preceding lexical item, but often between an SRP and what follows.

  (when combined with the previous properties this rules out all clitic types but [c] and [g]) [58]

Since intonational diacritics and parenthetical phrases never immediately separate the Syriac clitics from their preceding lexical items, this strongly indicates backward attachment.[59] Furthermore these same diacritics and parenthetical phrases do separate the particles from the lexical items which follow them. The strong tendency of these diacritics to not interrupt an SRP and a preceding element indicates a contiguous relationship and therefore designates an enclitic status for these Syriac clitics. The resulting parameters from these observations are, *a posteriori,* those of clitic type [c]: [INITIAL, AFTER, SUFFIXAL].

In (16a-f) and (30a-d) each Syriac particle follows a single prosodic word. This attachment, directly to the first *full* word (prosodic), has been the predominant analysis and consensus in previous literature concerning SRP attachment. Some have observed that this is not always the case (Kuty 2001, van Peursen 2009), yet they do not present any additional options of attachment or approaches to the Syriac questions. In the next subsections, I discuss the previous approaches and considerations presented in previous literature for SRP attachment. Specifically, I argue that in light of new data from the SWCorpus that Syriac clitics are not strictly limited to attachment to a phonological word.

3.4.2. SRP Attachment to a Single Prosodic Word

Determining that the SRPs are in second position and encliticize to their preceding hosts addresses only half of a two-part problem. The second issue involves how second position is defined, specifically in relation to Syriac. As discussed in chapter 2, 'second position' varies cross-linguistically but throughout the literature 'second position' is consistently divided into

[58] Clitic type [g] has been previously ruled out in examples (30a-b) since the SRPs do not attach to the final anchor of their phrasal domain.

[59] I explain attachment in terms of 'backwards' and 'forwards' to avoid unnecessary confusion with the right-to-left direction of the Syriac text and the left-to-right text of the transliterations and glosses. Backwards means to the right in the Syriac text (suffixal or enclitic) while forward attachment signifies proclitic or prefixal attachment.

two main classes: following the first phonological word *or* following the first syntactic daughter or phrase (sometimes labeled 'multi-word phrase').

Doron & Assif (2000) are the only researchers to argue a specific side of this question; they offer a two-part conclusion regarding Syriac second-position clitics. First, they describe Syriac particles as clitics which always follow the first word within their own domain (never following a multi-word constituent). Secondly, they offer a principled prosodic approach to explain the second-position phenomenon in Syriac (that they are placed in their respective positions post-syntactically by the phonology). The latter conclusion is not applicable to the scope of this thesis as I am defining the categorical status of the SRPs (and defining 'second position') rather than proposing a specific model to explain how and why the SRPs are positioned as they are.

Regarding their first conclusion however, they define the 'word' which the clitics follow as a phonological word, stipulating that the clitics do not follow a syntactic element through some process of incorporation or X^0 (head) movement. Doron & Assif conclude that "in no example do RCNs immediately follow a constituent which consists of more than one word". Evidence from the SWCorpus demonstrates that the assumption that SRPs cannot follow a constituent consisting of more than one word is false. In addition to encliticizing to a single prosodic word, I will show that they can variably attach to a constituent consisting of more than one word.

Although the Syriac samples given previously in example (16) are the standard throughout Doron & Assif's research, these researchers give few atypical examples which show an aberrant pattern. Their examples present data with SRPs following multi-word sequences, which don't naturally fit into the mold of a typical phonological or prosodic word. At the least, these Syriac sentences give non-intuitive and inconsistent interpretations of what is argued to be a prosodic word and need to be further scrutinized.

Doron & Assif give examples involving SRPs attaching to prepositional phrases. These sentence-initial prepositions procliticize to a variety of hosts to form a single phonological unit to which the Syriac particles encliticize:

(32) Prepositional Phrases (Doron & Assif 2000)

a.	ʾam= Haylṯone	***ger***	w= sarire	(Jul 10:3)[60]
	with strong-ones	***for***	and true-ones	
b.	ʾal= ʾesro	***den***	dorin	(Jul 76: la)
	to ten	***but***	generations	
c.	1= Hamsin	***ger***	w= arbaʾ snin	(Jul 65:25)
	for fifty	***for***	and four years	

Doron & Assif (2000) assume that the preposition and its immediate host form a single prosodic word. Usually this holds true cross-linguistically as other Semitic languages' prepositions procliticize and form a single prosodic word with their hosts (e.g., Arabic *b-*, *f-*). They claim that this combination of host and clitic attachment forms an inseparable contiguous relationship, prohibiting anything from intervening between the two lexical items.

However, utilizing the SWCorpus I have found passages which include similar prepositional phrases showing that the SRP clitics do in fact intervene and violate this contiguity constraint. This necessitates a reanalysis of both 'prosodic word' in Syriac (as the particles can attach immediately to the prepositions and their hosts) as well as the option of SRPs attaching to multi-word phrases. The clitics clearly demonstrate attachment directly to the prepositions—not typically considered phonological words; see (33).

(33) SRP Interrupting Prepositional Phrases

a. ܥܠ ܕܝܢ ܬܠܝܬܝܘܬܐ ܗܢܘܢ ܟܬܒܐ[61]

ʾal=	=***den***	tlytywtʾ	hnwn	ktbʾ
concerning=	=***but***	Trinity	are.3_{MP}	books

"Now concerning the Trinity these books…"

b. ܥܡ ܕܝܢ ܝܘܚܢܢ ܐܘܢܓܠܣܛܐ[62]

ʾam=	=***den***	ywḥnn	ʾwnglsṭʾ
with=	=***but***	John	evangelist

"But with John the Evangelist"

[60] "Jul" is an abbreviation used by Doron & Assif for Julian the Apostate.
[61] (Sixth Century/Philoxenus, Commentaire du prologue johannique (CSCO 380).draft)
[62] (Sixth Century/Philoxenus, Commentaire du prologue johannique (CSCO 380).draft)

In (33a) and (33b), the prepositions ʾl (ʾ*l*) and ʾm (ʾ*m*) are the first lexical items in the sentences and the first anchors in the domains of the SRPs (ʾ*al tlytywt*ʾ and ʾ*am ywḥnn*). These two examples demonstrate that the prepositional phrases can be interrupted by the insertion of an SRP (the SRP attaching to the first prosodic word). In light of this evidence, I propose that the examples in (32) should be reanalyzed as demonstrating the SRPs following a constituent consisting of more than one word. This is contrary to previous assumption since the contiguous preposition+host relationship was deemed a prosodic word by Doron & Assif. This is just one of various issues that arise when concluding that the SRPs only attach to a single prosodic word in their domain, as evidence exhibits a variable attachment to multi-word constituents as well.

Topicalization is another situation which challenges the analysis of SRP attachment exclusively to a single prosodic word. When a phrase is fronted or topicalized to the right of the clitic (left in the gloss) the SRP appears even farther from the right-most edge of the sentence (left in the transliteration), yet still is located in second position after a phonological word.

(34) Topicalized Constituent Adjoining to SRP Domain (Doron & Assif 2000)

a. holen d= men= kyon -hun [alohe ***lam*** itay-hun]
those that by nature their gods ***q-u*** BE-GEN(3MP)

"…who are gods by their nature." (Jul 51:7)

Doron & Assif explain that in example (34) ***lam*** is actually in the second position of its domain—the entire domain being the bracketed portion [*alohe* ***lam*** *itay-hun*]. The topicalization of the constituent *'those that by their nature'* necessitates that the linear position of the SRPs should always refer to the domain to which they belong. This was previously seen when discussing Kuty's (2001) analysis on ***den***; he would count each lexical item from the beginning of the sentence to the clitic in order to determine its numerical position. Doron & Assif say that the prepositional phrase in (34) is actually adjoined to the domain of ***lam*** (starting with *alohe)* and therefore does not affect the host-clitic relationship regarding ***lam***. Although I do not disagree with the analysis of this particular sentence, contrasting examples found in the SWC present the need to discuss the methodology of this prosodic approach, and prosodic approaches in general regarding topicalization. The tendency of prosodic approaches within clitic typology is to simply ignore whatever has been adjoined, topicalized or scrambled to the front, especially if this fronted element would drastically affect the results. Prosodic approaches which ignore these

cases—in which the clitics do not appear 'second' (orthographically or following a prosodic word)—is something on which Spencer & Luís (2012b) have commented:

> *"In purely phonological/prosodic approaches, clitics are regarded as phonologically aberrant words, and clitic placement is defined in terms of phonological phrasing. There is often a complex interaction between prosodic conditioning and information structure (topic/focus articulation). For instance, in defining 'second position with respect to a prosodic phrase, we may wish to ignore a clause-initial topicalized phrase in computing the domain for second-position placement".*

Example (34) appears to be correctly analyzed; however, I argue that considering all topicalized constituents as ignorable elements is flawed. Similar samples from the SWCorpus indicate that ignoring all clause-initial phrases which have been topicalized on similar assumptions, can neither adequately nor consistently predict the results as they vary from case to case. Take for example another sentence from the SWCorpus where the SRP is found following more than one phonological word: it follows and attaches to a topicalized constituent; see (35).

(35) SRP Encliticizing to Topicalized Constituent

a. ܡܢ ܒܬܪ ܕܩܡ ܐܢܐ ܕܝܢ ܩܕܡ ܐܢܐ ܠܟܘܢ ܠܓܠܝܠ

mn	btr	d-qᵓm	ᵓnᵓ	***den***	qdm	ᵓnᵓ	l-kwn	l-glylᵓ
from	after	REL-arise.1S	I	***but***	go.before.1MS	I	to-you.3MP	to-Galilee

"***But*** after that I am risen I am before you in Galila"[63]

I propose that the entire constituent '*mn btr d-qᵓm ᵓnᵓ*' in (35) is topicalized as a single unit and therefore ***den*** is located in second position. This same sentence can be analyzed syntactically as containing IP to CP movement, where the entire IP ([IP]*mn btr d-qᵓm ᵓnᵓ*) moves up to the left of ***den*** in the syntax, adjoining at spec-CP. This prevents the clitic ***den*** from appearing clause-initially, thus maintaining its second-position status by following the first syntactic daughter of the domain (2D). This would result in ***den*** encliticizing to the entire moved IP and gives further evidence against an exclusive attachment of SRPs to a single prosodic word. I propose that applying more syntactic analysis to clitic placement would greatly benefit the Syriac SRP literature.

Yet still, variation of host attachment can be evidenced from example (35). It is true that a prosodic approach could simply ignore the first two words, the PP '*mn btr d-',* to retain ***den***

[63] Matthew 26:32. Translation taken from Etheridge (1846).

attaching to a single prosodic word (qᵓm ᵓnᵓ). One need only claim that it has somehow been adjoined and is not part of the domain ([mn btr[d-qᵓm ᵓnᵓ ***den***]). The relative pronoun ܕ (*d-*), which follows '*mn btr'*, actually presents a strong argument for this case of '*mn btr'* being located outside of the domain of ***den***. It is not surprising that a prepositional phrase followed by a relative pronoun, "*but after that*", would be considered outside the domain of ***den*** (possibly in a matrix clause or through adjunction) and that the domain of ***den*** would start with the verb ܩܐܡ (qᵓm). This type of analysis is similar to Doron & Assif's conclusion previously discussed in example (34).

However, examples from the SWCorpus demonstrate that SRPs display variable attachment even when they are placed in relation to a PP and a relative pronoun+verb combination. The previous example (35), gives no indication for ***den*** to possibly attach to the initial prepositional phrase, and therefore gives no indication that '*mn btr*' is included in the domain of den. The SWCorpus provides evidence that the SRPs can directly attach to this construction, thus arguing that ܡܢ ܒܬܪ '*mn btr*' should be considered part of the domain of ***den*** (in example (35)):

(36) SRP cliticization to ܡܢ ܒܬܪ (*mn btr*)

a. ܡܢ ܒܬܪ ܕܝܢ ܙܒܢܐ ܣܓܝܐܐ[64] (***den***)

mn btr ***den*** zbnᵓ sgyᵓᵓ
from after ***then*** time length

"Then after a long time"

b. ܡܢ ܒܬܪ ܓܝܪ ܕܥܢܕ ܐܢܬ ܡܢ ܗܢܐ ܥܠܡܐ[65] (***ger***)

mn btr ***ger*** d-ᶜnd ᵓ(n)t mn hnᵓ ᶜlmᵓ
from after ***for*** REL-depart.2MS 2MS from this world

"For after you depart from this world"

In (36a) and (36b) the SRPs (***den*** and ***ger***) attach directly to the PP '*mn btr'*. Example (36b) demonstrates a similar situation previously encountered in (35) where an SRP interacts with '*mn btr*' followed by a relative pronoun+verb combination. However, in this example the clitic ***ger***

[64] (Acts of Judas Thomas/Page 187/1)
[65] (Book of Steps/Col. 101/958)

interrupts the relationship between '*mn btr*' and the relative pronoun+verb combination; demonstrating once again the variable attachment of SRPs. In light of these examples and this new evidence from the SWCorpus, I propose that the sentence in example (35) (repeated in (37a)) does not display the only position in which the particle ***den*** can be found. Rather, I argue that my proposed sentence in (37b) is grammatical and structurally and semantically identical to (37a):

(37) SRP alternation with ܡܢ ܒܬܪ

a. ܡܢ ܒܬܪ ܕܩܐܡ ܐܢܐ ܕܝܢ ܩܕܡ ܐܢܐ ܠܟܘܢ ܠܓܠܝܠܐ

b. ܡܢ ܒܬܪ ܕܝܢ ܕܩܐܡ ܐܢܐ ܩܕܡ ܐܢܐ ܠܟܘܢ ܠܓܠܝܠܐ

Since the particles ***den*** and ***ger*** are able to attach directly to the PP '*mn btr*' I argue that (37a) is a clear demonstration of the SRPs' ability to attach to multi-word phrases, while (37b) displays variable attachment to prosodic words. The particle ***den*** following the string '*mn btr d-qᵓm ᵓnᵓ*' shows the particle's placement after this multi-word phrase and is further evidence that SRPs are not strictly limited to attachment to a single prosodic word.

One additional problematic example for attachment to only a prosodic word is taken again from Doron & Assif (2000). The following Syriac sample appears as a footnote in their research and is a direct translation from Greek**.** It was included in their research to show that the Syriac clitics' 2W status is established by morphophonological rules. However, I utilize this same minimal pair to show the dissimilarity of the two languages' approaches to 2P clitic placement.

(38) Greek vs. Syriac Approaches to 2P Clitic Placement

a. **Syriac**

ܡܠܦ ܗܘܐ ܠܗܘܢ ܓܝܪ

malep	=wo	=l-hwn	***ger***
teach_PART-MS	was_3MS	to-them	***for***

b. **Greek**

ην	γαρ	διδασκων	αυτους
en	***gar***	didaskOn	autous
	for	teach	them

'For he taught them...' (Mt. 7:29)

In (38b), ***γαρ*** (*gar*) obeys Wackernagel's law; it is second position in its domain (and follows only one lexical item/prosodic word). Contra Doron & Assif, Syriac and Greek appear to approach second position differently. Doron & Assif concluded that SRPs always follow a single prosodic word, forcing classification of the entire string of text preceding ***ger*** in (38a) as a prosodic word. The constituent [ܡܠܦ ܗܘܐ ܠܗܘܢ] presents problems for an analysis of strict attachment to a prosodic word. Data from the SWCorpus show that this specific relationship of a verb participle (ܡܠܦ) followed by the verb 'to be' (in its enclitic form) can constitute a prosodic host to which the SRPs attach:

(39) SRPs Separate Predicate+Verb Construction

a. ܟܐܝܪ ܗܘܐ ܕܝܢ ܝܬܝܪܝܬ ܘܩܛܠ ܠܗ̇ ܪܝܚܐ ܕܣܪܝܘܬܐ ܕܫܠܕܐ ܗ̇ܝ[66]

kᵓyr	(h)wo	***den***	ytyrᵓyt	w-qṭl	l-(h)	ryḥᵓ
grow.hot.PART.MS	was.3 MS	***now***	excessively	and-kill.PART	to-her	smell

d-srywtᵓ	d-šldᵓ	(h)y
of.GEN-stink	of. GEN-corpse	3FS.DEM

'Now the smell of the stink of that corpse grew more stifling and was killing her.'

In (39a), the clitic ***den*** follows the verb ܗܘܐ (in its enclitic form) and the preceding predicate—an active participle in this case (similar to the construction in 38a). Since I have already presented evidence that the SRPs can follow prepositional phrases (examples (32) and (33)), the assumption is the same with respect to SRPs attaching to the PP '*l-hwn*' in (38a). Therefore, evidenced by (39a) and the SRPs ability to attach to prepositional phrases, I propose that Doron & Assif's sentence in example (38a) displays yet another example of an SRP following a constituent consisting of more than one prosodic word.

This variation of SRP host selection and attachment to a single prosodic word or to a multi-word constituent hasn't been addressed in previous literature. Therefore, this thesis adds a novel analysis to Syriac literature and clitic typology, specifically addressing the apparent variation of attachment which SRPs display. I argue that the SRPs are second-position clitics which follow the first prosodic word *or* multi-word constituent (syntactic daughter) of their phrasal domain. At best, Syriac will be considered to be 'exotic', similar to Serbo-Croatian and

[66] (Euphemia and the Goth (5th C)/Page 59/1). Translation taken from Burkitt (1913:146).

Luiseño, because it allows both variations of second-position clitic placement. I present this new linguistic observation for the Syriac data in chapter 4 and provide evidence of SRPs' variable 2W/2D second-position placement.

4. Application: Variable 2P Clitic Placement in Syriac

In this chapter I present new data from the SWCorpus and support my analysis for the variable placement of SRPs after the first prosodic word (2W) or after the first multi-word constituent (2D, also referred to as syntactic daughter). This variable 2W/2D attachment is evident in other languages, which I sketch in the following subsection.

4.1. 2W/2D: Variation of Clitic Attachment in Other Languages

So far I have shown that the Syriac clitics can follow a prosodic word, interrupt contiguous relationships of lexical items, and follow a syntactic constituent or a multi-word phrase. Syriac is not unique in this regard: other languages exhibit similar properties. As we have already seen, the majority of relevant research is from Serbo-Croatian which exhibits clitic attachment as both 2W and 2D. This same phenomenon also surfaces in the Uto-Aztecan language Luiseño, as well as the Pama-Nyungan language Ngiyambaa. Each one of these genetically unrelated languages contains a group of second-position clitics which display variable attachment to the first phonological word or to the first syntactic daughter of their domain. The minimal pairs in examples (40-42) are presented in the literature as semantically and structurally equal, but display a variation of clitic placement:

(40) Serbo-Croatian 2P Clitic Alternation (Browne 1974)

a. Taj pesnik ***mi*** ***je*** napisao knjigu.
that.MASC.NOM poet.NOM me.DAT is wrote.MASC book.ACC

b. Taj ***mi*** ***je*** pesnik napisao knjigu.
that.MASC.NOM me.DAT is poetNOM wrote.MASC book.ACC

'That poet wrote me a book.'

(41) Luiseño 2P Clitic Alternation (Steele 1976)

a. wiiwiš ’axaat ***up*** na’q
wiwish delicious 3SG is:burning

b. wiiwiš ***up*** ’axaat na ’q
wiwish 3SG delicious is:burning

‘The delicious wiwish is burning’

(42) Ngiyambaa 2P Clitic Alternation (Klavans 1982)

a. ?adhay guya **=ndu** dha-yi gambira

tasty fish 2.NOM eat-PAST yesterday

b. ?adhay **=ndu** guya dha-yi gambira
tasty 2.NOM fish eat-NOM yesterday
'You ate a tasty fish yesterday'

Examples 'a' in (40-42) show attachment to the first constituent/phrase in all three languages, while examples 'b' in (40-42) show attachment to the first word in the sentence.[67] Apparently these are the only three languages which exhibit 2W/2D variation for second-position attachment. Warlpiri for a time was analyzed as demonstrating this 2W/2D phenomenon, but more recent observations and a reanalysis of certain lexical categories have placed Warlpiri as a language predominantly showing 2P clitic attachment to the first syntactic daughter (2D) of its domain (Legate 2008; Spencer & Luís 2012).

In the following subsection, I argue that Syriac belongs among this rare list of genetically unrelated languages which exhibit the 2W/2D phenomenon.

4.2. **2W/2D: Syriac Variable Clitic Placement**

Similar to the data presented in (40-42), I propose a 2W/2D variation for second-position clitic placement in Syriac (see (32), (33), (36), (37), and (39)). Further examples from the SWCorpus support this classification:

(43) Syriac 2P Clitic Variation

a. ܟܕ ܩܡ ܕܝܢ ܘܢܦܩ ܡܢ[68]
kd qm ***den*** w- nfq mn-(h)
when rose.3MS ***then*** and went.out.3MS from-it
"Then when (he) rose and went forth from there"

b. ܟܕ ܩܡ ܕܝܢ ܘܢܦܩ ܡܢ[69]
kd ***den*** qm w- nfq mn-(h)
when ***then*** rose.3MS and went.out.3MS from-there
"Then when (he) rose and went forth from there"

[67] Serbo-Croatian examples in (40) show a clitic cluster of two clitics together; still in second position.
[68] (Ephrem the Syrian/Sermones in Hebdomadam Sanctum/VI/1325 ܟܕ ܩܡ ܕܝܢ ܘܢܦܩ ܡܢ ܗܘ ܒܝܬ ܡܫܬܐ ܕܐܚܝܗ ܕܝܠܗ ܕܝܘܣܦ ܕܐܬܚܙܝ ܠܗ ܒܚܠܡ ܕܐܬܚܙܝ ܠܗ ܒܫܘܒܥ

The SWCorpus clearly demonstrates variable clitic attachment to the first constituent in (43a) and to the first prosodic word in a very similar sentence in (43b).

One of the main benefits from Kuty's (2001) analysis of the particle ***den*** is his detailed list of restrictions placed on the particle. These claims state very clearly when ***den*** can—and cannot—be placed in second-position (understood as *orthographically* second). This list is beneficial because when Kuty provides evidence of a limitation on the particle's position (albeit in second or some other position), variable and counter-examples can be found in the SWCorpus.

Kuty's first exceptions to SRPs appearing in second position address the relationship of ***den*** with enclitics, specifically the enclitic forms of the verb 'to be'(ܗܘܐ), mentioned in (38) and (39), and the enclitic pronoun/particle ܗܘ. In Syriac, these enclitic forms of the verb, particles, and pronouns, encliticize to the preceding word (dropping their initial consonant). Coakley (2013) gives the following examples as evidence that the enclitic pronouns attach directly to their preceding predicate and form a singular prosodic unit. These enclitic forms drop their initial consonant upon encliticization, which is signified by the *linea occultants*:

(44) Pronominal Suffix attachment in Syriac (Coakley 2013)

a. ܡܠܟܬܐ ܗܝ (malkṯᶜy)

malkto hay
'She is queen'

b. ܡܠܟܐ ܗܘ (malkᶜw)

malko haw
'He is king'

Syriac ܗܘܐ and ܗܘ behave similarly to the pronominal suffixes in (44a-b) as they drop their initial consonant and encliticize to the preceding word:

(45) Attachment of ܗܘܐ (Coakley 2013)

a. ܕܡܟܝܢ ܗܘܝܢ

'we were sleeping'

b. ܝܫܘܥ ܫܬܝܩ ܗܘܐ

'Jesus was silent'

Kuty states that these enclitics usually do not separate from their preceding predicates and therefore lists them as evidence of ***den*** occurring in third and sometimes fourth position (according to Kuty's understanding of linear positioning). Kuty claims therefore that ***den*** (and consequently the other SRPs) follow both ܟܢܘ and ܢܘ consistently in the literature and do not intervene between the two. However, SWCorpus examples show that ***den*** and the other SRPs are able to precede the particles ܢܘ and ܟܢܘ, interrupting the relationship with the phase-initial element in each sentence. Since Kuty provides evidence of ***den*** following the enclitic particles in his analysis, I refer the reader to his research (I give one example of the enclitic particle preceding ***den*** in (47a)):

(46) SRPs Preceding the Particle ܢܘ[70]

a. ܐܒܪܗ ܠܚ ܢܘ ܪܝܥ ܟܠܡ ܢܘ ܗܢ ܟ[71]

b. ܡܠܐ ܡܫܡ ܠܟ ܐ ܟܚܕ ܢܘ ܚܛ ܟ[72]

c. ܐܠܢܟ ܚܢ ܠܟ ܐܒܗ ܟܦ ܢܘ ܚܥ ܟ[73]

d. ܫܒܚܣܗ ܟܟܒ ܪܝܦ ܢܘ ܚܥ ܒܟ[74]

e. ܟܚܒ ܡܠ ܢܘ ܗܢ ܪܥܡ[75]

f. ܒܟܣ ܟܒܫܠ ܟܒܚܒ ܢܘ ܚܥ ܐ[76]

(47) SRP Interaction with the Verb ܟܢܘ

a. ,ܡܢܒܗܟ ܟܠܒܢܢܡ ܗܢ ܟܢܘ ܟ[77]

b. ܟܝܒܚܟ ܟܢܘ ܗܢ ܟ

c. ܟܝܚܢܡܒ ܟܣܐ ܟ ܒܢ ܟܢܘ ܠܟ ܟ[78]

d. ܟܠ ܟܝܝܥ ܒܢܘ ܚܥ ܟܐܡ[79]

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[70] I do not offer a distinction between the demonstrative and the personal pronouns here, as the SRPs show the same variable attachment to both enclitic particles in the literature.

[71] (Ephrem the Syrian/Hymns Against Heresies/VI/23 ܐܒܪܗ ܠܚ ܢܘ ܪܝܥ ܟܠܡ ܢܘ ܗܢ ܟ)

[72] (Ephrem the Syrian/Hymns Against Heresies/LI/11 ܡܠܐ ܡܫܡ ܠܟ ܐ ܟܚܕ ܢܘ ܚܛ ܟ)

[73] (Ephrem the Syrian/Hymns on Faith/LII/ܟܠܟܠ ܝܥܝ ܐ ܠܛ ܚܒܛ ܟܟ 6 ܟ/1–2)

[74] (Ephrem the Syrian/Nisibene Hymns/XLIII/14 ܫܒܚܣܗ ܟܟܒ ܪܝܦ ܢܘ ܚܥ ܒܟ)

[75] (Ephrem the Syrian/Hymns on the Passover/IV/8 ܒܟܣ ܟܒܫܠ ܟܒܚܒ ܢܘ ܚܥ ܐ)

[76] (Ephrem the Syrian/Hymns on Nativity/XXVI/6 ܪܝܒܚܐ ܟܠܚ ܟܒܠܟ ܟܚܘ/4)

[77] (John the Solitary/Third Dialogue with Thomas (1.2.1.3)/Page 22/23)

[78] (Ephrem the Syrian/Hymns Against Heresies/XXXVI/9 ܟܚܟ ܚܦ ܚܦ ܚܥ ܢܘ ܟ/1)

[79] (John the Solitary/First Dialogue with Thomas (1.2.1.1)/Page 12/1)

The examples in (46) and (47) further demonstrate the variability of attachment which the SRPs display. These examples exhibit the SRPs' ability to attach to a single prosodic word; contrasting with Kuty's assumption that ***den*** must follow the multi-word constituent. Thus providing further evidence of variable second-position placement of SRPs to either a single prosodic word or to a constituent consisting of more than one word.

One explanation for the SRPs' ability to interrupt this relationship would be to reanalyze ܗܘܢ and ܢܘ as having some sort of prosodic weight or constituting prosodic words themselves. Another proposed explanation which would require analysis beyond the scope of this thesis, is to consider ܗܘܢ and ܢܘ as similar second-position clitics displaying their ability to encliticize to the SRPs and vice-versa. Although I do not make any assumptions here on the correct interpretation, many interesting questions surface through analyzing these Syriac clitic particles. For the purposes of this thesis, these examples are further evidence towards Syriac second-position clitics with variable positions in their domains.

In addition to the enclitics ܗܘܢ and ܢܘ, Kuty's list gives multiple examples where ***den*** is not found in 'second-position' (*orthographically*); see example (14) in chapter 2. Similar to the previous examples, I have found counterexamples in the SWCorpus to Kuty's limitations on the SRP and host relationships. In (48) and (49) I list limitations on SRP (***den***) attachment as described by Kuty (2001), followed by examples of variable positioning which the SRPs demonstrate:

(48) 'Inseparable' and Contiguous Syriac Sequences

- the adverb ܟܪ (*ʾp*) is never separated from the word it modifies:

  ܢܘ ܡܕܡ ܠ ܡܚܫܟ ܚܙܐ ܟܦ ܡܒܠ[80]

- the negative ܠ (*lʾ*) is not separated from what it negates:[81]

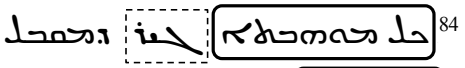
  ܡܠܟ ܡܚܒܠ ܠ ܡܕ ܟ[82]

  ܡܠܫ ܒ ܠ ܡܗܘܫܒܠ ܕܒ ܟ[83]

- the quantifier ܟܠ (*kl*) is not separated from what it modifies:

---

[80] (Ephrem the Syrian/Hymns Against Heresies/XXV/7 ܡܕ ܕܐ ܕܐ ܒ ܕ ܟܠ/3–4)
[81] This is unless it occupies the initial position in the clause, then it can be separated (and usually is).
[82] (Sixth Century/Philoxenus, Fragments of Commentary on Matt and Luke (CSCO 392))
[83] (Book of Steps/Col. 101/976)

 [84]

[85]

- the combination of ܘ + ܠ (*wy* + *l*-), "woe unto", is not separated:[86]

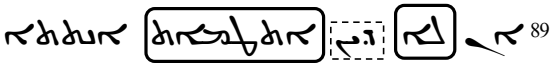
[87]

(49) SRPs Interrupt "Inseparable" Syriac Sequences

- the adverb ܐܦ (*ʾp*) separated from the word it modifies by an SRP:

[88]

- the negative ܠܐ (*lʾ*) separated from what it negates by an SRP:

 [89]

- the quantifier ܟܠ (*kl*) separated from what it modifies by an SRP:

[90]

[91]

- the combination of ܘ + ܠ (*wy* + *l*-), "woe unto", separated by an SRP:

[92]

The SWCorpus sentences show that the Syriac second-position clitics can—and do—demonstrate variation of attachment to the first constituent *or* the first word in their domain. Doron & Assif (2000) stated that in over 3,000 examples in their corpus they could not find a single example where a clitic followed more than one word in its domain. In the SWCorpus I have found too many examples to list here. Instead, I list a few contrastive examples showcasing an SRP following a single prosodic word and the variable attachment of following a multi-word constituent:

(50) SWCorpus examples showing Variable SRP Clitic Placement

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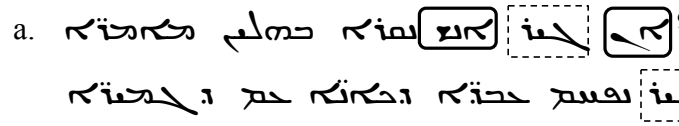
[84] (John the Solitary/Dialogue on the Soul (1.1.2)/73)
[85] (Book of Steps/Col. 101/80)
[86] van Peursen and Falla (2007) mention this same restriction: ܘܠ ܕܒ ܠܚ
[87] (Ephrem the Syrian/Sermons II/IV/105 ܘܠ ܕܒ ܚܒ ܒܗ ܟܠ ܫܘܝ ܕܒ ܚܒ ܒܗ ܟܠ ܫܘܝ)
[88] (Early (pre 400)/Clementine Recognitions/Ps. Clementine Recognitions)
[89] (Peshitta OT/Numbers/432)
[90] (John the Solitary/Dialogue on the Soul (1.1.2)/214)
[91] (Pseudo Melito/Page 26/1)
[92] (Early (pre 400)/Clementine Recognitions/Ps. Clementine Recognitions)

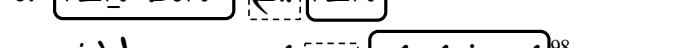
a.  [93]

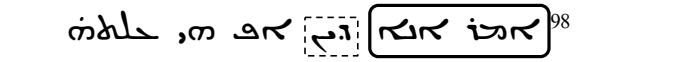
[94]

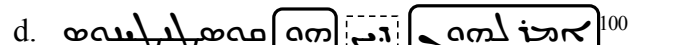
b. [95]

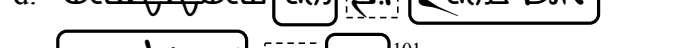
[96]

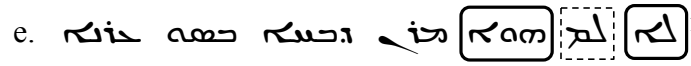
c. [97]

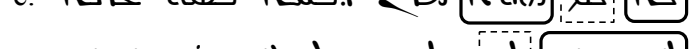
 [98]

 [99]

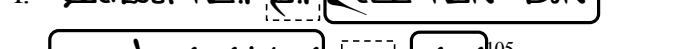
d.  [100]

 [101]

e.  [102]

 [103]

f. [104]

 [105]

[106]

Each set of examples in (50a-f) demonstrates the Syriac clitics (in the dotted box) exhibiting variable second-position placement in relation to a similarly constructed sentence. Furthermore, the additional boxes containing the SRPs' surrounding lexical items highlight the variation of constituent order in Syriac as well as the SRPs' ability to attach to virtually any host. Although

[93] (Aphrahat/XXII. Demonstration on Death and the Last Times/1)
[94] (Book of Steps/Col. 101/648)
[95] (Book of Steps/Col. 101/1009)
[96] (Ephrem the Syrian/Hymns on Paradise/I/10 ܡܢ ܐܠ ܡܥܡܪ ܒܪ ܟܠ ܕ ܕ)
[97] (Book of Steps/Col. 101/826)
[98] (John the Solitary/Dialogue on the Soul (1.1.2)/62)
[99] (Early (pre 400)/Clementine Recognitions/Ps. Clementine Recognitions)
[100] (Hagiography/Death of Constantine II (VatSyr37))
[101] (Seventh to tenth Century/Dadisho Qatraya, Commentary on the Paradise of the Fathers/Dadisho' Qatraya/Manuscript Sigla/Other signs and abbreviations)
[102] (Ephrem the Syrian/Hymns Against Heresies/XXXVI/9 ܟ ܐ ܕ ܕ ܕ ܕ ܐ/1)
[103] (John the Solitary/Dialogue on the Soul (1.1.2)/27)
[104] (Fifth Century/Eusebius, Theophania Syriac)
[105] (Early (pre 400)/Titus of Bostra, Against the Manichaeans/Titus of Bostra, Against the Manichaeans)
[106] (Acts of Judas Thomas/Page 248/1)

each example is not glossed, the boxed pairs in some examples like (50b) are semantically identical 'when Adam had sinned' (kd ḥṭᵊ ***den*** ᵓdm/ kd ***den*** ḥṭᵊ ᵓdm).[107] The purpose is to highlight the variable 2W/2D attachment.

Data from the SWCorpus have shown that Syriac rhetorical particles exhibit the 2W/2D analysis for second-position placement which is also attested in three other languages (Ngiyambaa, Luiseño and Serbo-Croatian). This new observation opens Syriac to further investigation regarding cliticization. In the next subsection I briefly discuss SRPs in terms of head-adjacent and non-head-adjacent clitics.

4.3. **Head-Adjacent and Phrasal Clitics**

The majority of research within clitic typology consists of observations and analysis on pronominal clitics, which for the most part are head-adjacent clitics of some sort. These contrast with non-head-adjacent clitics, also called 'phrasal affixes' by Klavans (1985) and Anderson (2005) and 'phrasal clitics' by Billings (2002).

These two types of clitics exhibit differential scope: the former are adjacent to some syntactic head (predominantly verb-adjacent), while the latter orients directly to a phrasal edge or peripheral element of a constituent. Head-adjacent clitics, particularly verb-adjacent ones, present problems beyond the already established issues for determining the categorical status of clitics. As we have already seen, one salient feature of clitics is their high selectivity of their host, though this is not the case of verb-adjacent clitics (as the name implies). In addition, due to this attachment directly to the verb in a VP, the parameters of the respective clitics will change (i.e., INITIAL, AFTER, SUFFIX) when the positioning of the verb changes in the sentence:

(51) Bulgarian Head-Adjacent Clitics[108] **(**Billings & Konopasky 2002)

a. Az ***ti***= ***ja***= <u>dadox</u>.
I.NOM 2SG.IO FEM3SG.DO gave.1SG
'It's me that gave it to you.'

b. <u>Dadox</u> =***ti*** =***ja***.
gave.1SG 2SG.IO FEM3SG.DO
'I gave it to you.'

[107] Book of Steps Memra 28:4 (Kitchen & Parmentier 2004).
[108] The clitics have been bolded and italicized and the verb (head) underlined for visual convenience. (=) references the direction in which the clitics attach, i.e., preceding is suffixal, following shows prefixation.

(52) Tagalog Head-Adjacent Clitics (Billings & Konopasky 2002)

a. Bukas ***ba***= ***siya***= aalis?
tomorrow Q 3SG.NOM FUT.leave

'Is it tomorrow that he'll be leaving?"

b. Aalis ***=ba*** ***=siya*** (bukas)?
FUT.leave Q 3SG.NOM (tomorrow)

'Will he be leaving (tomorrow)?'

Examples (51a) and (52a) show clitics which are anchored to the final element in the phrase, preceding it, while (51b) and (52b) show completely opposite parameters [INITIAL, AFTER, SUFFIX]. Thus, these clitics in (52a-b) would alternate between type [c] and type [f] clitics. Consequently, universal rules and a standardized typology are difficult to imagine without separating head-adjacent clitics from non-head adjacent ones, but few researchers make this distinction clear. Klavans (1985) herself planned to include the famous Romance pronominal clitics in her taxonomy, but because these clitics' positioning is defined relative to a head, or a category of a verb, the three binary parameters fail to properly account for this. For the most part her taxonomy does not distinguish head-adjacent from non-head-adjacent clitics. In fact, the majority of the literature does not distinguish the two at all (Klavans 1985; Halpern 1995; Anderson 2005a), thus leaving studies on non-head-adjacent particle and (including discourse clitics like the SRPs) as the minority.

Billings (2002) does make this necessary distinction with 'phrasal clitics' directly contrasting with head-adjacent clitics. His phrasal clitics are easily identifiable for their specific relation and position with the initial or final element in the phrase. They can appear adjacent to a verb or head in the phrase but this is coincidental and not mandatory. In the next subsection, I apply specific constraints given in Billings (2002) to the Syriac data which result in Syriac particles behaving in much the same way as the English possessive *'s*. In particular, he employs an Optimality Theory (OT) analysis which I apply to SRPs.

McCarthy (2007) describes OT as a general model of how grammars are structured and the associated framework was first introduced by Prince & Smolensky (1993). In essence, OT is a constraint-based approach to language generation within the language faculty. The constraints (hereafter described) are hierarchical in value (listed from most important to least). Although the constraints are assumed to be universal, the hierarchy and ordering are usually language-

specific. The operational component, known as GEN, interacts with the input by constructing a set of candidate output forms which vary from the initial input. McCarthy explains that GEN has to anticipate all of the possibilities that a language could transform any given input and account for each one of these possibilities in the candidate set. Following GEN, the constraint component of OT, called EVAL, selects the most harmonic or optimal candidate from this candidate set as the actual output of the grammar. EVAL selects the optimal candidate by evaluating them using a constraint hierarchy and the ranking order of the constraint hierarchy is language-specific. Those which violate the least number of the most important constraints emerge as the 'optimal' candidate(s) selected as the correct output for the grammar. I will follow the constraints given in Billings (2002) addressing clitic typology. For more on OT regarding cliticization and clitic typology; see Anderson (1992, 2005a, 2005b).

Billings proposes to identify all clitic types with four main specific OT constraints:

(53) Billings's OT Constraints (Billings 2002)

a. **SCOPE**: Elements precede the domain over which they take scope.
b. **ALIGN**(*clause*|L, *intonation phrase*|L): A clause's leading edge must coincide with the leading edge of an intonation phrase.
c. **SUFFIX**: Morphemes marked as suffixes (**cl**) must follow some PrWd.[109]
d. **INTEGRITY**: Clitics are prohibited from intruding into words/phrases [IN(∀)].

Although OT is based on the conflict between markedness and faithfulness constraints, Billings does not discuss his constraints in these terms, and therefore I leave this discussion outside of the scope of this thesis. Evaluation of candidates against the constraints is recorded in a tableau, which additionally has the candidate set and lists the input somewhere above. Billings gives the final hierarchical ranking for English as {ALIGN, SUFFIX, IN(∀)} » SCOPE}.[110] Example (54) shows the tableau for evaluating optimal placement for the phrasal clitic *'s*.

(54) English possessive 's (Billings 2002)

	ALIGN	SUFFIX	IN(∀)	SCOPE
a. [PrWd=**cl** PrWd PrWd]			*!	*

[109] This is the exact terminology used by Billings (2002). I note that there is confusion between suffixal and enclitic, as the constraint is SUFFIX but should probably be ENCLITIC to avoid confusion between clitics and affixes.
[110] Commas represent an equal or 'tied' ranking whereas (») signifies a ranking (to the left) outranking that to the right.

b. [PrWd PrWd=**cl** PrWd]			*!	* *
c. ☞[PrWd PrWd PrWd=**cl**]				* * *
d. [=**cl** PrWd PrWd PrWd]	*!			
e. [**cl**=PrWd PrWd PrWd]		*!		

English possessive *'s* candidates (54d-e) are eliminated by the first two superior constraints: candidate (54d) violates ALIGN by attempting to attach leftward across a clausal boundary and candidate (54e) violates SUFFIX because the clitic attempts to attach rightward, conflicting with the suffixal constraint. Candidates (54a-b) both violate the integrity IN(∀) constraint by interrupting a phrase. Candidate (54c) violates SCOPE three times since it does not precede its entire domain. However, as all of the other candidates have violated superior constraints, (54c) is the optimal candidate (indicated with the pointing finger). This hierarchal ranking for English possessive *'s* is not strictly limited to English but rather is the hierarchal ranking for determining the optimal candidate for phrase-final suffixal clitics in general.

I have argued that the SRPs are phrase-final suffixal clitics in second position (in addition to attaching to a prosodic word). Accordingly, I applied Billings's constraint rankings to the Syriac data and they appear to properly describe the Syriac particles' behavior and structure. As support for their status as phrasal clitics, in tableau (55) I present an analysis for Syriac ***den*** with the same hierarchy of constraint rankings:

(55) Matthew 26:32 (2D placement for ***den***)

"mn btr dqam ᶜnᶜ ***den***…"	ALIGN	SUFFIX	IN(∀)	SCOPE
a. ☞ [mn btr dqam ᶜnᶜ=***den***]				* * * *
b. [mn btr dqam=***den*** ᶜnᶜ]			*!	* * *
c. [mn btr=***den*** dqam ᶜnᶜ]			*!	* *
d. [mn=***den*** btr dqam ᶜnᶜ]			*!	*
e. [=***den*** mn btr dqam ᶜnᶜ]	*!			
f. [***den***=mn btr dqam ᶜnᶜ]		*!		

Candidate (55e) violates ALIGN by attaching backwards across clausal boundaries; candidate (55f) violates SUFFIX by prefixing to the preposition *mn*; and candidates (55b-d) all violate IN(∀) by interrupting certain phrases. As a result of the constraints, candidate (55a) is the

optimal one. Although (55a) violates SCOPE four times, this constraint is the least important in the hierarchy and this candidate does not violate the more important constraints (ALIGN, SUFFIX, and IN(∀)).

In tableaux (56)-(58) I provide further evidence where this constraint ranking yields the optimal candidate for Syriac examples. The analysis follows similarly to the explanation given to describe (55) and therefore I only include the tableau for further consideration:

(56) Julian the Apostate 72:1[111] (2W placement for ***den***)

"mahelwo ***den*** b-eh qadisho…"	ALIGN	SUFFIX	IN(∀)	SCOPE
a. [mahelwo b-eh qadisho=***den***]				* * *
b. [mahelwo b-eh=***den*** qadisho]			*!	* *
c. ☞[mahelwo=***den*** b-eh qadisho]				*
d. [=***den*** mahelwo b-eh qadisho]	*!			
e. [***den***=mahelwo b-eh qadisho]		*!		

(57) Matthew 2:5 (2W placement for ***ger***)

"hknʾ ***ger*** ktyb bnbyʾ **…"**	ALIGN	SUFFIX	IN(∀)	SCOPE
a. [hknʾ ktyb bnbyʾ=***ger***]				* * *
b. [hknʾ ktyb=***ger*** bnbyʾ]			*!	* *
c. ☞[hknʾ=***ger*** ktyb bnbyʾ]				*
d. [=***ger*** hknʾ ktyb bnbyʾ]	*!			
e. [***ger***=hknʾ ktyb bnbyʾ]		*!		

(58) Luke 20:25 (2W placement for ***hkyl***)

"hbw ***hkyl*** dqsr lqsr**…"**	ALIGN	SUFFIX	IN(∀)	SCOPE
a. [hbw dqsr lqsr=***hkyl***]				* * *
b. [hbw dqsr=***hkyl*** lqsr]			*!	* *
c. ☞[hbw=***hkyl*** dqsr lqsr]				*
d. [=***hkyl*** hbw dqsr lqsr]	*!			
e. [***hkyl***=hbw dqsr lqsr]		*!		

[111] Syriac sentence appearing in Doron and Assif (2000:105)

My OT analysis on the Syriac particles serves two purposes: first, it demonstrates Syriac second-position clitics as 'phrasal clitics' in line with contemporary linguistic typology. Secondly, the analysis presented in this section displays application of the Syriac data to a linguistic framework and the results successfully display variable 2W/2D second-position attachment of SRPs in Syriac.

5. Conclusion and Discussion

The primary contribution of this thesis is to establish SRPs as clitics and define them as 'second-position' clitics, as well as to show how they fit into the typological literature on clitics. In doing so, I have established a link between traditional Syriac literature and contemporary linguistic research on clitic typology. I argued that second-position clitic attachment in Syriac can occur in one of two possible ways: by attaching directly to a single prosodic word, or by attaching to a multi-word constituent/phrase. The former analysis is attested and researched in previous literature and this thesis expands that previous analysis by applying the Syriac question to more extensive corpus research via the SWCorpus. The latter option of additionally attaching SRPs to a multi-word constituent/phrase is an entirely new level of description for Syriac. The variable 2W/2D analysis of SRPs' second-position attachment places Syriac among a small group of languages displaying similar phenomena (i.e., Luiseño, Ngiyambaa and Serbo-Croatian).

A few issues regarding cliticization in Syriac, especially SRPs, are left open to future research and investigation. One pressing issue is the fact that this variation of 2P attachment is only attested in three languages outside of Syriac, two of which are extremely rare with little extant literature (Ngiyambaa and Luiseño). Although Serbo-Croatian has been exhaustively researched and analyzed, it does beg the question whether this analysis is an outlier showing variable attachment, or if all four languages should somehow be reanalyzed more canonically as strictly 2W or 2D. Future research could investigate possible Syriac stylistic variations in the SWCorpus, whether by author or genre, which may highlight the 2W/2D variation and help to better understand the phenomenon.

One could also pursue possible semantic differences due to change in the linear order of SRPs within their domain (i.e., ***lam/hokyl, hokyl/lam***). Doron & Assif (2000) claim that no semantic difference exists between a proposed string of ***den/lam*** versus ***lam/den***; however, given the rhetorical nature of each SRP, I argue that this conclusion is based on insufficient data and that further investigation is needed.

An interesting area which could greatly benefit the literature is further investigation into SRP usage in the different versions of the New Testament: the Peshitta, the Curetonian and the Sinaitic. As shown in examples (18) and (19) in chapter 3, interesting similarities exist between

the SRPs selected for each version. These examples clearly showed the semantic relationship and similarity of the SRPs being used interchangeably. However, these examples are only descriptive, providing no investigation or argumentation regarding the reasons for the specific selections which each author/translator made.

Another area of research which the different versions of the New Testament highlight is possible diachronic analysis on the Syriac particles. Comparative analysis of SRP usage and change over time could give further insight to the semantics and historical usage of these particle clitics.

Other issues which could be addressed in the future involve clitic clusters and further Syriac OT investigation. The OT analyses given in chapter 4 are merely a point of departure. The constraints correctly predict the optimal candidates for both 2W and 2D attachment in different tableaux, however, future research could investigate the possibility of accounting for the 2W/2D variation in attachment by selecting two optimal candidates in the same tableau.

6. Appendices

Appendix 1 Syriac Romanization Key[112]

ܐ	ʾ	ܠ	l
ܒ	b	ܡ	m
ܓ	g	ܢ	n
ܕ	d	ܣ	s
ܗ	h	ܥ	ʿ
ܘ	w	ܦ	p
ܙ	z	ܨ	ṣ
ܚ	ḥ	ܩ	q
ܛ	ṭ	ܪ	r
ܝ	y	ܫ	š
ܟ	k	ܬ	t

[112] The romanization key is adapted from Kiraz (2012).

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