BART Display Enhanced for Discourse Features: Hebrew Old Testament[1]

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0. Introduction

The purpose of this paper is to show the value of enhancing SIL International's Bible Analysis and Research Tool (BART) so that key discourse features of the Biblical Hebrew or Koiné Greek text are readily apparent. Its base is the draft of a propositional display being developed by LOGOS Bible Software, with one proposition per line, which I have modified extensively. My intention, in preparing such a display, is to make it easier for translators with limited knowledge of Hebrew or Greek to recognise the presence of certain discourse features in the source text.

I used such a display in 2009 in a 'discourse for translation' workshop for Filipino mother tongue translators who had studied Hebrew at seminary in Manila. Feedback from them indicated that marking the discourse features in this way facilitated their exegesis of Exodus 1-12. It is my belief that the availability of such displays will encourage translators around the world to use the original languages as their source text, rather than versions in European languages, with resulting improvements in their draft translations—hence my desire to share with you what has so far been achieved.

I illustrate this paper from the file entitled Ex1-23BART.pdf that accompanies this document. I have prepared a number of similar files for twelve New Testament books and hope to have the rest of the New Testament displayed in the same way and available on this website before too long.

The paper outlines the discourse significance of marking a number of features within propositions. It does not attempt to justify the claims that underlie the display, however. Instead, it indicates books or articles where such claims are substantiated. First, though, I describe the system of indentation.

1. Indentation

The text is usually displayed with one proposition per line (e.g. Ex 1:1)[2], though long propositions have had to be divided (1:14), and a series of verbs is sometimes displayed on a single line (1:7b).

The **first** level of indentation reflects the presence in a proposition of any pre-nuclear or pre-verbal constituents, including vocatives, pre-verbal subjects (e.g. 1:5b) and other points of departure (also called 'topicalised constituents'—1:16b)[3] and preposed focal constituents (1:1b).[4] Verbless clauses that begin with either the subject or the complement are indented in the same way (1:1a, 1:19b).

The **second** level of indentation is for nuclear clauses that begin with a verb (e.g. 1:19a).

Third and subsequent levels of indentation are for post-nuclear clauses (e.g. 1:19c), as well as the second part of long propositions that have had to be divided.

The reported speech of 1:9b-10 illustrates this use of multiple levels. It begins with a verbless clause (1st level of indentation), then a nuclear clause that begins with a verb (2nd level) and, finally, a series of post-nuclear clauses which are introduced with the subordinator פֶּן 'lest' (3rd and 4th levels).

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[1] This paper was presented at the 2010 Bible Translation (BT2010) conference held at Horsleys Green, UK in July 2010 under the auspices of the European Training Programme (ETP) of SIL International.

[2] Unless otherwise indicated, all the examples are taken from Exodus 1-18.

[3] See *NARR* §3.1, *NonNarr* §4.3. Pre-verbal subjects and other points of departure occupy P1 in Dik's template (see Levinsohn 2010 §2 and §4.1 below).

[4] Preposed focal constituents occupy P2 in Dik's template (ibid.). In Greek, pre-nuclear participial clauses (*DFNTG* §11.1) also begin at the first level of indentation.

2. Reported Speech

The enhanced BART display currently makes a two-way distinction between reported speech and any form of embedded reported speech (i.e., speech that is reported within a reported speech).
- Reported speech is coloured **blue** (e.g. Ex 1:9b-10).
- Speech that is reported within a reported speech (embedded reported speech) is coloured **magenta** [pink] (e.g. 3:13d,f).[5]

So far, no attempt has been made to distinguish levels of embedded speech, such as occurs in 7:16.

3. Over-Encoding of References to Active Participants and Props

When the subject remains the same between clauses or sentences, the default means of reference to the subject in all languages is the minimum permitted for that language (*NARR* §8.2.4). Since Hebrew is a pro-drop language (Levinsohn 2010 §4), this means that the default way of referring to the subject in a same-subject context in verbal clauses in Hebrew is with no overt reference other than verb inflection. The same is true for certain contexts in which there is a change of subject when the new subject is an active participant or prop (*NARR* §8.3).

I use the term 'over-encoding' to refer to any instance in which more encoding than the default is employed to refer to an active participant or prop. Over-encoding is signalled in the enhanced BART display by means of **yellow background**.

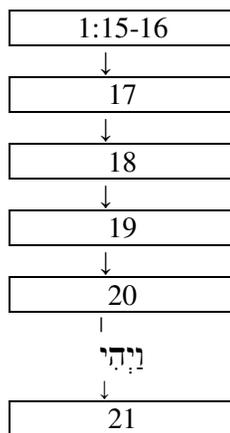Over-encoding is used in Hebrew, as in other languages:
- to mark the beginning of a narrative unit (e.g. 12:37); and
- to highlight the action or speech concerned (e.g. 3:2d).

As I have argued elsewhere (*NARR* §8.3), an additional motivation for over-encoding references to active participants and props in Hebrew is:
- to indicate new developments along the theme line.[6]

In Ex 1:15-20, for instance, the midwives are renamed in vv. 17, 18, 19 and 20. These are instances of over-encoding that have the effect of dividing 15-20 into five development units (see also the apparently redundant reference to Pharaoh in 19).

The following flow-chart shows how such overencoding divides 1:15-21 into development units.[7]

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┌───────────────┐
│    1:15-16    │
└───────────────┘
        ↓
┌───────────────┐
│      17       │
└───────────────┘
        ↓
┌───────────────┐
│      18       │
└───────────────┘
        ↓
┌───────────────┐
│      19       │
└───────────────┘
        ↓
┌───────────────┐
│      20       │
└───────────────┘
        │
      וַיְהִי
        ↓
┌───────────────┐
│      21       │
└───────────────┘
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[5] In the Greek text, I have inherited LOGOS' use of background coloured cyan [turquoise] to mark quotations from the Old Testament.

[6] In narrative, development units 'start a new scene or open a new burst of closely related actions' (Heimerdinger 1999:124).

[7] See §5 on the use of וַיְהִי 'and it was' to introduce the final unit of the episode.

4. Constituent Order

The BART display has been enhanced to indicate the function of a number of variations in constituent order.

4.1 Pre-verbal constituents

As I indicated in my paper on contextualising the teaching of Biblical Hebrew (Levinsohn 2010), the language is of the VS/VO type (*NARR* §0.3). Many variations in constituent order can be explained by reference to Simon Dik's (1989:363) **P1 P2 V X** template, where:

- P1 can be occupied by a pre-verbal topical subject and/or other points of departure;
- P2 can be occupied by a FOCUS constituent, to give it prominence (*NARR* §4.2.3).

Constituents in **P1** are **underlined** and marked with one of the following labels:

- **Top**—pre-verbal topical subject or other referential point of departure (*NARR* §3.1, *NonNarr* §4.3; e.g. Ex 1:5b, 12:10b)
- **Sit**—situational point of departure, which may be temporal, spatial, conditional, etc. (ibid.; e.g. 1:10d, 1:16b,d,f).[8]

Constituents in **P2** to give them focal prominence (*NonNarr* §5.2, *DFNTG* §3.6) are enclosed in a solid red box (e.g. 1:1b, 12:10b).

If a focal constituent is split, with only the first part in P2 (*NonNarr* §5.5, *DFNTG* §4.4), then the second part is marked with the label **Split** and is also enclosed in a solid red box (e.g. 18:11b).

If a constituent of a phrase or embedded clause has been preposed for focal prominence (*DFNTG* §4.5), it is enclosed in a solid red box and is marked **Emb** (embedded). In 1:16d, for instance, the complement בֵּן is preposed for focal prominence within the situational point of departure אִם־הוּא בֵּן 'If it (is) a son'.

Tail-head linkage (*NARR* §3.2.3, *NonNarr* §8.12) may involve a subordinate clause in P1 (underlined–e.g. 11:1d), or a repeated independent clause (e.g. 8:22). Such linkage is marked **T-H** and is *italicised*.[9]

Left-dislocated constituents (*NARR* §3.1) are **right**-dislocated in Hebrew, so are **underlined** and labelled **R-Dis**. In 3:5d, for instance, הַמָּקוֹם אֲשֶׁר אַתָּה עוֹמֵד עָלָיו 'the place on which you are standing' is dislocated to the beginning of the proposition (see the presence of the pronoun הוּא 'it' at the end of the proposition), perhaps because the constituent is complex or as a rhetorical slowing-down device to highlight the comment about it (אַדְמַת־קֹדֶשׁ הוּא 'it is **holy**').

4.2 Clause-final focal constituents

The Principle of Natural Information Flow explains many variations in the order of constituents in Hebrew and Greek (see *NARR* §4.2.1, *NonNarr* §4.4). Constituents that may be moved from their default position to the end of a proposition to give them focal prominence include verbs, pronominals and objects that follow adjuncts (*NonNarr* §5.3). Such constituents, also called 'dominant focal elements' or DFEs,[10] are enclosed in a red box with dots for borders.

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[8] In the case of Greek, articular pronouns, which often introduce 'intermediate steps' in a conversation (*NARR* §7.5, *DFNTG* §13.1) are marked with the label **Art**.

[9] In Greek, tail-head linkage may also involve pre-nuclear participial clauses (e.g. 1 Th 5:8).

[10] See Heimerdinger 1999:167.

The following are examples of DFEs at the end of a proposition:

- Ex 2:10f: the verb מְשִׁיתִהוּ 'I drew him' is postposed to explain why the daughter of Pharaoh named the child Moses.
- 5:2f: the negated verb לֹא אֲשַׁלֵּחַ 'I will not let go' is the DFE.
- 5:11b: the subject דָּבָר 'anything' is the DFE.
- 5:21b: the pronominal עֲלֵיכֶם 'towards you' is the DFE.
- 8:17b: the object אֶת־הֶעָרֹב 'the swarm' is the DFE.

Right-dislocated constituents are **left**-dislocated in Hebrew, so are marked **L-Dis**. In 3:16c, for instance, אֱלֹהֵי אַבְרָהָם יִצְחָק וְיַעֲקֹב 'the God of Abraham, Isaac & Jacob', which is in an appositional relation to the focal subject יְהֹוָה אֱלֹהֵי אֲבֹתֵיכֶם 'YHWH the God of your ancestors', is dislocated to the end of the proposition.

4.3 Marked but ambiguous constituent order

When a constituent precedes the verb, it is not always clear whether it is topical (in P1) or focal (in P2). When such is the case, the constituent is marked in a way that reflects my preferred analysis, but with added **asterisks** (*).

In Ex 6:3b, for instance, וּשְׁמִי יְהֹוָה '(&) my name YHWH' may be in P1, in which case the negated verb (לֹא נוֹדַעְתִּי 'I did not make myself known') is focal. Alternatively, it may have been preposed for focal prominence (in P2): 'I did not make myself known to them by **my name YHWH**'. I prefer the second analysis, so the constituent is enclosed in a red box, but asterisks warn the reader that it is possible to exegete the proposition in a different way.

In 18:22c, the New International Version (NIV) treats כָּל־הַדָּבָר הַגָּדֹל 'every difficult case' as part of the comment about 'them' as topic ('have them bring every difficult case to you'), in which case it has been preposed for focal prominence (in P2). However, it may be in P1 (the NIV translates 26b, which has the same constituent order, 'The difficult cases they brought to Moses'). The use of a passive in the New Living Translation ('Anything that is too important or too complicated can be brought to you') is consistent with such an exegesis. I judge that the constituent is indeed in P1, so it is underlined and marked **Top**, with asterisks to warn the reader that it is possible to exegete the proposition in a different way.

When the verb is final, it is not always clear whether the DFE is the verb or the constituent that immediately precedes it (see *DFNTG* §3.8.1). When such is the case, both constituents are enclosed in a red box and are marked with an asterisk.

5. Highlighting Devices

So far, three highlighting devices are marked in the enhanced BART display: presentatives such as הִנֵּה 'here!', the combination of וַיְהִי '& it was' or וְהָיָה '& it will be' with a situational point of departure, and verbs that are emphasised by the addition of an infinite absolute or 'paragogic *nun*'. I discuss them in turn.

5.1 Presentatives

Interjections such as הִנֵּה and הֵן 'lo, here!' are used as interpretive use markers (Sim 2010) that highlight what immediately follows (*NonNarr* §7.7.3). They often mark 'a statement expressing the

perception of a character as distinct from the biblical narrator' (Hepner 1988:50, citing Berlin 1983:43-82).

Such presentatives are displayed on a **light green background** (e.g. Ex 1:9b, 5:5b).

5.2 The combination of a 'be' verb and a situational point of departure

When the perfective verb form וַיְהִי '& it was' or the imperfective וְהָיָה '& it will be' is followed by a situational point of departure, it marks a transition from less important to more important information (*NARR* §5.4.2, *NonNarr* §7.7.5). Such instances of וַיְהִי and וְהָיָה are also displayed on a **light green background**.

In Ex 1:21, for instance, וַיְהִי '& it was' is followed by a reason clause that provides a situational point of departure כִּי־ יָרְאוּ הַמְיַלְּדֹת אֶת־ הָאֱלֹהִים 'because the midwives feared God'.[11] The combination introduces the climactic event of the episode, as far as the midwives are concerned (וַיַּעַשׂ לָהֶם בָּתִּים '(&) He established households for them'—the opposite of what Pharaoh had intended).

In 1:10, וְהָיָה '& it will be' is followed by the conditional point of departure תִקְרֶאנָה מִלְחָמָה כִּי־ 'if war breaks out', and points forward to 'significant background or important events to follow' (Longacre 1994:84).

5.3 'Emphasised' verbs

The combination of an independent verb and an **infinite absolute** 'is used to give emphasis with various nuances, the basic idea being that by giving the verbal idea in abstracto, the writer or the speaker wants to indicate that he is especially interested in it or to demand that the reader or hearer give especial attention to it' (Muraoka 1985:92). The infinite absolute is coloured cyan and the combination is enclosed in a **red box** with **dashes** for borders.

See, for example, Ex 3:7b (רָאֹה רָאִיתִי [literally 'to.see I.have.seen']), which emphasises 'see': 'I have marked well' (Sarna 1991:15), 'I have surely seen' (Cassuto 1967/1997:32).

In 8:24d (הַרְחֵק לֹא־ תַרְחִיקוּ [go.far.away not you will.go.far.away]), the emphasised verb is negated: 'don't go too far away' (New Living Translation).

Verbs that end with '**paragogic *nun***', which often indicates 'marked emphasis' (GKC §47*m*), are also enclosed in a **red box** with **dashes** for borders. In 9:28d, for instance, the (auxiliary) verb תֹסִפוּן 'you will increase' ends with paragogic *nun*. The proposition וְלֹא תֹסִפוּן לַעֲמֹד (&.not you.will.increase to.delay) can therefore be translated, 'you shall certainly stay no longer' (Durham 1987:125, 124).

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[11] This clause repeats information from 1:17, so may be taken as an instance of resumptive tail-head linkage (§4.1, *NARR* §3.2.3). Such repetition probably adds to the highlighting.

6. Demonstratives and Relative Clauses

Hebrew demonstratives and relative clauses often give prominence to their referents. Demonstratives may have anaphoric or cataphoric reference.

6.1 Demonstratives

Proximal demonstratives are marked **prox**. When used **anaphorically**, their referent is thematic (the current centre of attention—*NARR* §§4.6, 9.2).

In Ex 1:18c, for instance, if we take the referent of הַדָּבָר הַזֶּה 'this thing' to be what the midwives had failed to do (Cassuto p. 16), then it is thematic. (See also 2:15a, 3:21a, 4:2b, 4:9b.)

When a proximal demonstrative or כֹּה 'thus' is used **cataphorically**, to point forward to and highlight something which 'is about to be expressed' (Crystal 1997:55; see *NARR* §5.4.2), it is enclosed in a **red box** and marked **Cata**. If it is in P2, it is enclosed in a solid red box (e.g. 3:14d, 6:14a, 1:1a). If it is after the verb, it is enclosed in a dotted red box (e.g. זֹאת זִכָּרוֹן 'this reminder'—17:14b).

Distal demonstratives are marked **dist**. They are often used to communicate identity ('the same').

In 5:6a, for instance, בַּיּוֹם הַהוּא 'on that day' is used anaphorically, to underline the fact that what follows took place 'on the same day' (Cassuto p. 68).

6.2 Relative clauses

Relative clauses that begin with אֲשֶׁר are marked **rel**. As in many African languages, they are usually related to prominence, provided that they contain information which is not really needed to establish the identity of the referent (*NARR* §10.3.7).

In Ex 1:8, for instance, the relative clause אֲשֶׁר לֹא יָדַע אֶת יוֹסֵף ('who did not know Joseph') marks the 'new king over Egypt' (מֶלֶךְ חָדָשׁ עַל מִצְרָיִם) as **thematic**. In other words, he will have a significant role to play in the ongoing narrative.

In 1:15, the relative clause אֲשֶׁר שֵׁם הָאַחַת שִׁפְרָה וְשֵׁם הַשֵּׁנִית פּוּעָה ('one of whom was named Shiphrah and the other Puah'—Sarna p. 6) again implies that the midwives are **thematic** in the episode (see also the renaming of them throughout the passage—discussed in §3). The insertion of this relative clause, which conveys 'non-event information', also has the rhetorical effect of 'slowing the story down' (*NARR* §5.4), thus giving prominence to the speech that follows, with its instruction to kill all the male Hebrew babies.

In 3:20, the relative clause אֲשֶׁר אֶעֱשֶׂה בְּקִרְבּוֹ ('which I will do in its midst') may give prominence to בְּכֹל נִפְלְאֹתַי ('with all my wonders') by **intensifying** 'all'.

7. Conclusion

This paper has shown how SIL International's Bible Analysis and Research Tool (BART) can be enhanced to make key discourse features of the Biblical Hebrew or Koiné Greek text readily apparent. As I indicated in my introduction, such a display makes it easier for translators with limited knowledge of Hebrew or Greek to recognise the presence of some of the discourse features of the source text, understanding of which will result in a more accurate exegesis of the passages concerned. Such displays may also encourage translators around the world to use the original languages, rather than a version in a European language, as their source text, with resulting improvements in their draft translations.

Experience from past workshops leads me to believe that aspiring translators of the Old Testament who have some knowledge of Hebrew benefit most from an enhanced BART display if they are taught how to apply the features so marked to their draft translations (e.g. in 'Discourse for Translation' workshops). Consultant checks, whether face-to-face or by e-mail, then need to be carried out until it is evident that the translator has mastered the significance of the marked features and is successfully reflecting them in his or her draft.

I do not pretend that all the relevant discourse information that a translator needs will be conveyed by such a display. Files such as *Some Notes on the Information Structure and Discourse Features of Exodus 1.1-12.15* (online at http://www.sil.org/~levinsohns) interpret the features marked in the display, and also explain why a particular exegesis was followed. In the future, it will no doubt be possible to include pop-up boxes or comparable devices so that translators can access such notes at the same time as they look at the text. I look forward to working with computer experts who can make that happen!

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