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Research article

Einav Fleck*

Passive-active variants in the Samaritan Pentateuch: A psycholinguistic perspective

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Abstract: Changes of passive predicates in the Masoretic Text (MT) to active predicates in the Samaritan Pentateuch (SP) have long been noted by SP scholars. Most of these changes have been convincingly explained by morpho-phonological and morpho-semantic developments in Samaritan Hebrew (SH), mainly the loss of internal passives and the increased use of *Nifʿal* to encode passives. However, diachronic developments in SH alone cannot fully explain the passive-active variants found in SP. A sentence-processing evaluation of these variants may help explain the unexpected changes of 48 passive *Nifʿal* predicates in SP, as well as the retention of over 80% of internal passives in this tradition. It may also illuminate some variants in the opposite direction, i.e., active clauses in MT that appear as passive clauses in SP. It is argued that the non-canonical semantic-syntactic mapping in passive structures, which affects the way passives are interpreted or retrieved, may be involved in the generation of passive-active variants in SP.

Keywords: Samaritan Pentateuch, Samaritan reading tradition, textual variants, passive

1 Introduction[1]

The Samaritan Pentateuch (SP) presents thousands of variants when compared to the Masoretic Text of the Pentateuch (MT), as is evidenced by both the text of the SP and its reading tradition (RT). The earliest surviving manuscripts of the SP are dated to the twelfth and thirteenth centuries CE,[2] while the oral reading tradition—recorded, transcribed and analyzed by Ben-Ḥayyim (1977)—probably has its roots in the Second Temple period. Unlike the extensive, consolidated vocalization systems of the MT (in particular the Tiberian tradition), the SP has only a few vocalization marks, which are attested sporadically and unsystematically in some of its late manuscripts.[3]

According to Tal (2013: 146), it was Gesenius who first concluded—based on philological evaluation of the written text—that the SP is "a version that presents a general tendency towards simplification and harmonization, many of which one witnesses in the Septuagint too and is therefore secondary." While Gesenius classified the variants in SP into eight different categories, Ben-Ḥayyim (1977) has divided them into two major classes: (1) intentional changes, motivated by the ideology and theology of the Samaritan community and by literary considerations; and (2) unintentional changes, reflecting the scribes' dialect and the process of textual transmission.[4] Amongst the latter,

1 Citations of MT are drawn from Accordance, Hebrew Masoretic Text with Westminster Hebrew Morphology (HMT-W4) Version 2.2. Citations of SP are drawn from Accordance, Samaritan Pentateuch, edited according to MS 6 (C) of the Shekhem Synagogue by Abraham Tal (1994), Version 3.1. Samaritan transcriptions and grammatical analyses throughout are drawn from Ben-Ḥayyim (1977).

2 Schorch (2021: xxxix). According to Tov (2012: 77), "a paleographical analysis of the specific version of the Hebrew script used by the Samaritans indicates that it dates from the Hasmonean period or later."

3 See Ben-Ḥayyim (2000: §0.6–§0.9).

4 Ben-Ḥayyim (2000: §0.4).

* The Hebrew University of Jerusalem, Israel, E-mail: einavfleck@gmail.com

Ben-Ḥayyim included changes in MT passive constructions, which he attributed to linguistic developments in Samaritan Hebrew (SH), some of which are also attested in other Second Temple Hebrew sources. The explanation of passive-active variants in light of these developments will be our point of departure. As shall be further shown, the diachronic explanation alone cannot account for passive-active variants in SP.

1.1 Passive-active variants in SP: The diachronic explanation

One morpho-phonological development in the Hebrew of the time is the fusion of some 'internal' passive forms *Puʕʕal*, *Hufʕal* and passive-*Qal*.[5] Fassberg (2001) has argued that a shift from *Qal* to *Piʕʕel*[6] (with no semantic change) led to a fusion of *Puʕʕal* and passive-*Qal* in *qatal* forms, resulting in the disappearance of the latter. That is to say, a verbal form such as יֻלַּד (3.m.s *qatal*), which diachronically may have been a passive-*Qal*, was synchronically analyzed as *Puʕʕal*. Fassberg viewed this process as part of a general abandonment of the *Qal* stem attested in extra-biblical sources including the Samaritan RT, wherein transitive and intransitive *Qal* shifted to *Piʕʕel*, and intransitive *Qal* and passives shifted to the more transparent *Nifʕal*. In the same vein, Hornkohl (2021) observed a morpho-semantic shift in SH and other Second Temple sources from the *Qal* stem to the more distinctive *Nifʕal* stem, a shift he terms *Niphalisation*. Hornkohl notes, however, that although SH represents a rather advanced stage of this shift, the RT sometimes preserves an 'archaic *Qal* morphology', as opposed to MT *Nifʕal*, in some weak verbs, a retention which he refers to as conditioned and probably secondary.[7]

In parallel to the general shift from *Qal* to *Piʕʕel* and *Nifʕal*, a phonological development is attested in SH (as is evident in RT): a short /u/ (and /o/)[8] in a closed syllable shifted to /a/, /i/ or /e/, sometimes resulting in the fusion of active-passive counterparts. For example, the active *Qal* יִקַּח ('take', 3.m.s *yiqtol*) and its passive-*Qal* counterpart יֻקַּח are both pronounced *yiqqa* in RT. Synchronically, then, Ben-Ḥayyim concluded that:

> At that time, the passive voice was no longer expressed other than by external forms, i.e., *Nifʕal* and *Hitpaʕel* (as in MH). The Pentateuch, however, preserves verbs requiring a passive sense in context, but in which no sign of the external passive appears, forcing us to understand them as internal passive forms. In such instances, the Samaritan oral tradition employs a variety of methods for expressing the required sense, most of them substitutes for the original, ancient passive forms. These include [...] [r]eplacement of the passive voice by active in places where the spelling of the verb and the syntax of the verse allow.[9]

However, Ben-Ḥayyim did not explain how the specific method of replacing a passive with an active verb could maintain the passive sense in SP.

The salient developments in the Hebrew of the Second Temple period, and specifically in SH, can thus be summarized as follows: (a) the fusion of some internal passive forms, e.g., passive-*Qal* and *Puʕʕal*; (b) the fusion of some internal passive forms with their active counterparts, e.g., *Qal* and Pas-

5 For a recent review of the passive-*Qal* and its status and use in ancient Hebrew texts, see Reymond (2016).
6 For a description of this shift in SH, see Ben-Ḥayyim (2000: §2.1.4.7).
7 Hornkohl (2021: 10, and n.14); see also Florentin (1993: 205).
8 See Ben-Ḥayyim (2000: §1.5.2.3).
9 Ben-Ḥayyim (2000: §2.10.2; §2.10.3).

sive-*Qal*; and (c) the innovative use of *Nifʕal*[10] to encode the passive, together with its other functions in encoding middle,[11] stative,[12] and reflexive[13] predicates.

The linguistic developments in SH, including the increased use of *Nifʕal* for encoding passive, may allow us to posit the following: (a) active interpretation in SP is mainly expected to arise in the RT in cases of passive-active homographs, i.e., single orthographic forms that have more than one possible vocalization and interpretation;[14] (b) *Nifʕal* passive forms in MT, specifically *Qal-Nifʕal* homographs, e.g. ימצא (3.m.sg *Qal* 'find'/*Nifʕal* 'will be found'), would not be expected to appear as active in SP,[15] given the innovative use of *Nifʕal* to encode passive in SH and the lack of phonological restrictions on this stem. While the shift of short /u/ in a closed syllable is considered to be one of the factors that eventually eliminated the internal passives in SH, no such shift is applicable to *Nifʕal*. However, the data on passive-active variants in SP suggest a more complex picture.

Overall, 90 clauses with passive predicates[16] in MT appear as active in SP. The changes in this set do not fully support the assumptions presented above, for the following reasons:

(a) As assumed, the active interpretation in SP is found in MT homographs (53 of 90 examples of all stems; 59%), but not exclusively. For example, in Lev 4:35, the non-homographic *Hufʕal* יוּסַר ('shall be removed', 3.m.sg) appears in SP as its *Hifʕil* counterpart יסיר ('shall remove', 3.m.sg). The active reading in Lev 4:35 cannot be accounted for by a morpho-phonological explanation; numerous imperfective *Hufʕal* forms are retained in SP, including יומת ('be killed', e.g., Ex 35:2), יוסך ('be poured out', Ex 37:16) or יורם ('be exalted', Lev 4:10).

(b) MT Passive-SP active variants are not evidenced in the RT alone, e.g., MT יוסר-SP יסיר in Lev 4:35. Of the 90 variants, 46 (51%) are also evidenced in the SP text.

(c) Of 244 internal passive predicates in MT, homographs and non-homographs, only 42 (17%) appear as active in SP (the actual rate of change may be greater, as will be discussed below). That is, over 80% of internal passives were retained in SP, as briefly shown in (a) above—'not only in places where there was no other option.'[17] Some internal passives changed inconsistently in SP, a pattern that may point to a non-phonological explanation. For example, the homographic *Hufʕal* form מֻכִּים in Ex 5:16 ('being beaten', m.pl part.) is read *makkəm* in SP, as an active *Hifʕil* (and resulting in a pragmatically difficult reading). By contrast, the same homographic *Hufʕal* forms in Num 25:14 מֻכָּה ('is beaten', m.sg part.) and הֻכָּה ('was killed', 3.m.sg) did not change to active *Hifʕil*, reading *mukkå* and *ukkå* respectively—with a retained /u/ in closed syllables.

(d) Crucially, passive *Nifʕal* clauses in MT do sometimes appear as active in SP. Overall, 48 of the 90 passive>active clauses (53%) are passive *Nifʕal* clauses in MT. Of these, 21 (44%) are passive-active homographs, e.g. ימצא. In a similar way to the internal passive clauses in MT that appear to be active in SP, the active reading is also evidenced in 26 *Nifʕal* clauses (54%) in the written SP text. Changes in passive *Nifʕal* cannot be accounted for by morpho-phonological or morpho-semantic developments in SP; essentially, they contradict them.

10 The *Nifʕal* in SP has two forms, *niqqāṭal* (*Nifʕal A*) and *niqqaṭṭal* (*Nifʕal B*), i.e., first/first-and-second radical geminated, respectively. See Florentin (1993: 210–211); Ben-Ḥayyim (2000: §2.1.4.7, 2.1.4.8); Fassberg (2018: 40–41).

11 E.g., van Wolde (2019). For a critique of van Wolde's argument, see Jones (2021).

12 E.g., Bicknell (1984).

13 E.g., Gesenius, Kautzsch, and Cowley (1910: §51.2).

14 See Ben-Ḥayyim (2000: §2.10.3).

15 Assuming a common predecessor for MT and SP. For a review, see the introduction in Tal and Florentin (2010).

16 Included in this study are MT clauses with passive predicates that have an active counterpart: internal passives *Qal* (of active *Qal*); *Hufʕal* (of active *Hifʕil*); and *Puʕʕal* (of active *Piʕʕel*). Passive *Nifʕal* predicates follow Bicknell's *Nifʕal* verbs with active counterparts in BH (Gen–Judg). See Bicknell (1984: 97–115).

17 Ben-Ḥayyim (2000: §2.10.5).

Despite the clear passive>active tendency in SP, at least 17 examples of active clauses in MT appear as passive in SP (none of them in *Hitpaʕʕel*). For example, Lev 25:5: וּמִמִּשְׁפַּחְתֹּ֣ם אֲשֶׁ֣ר עִמָּכֶ֔ם אֲשֶׁ֖ר הוֹלִ֣ידוּ בְאַרְצְכֶֽם (‘and from their families who are with you who have begat in your land’), wherein the *Hifʕil* הוֹלִ֣ידוּ (‘begat’, 3.pl) appears as *Huffal* in SP: אשר הולדו בארצכם (‘who have been born in your land’, 3.pl). Such variants require further consideration.

1.2 Passive-active variants in SP: A sentence-processing perspective

Given the above observations, I propose to examine changes from passive to active in SP focusing on the sentence level. Consider [1], where the reading tradition points to a change from a passive *Puʕʕal* clause in MT to an active *Piʕʕel* clause in SP.

[1] Num 36:2
MT: וַאדֹנִ֗י צֻוָּ֤ה בַֽיהוָה֙ לָתֵ֣ת אֶת־נַחֲלַ֣ת צְלָפְחָ֔ד אָחִ֖ינוּ לִבְנֹתָֽיו
צֻוָּה = ‘was commanded’, 3MSG *Puʕʕal*
‘and **my lord was commanded** by the Lord to give the inheritance of our brother Zelophehad to his daughters’
SP: ואדני צוה ביהוה …
RT: wådanni ṣåba afšēmå
ṣåba = ‘commanded’, 3MSG *Piʕʕel*
‘and **my lord commanded** by the Lord …’

At the sentence level, the RT may point to a different interpretation of this clause in SP. Although the first noun-phrase (NP) אדני (‘my lord’) is the grammatical subject of the clause in both MT and SP, in MT it is the participant who **undergoes** the action of commanding, i.e. is the **patient** of this action. In SP, on the other hand, אדני is the participant who **performs** the action of commanding, i.e. is the **agent** of this action (and no overt participant is realized in object position). When interpreting the NP אדני as the patient of the passive predicate צוה (‘was commanded’), as in MT, the **patient** role is the first role to be assigned to the argument in subject position. When the NP אדני is interpreted as the agent of the active predicate צוה (‘commanded’), as seems to be the case in SP, the **agent** role is the first role to be assigned to the argument in subject position. In other words, an active interpretation of the input maintains the expected mapping of thematic roles to syntactic positions, which is usually Agent-before-Patient (hence: AP) in Subject-before-Object (hence: SO) languages, including BH[18] and SH.

The probable interpretation of passive structure as active is not unique to SP or SH. As shall be further discussed, passive structures in AP languages are prone to misinterpretation during comprehension;[19] that is, comprehenders may perceive or retrieve an **active** clause even when the linguistic input is a **passive** clause, as shown in various processing tasks in living languages. Accordingly, I argue that the processing perspective should also be considered when evaluating passive-active variants in SP.

The rest of the article is arranged as follows. In §2, I present the characteristics of passive structures in BH that appear as active in SP. The relevant findings on the processing of passive structures and some other patient-first structures are presented in §3. The findings in SP are discussed in §4, divided into two main categories: variants in internal passive clauses (§4.2), and variants in *Nifʕal* passives clauses (§4.3). Examples of (the unexpected) active clauses in MT clauses corresponding to passive clauses in SP are discussed in §4.4.

18 I follow Moshavi (2010) and the dominant scholarly view that holds the canonical word order in finite clauses in BH to be VSO. According to Fassberg (2013), a shift towards SV order is attested in the Second Temple period. Since the subject precedes the object in both linearizations, BH is an AP language.

19 See, e.g., Ferreira (2003); Bader and Meng (2018).

2 Passive structures in MT

Two passive constructions in MT fall within the scope of the current study: **personal passive** as in [2], and **impersonal passive** as in [3] and [4].

[2] הוּשַׁב כַּסְפִּי (Gen 42:28)
'My money has been put back'

[3] וּבַכְּרָמִים לְֹא־יְרֻנַּן לָֹא יִרְעָע (Is 16:10)
Lit: and-in-the-vineyards not will-be-sung not will-be-cheered
'and in the vineyards no exultation is heard; no shouts are raised'

[4] יֻקַּח־נָא מְעַט־מַיִם (Gen 18:4)
Lit: will-be-taken.3MSG.PASS little water.M.PL
'let a little water be brought'

Two notable differences are seen in [2], when compared to [3] and [4]. The first relates to subject position. The personal passive clause in [2] has a grammatical subject, כַּסְפִּי ('my money', m.sg), agreeing with the 3.m.sg verb הוּשַׁב ('has been put back'), and hence it is a **personal** passive; whereas the clauses in [3] and [4] lack grammatical subjects (i.e., no NP agrees with the 3.m.sg passive verbs יְרֻנַּן, יִרְעָע and יֻקַּח), and hence they are **impersonal** passives. The second difference relates to the type of passivized predicate. The personal passive [2] is derived from its corresponding active transitive predicate, while impersonal passives are derived from intransitive[20] [3] and transitive [4] predicates.[21]

The derivation of personal passive, as in the English pair *Mary kissed John>John was kissed (by Mary),*[22] reflects what is usually regarded as the principal effect of passivization, that is, subject demotion and object promotion.[23] This effect may be seen as two aspects of the same phenomenon:[24] *Mary*, the active clause's subject, which is the syntactically most prominent position in the active structure, is expressed in the passive clause by an oblique argument, a less prominent syntactic position; and *John*, the object in the active clause, is promoted to subject in the passive clause.[25]

By contrast, in the derivation of impersonal passives, no NP is promoted to subject position following subject demotion.[26] Consider the intransitive passivized predicates in examples [5] from Dutch[27] and [6] from Turkish.[28]

20 At least in some languages, impersonal passives of intransitives are limited to unergative, agent-subject predicates, e.g., *skate*, *dance*, *play*. See, e.g., Pearlmutter (1978); Primus (1999); Alexiadou, Anagnostopoulou, and Everaert (2004).

21 See, e.g., Siewierska (1984); Abraham (2006, 2011); Keenan and Dryer (2007). Another semantic difference between the two structures is the type of subject in the personal passive/the entailed agent of the impersonal passive: the former is not semantically restricted, while the latter is usually indefinite human – especially when derived from intransitive verbs, as pointed out to me by Tania Notarius. This is a cross-linguistic tendency (Siewierska, 1984: 100), including BH (see Notarius, 2021: 5).

22 The agent of the passive predicate may (and in some languages must) be left unexpressed, or be realized as an agentive adjunct, e.g., John was kissed by Mary. In BH it is usually left unexpressed, with some exceptions (see Fassberg, 2019: 139; cf. Callaham, 2012, for a suggested analysis of passives with preposed agentive expressions).

23 Haspelmath (1990: 26) argues that the basic function of passive is inactivization of the verbal situation, resulting in participant backgrounding and foregrounding.

24 Solstad and Lyngfelt (2006: 9).

25 See, e.g., the syntactic prominence hierarchy in Comrie (1977: 470).

26 E.g., Abraham (2011: 92).

27 Pearlmutter (1978: 69, example 41).

28 Keenan and Dryer (2007: 346, example 45a).

[5] Er wordt op de deur geklopt
'It is (being) knocked on the door'

[6] Ankara-ya gid-il-di
Ankara-to go.PASS.PST
'It was gone to Ankara'/'There was a trip to Ankara'

In impersonal passive of transitive predicates, the object NP is not promoted to subject; i.e., it remains in situ, as seen in example [7] from North Russian.[29]

[7] U mena bylo telenka zarezano
At me was.3SG.NEUT calf.FEM.ACC slaughtered.SG.NEUT
'By me there was slaughtered a calf'

In line with [7], the accusative marker את is sometimes retained in impersonal passive clauses in BH, as in [8].[30]

[8] הִנֵּה יָמִים בָּאִים עֲלֵיכֶם וְנִשָּׂא אֶתְכֶם בְּצִנּוֹת (Amos 4:2)
Lit: here days come upon-you and-shall-be-carried.3MSG ACC-you by-hooks
'The time is surely coming upon you when they shall take you away with hooks'

Summing up, **personal passive**s are derived from transitive predicates, and their subject is the patient/object of the corresponding transitive. **Impersonal passives** are derived from intransitive and transitive predicates,[31] with no promotion to subject position (i.e., subjectless structures). From a processing perspective, passives are considered non-canonical in AP languages, since the agent is not the first thematic role assigned to the argument in subject position.[32]

3 Processing passive structures

The process of interpreting written or auditory input of a human language is rapid and incremental: linguistic input presented to the comprehender is immediately processed by the parser—the human processing device—word by word, while an abstract representation of the sentence's structure and meaning is continuously being constructed.[33] The eagerness of the parser to construct a mental representation of the input with little or no delay, even when its initial analysis proves to be wrong as the sentence unfolds,[34] is explained by the cognitive cost of maintaining unprocessed elements in the working memory (WM).[35]

The need to spare cognitive resources is assumed to underlie the main principles and phenomena in sentence processing, which reflect a general bias towards the simplest syntactic and semantic rep-

29 Keenan and Dryer (2007: 347, example 48).

30 See also Notarius (2021: 28). In BH scholarly literature, the retained את in such structures is traditionally termed 'nominative ʔet'. For a recent discussion of this את in BH and references to previous works and views, see Samet (2020).

31 See, e.g., Nolan (2001) for Irish; Jónsson (2009) for Icelandic; Giacalone Ramat and Sansò (2011) for Italian.

32 Findings from the psycholinguistic literature are limited to personal passive structures. I know of no study that has specifically investigated the processing of impersonal passives. However, both structures are passive, and both are non-canonical in terms of semantic-syntactic mapping.

33 See, e.g., Pickering and Van Gompel (2006).

34 For example, when reading the sentence fragment *Pete invited Mary and her sister…*, comprehenders will initially interpret *Mary and her sister* as a compound object of *invited*. This interpretation will be made automatically even if the next input will contradict it, and a reanalysis will be needed, e.g., *Pete invited Mary and her sister laughed.* See Frazier (1987b) among many others.

35 WM refers to the human mental ability to keep a small amount of information readily available for current manipulation and computation. See Logie, Camos, and Cowan (2020: 1). For WM in language comprehension and language production, see, e.g., Baddeley, Hitch, and Allen (2009).

resentation of the input.[36] In language comprehension, these phenomena include the preference to interpret sentences according to the expected structures of the comprehender's language.[37]

In SO/AP languages, the expected structure is SO, and the thematic role assignment is AP. Accordingly, structures in which the patient role is assigned first,[38] including passives, are considered non-canonical. A relative difficulty with passive structures has been reported consistently and cross-linguistically in adults, in children acquiring a first language, and in healthy adults compared to adults with aphasia.[39] Mayer et al. (2012) and Jackson et al. (2020) associated this difficulty with the default operation of an **agent-first** strategy, i.e. a tendency to assign the first NP encountered in the input to the agent role, regardless of the type of predicate.[40] This strategy reflects a general bias for agents over patients, a greater salience of agents in human cognition, and a more central role of agents in the building of event structure.[41] When processing patient-first structures, this strategy fails.

Notwithstanding the default operation of an agent-first strategy, Paolazzi et al. (2019),[42] Bader and Meng (2018, 2023), and Meng and Bader (2021) have argued that the difficulty with passives is regularly attested when comprehenders are asked to **remember** and **retrieve** passive sentences, for example, naming the 'acted on' argument (=patient) after hearing the sentence *the dress was fixed by the man*.[43] Such tasks are assumed to involve maintaining the abstract representation of the input in the WM, which may require more resources with passives.[44] The possible difficulty in maintaining representations of passives in the WM may account for findings in early studies, which showed that passive sentences are sometimes recalled as active in retrieval tasks.[45]

In assessing passive-active variants in SP, we should note that the task of copying, which is at issue here, involves the maintaining of linguistic representations in the WM and their retrieval for production in writing.[46] Moreover, passive predicates in BH consonantal text are usually ambiguous; with the exception of some *Huf*ʕ*al* forms with a second radical *Yod*/*Waw,* BH has no marked morphology that can facilitate a passive interpretation or increase the comprehender's expectation of a passive structure. Considering the general preference for agentive, active events in human perception, and the possible operation of an *agent-first* strategy, a passive interpretation of a homographic predicate is unlikely to be the default. Indeed, the following findings suggest that during the trans-

36 See, e.g., Frazier and Fodor (1978); De Vincenzi (1991); Grimshaw (1993).

37 For Hebrew, see Keshev and Meltzer-Asscher (2021).

38 Other patient-first structures include object relative clauses, e.g., *the dog that the cat chased*, object-clefts, e.g., *it was the cat that the dog chased*; and unaccusatives, i.e. intransitive verbs with a patient-subject, e.g., *fell*, *sink*, *arrive*. In AP languages, these structures are read more slowly and comprehended less accurately than their agent-first counterparts—subject relative clauses, e.g., *the dog that chased the cat;* subject-clefts, e.g., *it was the dog that chased the cat*; and unergatives, i.e. intransitive verbs with an agent-subject, e.g., *play*, *skate*, *laugh*. See, e.g., King and Just (1991); Traxler, Morris, and Seely (2002); Ferreira (2003); Friedmann, Belletti, and Rizzi (2009); Shetreet, Friedmann, and Hadar (2010); Staub (2010); Gómez-Vidal et al. (2022).

39 E.g., Maratsos et al. (1985); Borer and Wexler (1987); Grodzinsky et al. (1999); Ferreira (2003); Street and Dąbrowska (2010); Duman et al. (2011); Meyer, Mack, and Thompson (2012).

40 For comprehensive recent reviews and references to studies on agent preference in different languages, see Isasi-Isasmendi et al. (2023); Sauppe et al. (2023).

41 For agent preference in visual narratives, see Cohn and Paczynski (2013).

42 Paolazzi et al. (2019) showed that, in effect, passive sentences are read faster than active sentences, i.e., may be more easily processed. These findings are drawn from languages that clearly mark passive structures by an auxiliary verb after the first NP and an optional *by-phrase* after the verb, thereby increasing the comprehender's expectation of a passive sentence.

43 Ferreira (2003: experiment 1).

44 Paolazzi et al. (2019: 1012); Paolazzi, Grillo, and Santi (2021). For similar findings in other non-canonical structures, see Cutter, Paterson, and Filik (2022).

45 E.g., Anderson (1974).

46 See, e.g., Bonin et al. (2015).

mission of SP, passive clauses in the biblical text were sometimes interpreted as active—both in cases of homographs and in cases of non-ambiguous orthography.

4 Findings

4.1 Method and classification

The data for this study were collected through a verse-by-verse comparison of SP with the MT Pentateuch,[47] which yielded 90 examples of passive clauses in MT that appear as active in the SP. For each altered clause, the following variables were recorded: (1) MT stem; (2) SP stem; (3) +/- homograph in MT; (4) +/- different orthography in SP. For example, consider the following passive clause in Lev 4:35.

[9] Lev 4:35
MT: וְאֶת־כָּל־חֶלְבָּהּ יָסִיר כַּאֲשֶׁר יוּסַר חֵלֶב־הַכֶּשֶׂב
'He shall remove all its fat, as **the fat of the sheep is removed**'
SP: ואת כל חלבה יסיר כאשר יסיר חלב הכשב
'He shall remove all its fat, as **he shall remove the fat of the sheep**'

The variant in Lev 4:35 was recorded as follows: (1) *Hufʕal*; (2) *Hifʕil*; (3) -homograph; (4) +changed orthography.

The 90 clauses were divided according to their stem in MT as follows: (a) **internal passives**, in which active variants are expected in the light of linguistic developments in SH; and (b) **passive *Nifʕal***, in which variants in SP are less expected, and cannot be easily explained by morpho-phonological and morpho-semantic developments in SH.

Seven passive clauses in MT that appear as unaccusatives in SP were not included in the findings, since the subject is a patient in both interpretations: Gen 2:1; Ex 9:31, 32; 15:4; 21:19; Lev 6:23, 11:32. Such changes call for further research, as they may point to a different processing pattern for different patient-first structures.[48]

4.2 Changes of internal passive clauses: 42 examples

The internal passive stems—passive-*Qal*, *Hufʕal*, and *Puʕʕal*—occur 244 times in the MT Pentateuch. Of these, 42 (17%) appear as active in SP. As shown in Table 1 below, in 20 examples (48%), the different orthography in SP also indicates an active reading. In 32 examples (76%), the verb is homographic in MT. Moreover, due to the phonological developments in SH discussed in §1.2 above, some predicates in RT are active-passive homonyms. In the case of homonyms, i.e., a single orthographic form that has one vocalization but more than one interpretation, I have generally followed Ben-Ḥayyim's analysis, with a few exceptions. The forms מרק ('polish') and שטף ('rinse'; both in Lev 6:21) are read as *måråq* and *šåtåf*, respectively, but each of these can be interpreted as active *Qal*, passive-*Qal*, or *Puʕʕal*. In these instances, Ben-Ḥayyim (2000: §2.10.6) argued that the active interpretation is unavoidable, but contextually preferred the passive interpretation, and noted their passive translations in the Samaritan Targum and Samaritan Arabic Version. However, I have adopted Tal and Florentin's analysis (2010: 694), who rightly argued for an active interpretation of the two verbs. Accordingly, similar ambiguities noted by Ben-Ḥayyim (2000)[49] have been included in the findings: זרק ('throw', *zåråq*; Num 19:13; 19:20); and the *Puʕʕal*/*Piʕʕel* forms יכפר ('make atonement', *yēkåfər*; Num 35:33)

47 See n.1 for detailed sources.

48 This suggestion may find some support in MT unaccusative clauses that appear as agentive in SP: Gen 3:7; 9:17; 11:7; 18:4; 24:21; 49:17; Ex 2:23; 10:3; 23:13; 40:37; Num 9:21; 17:7, 10; 16:26; 23:15, 16; 31:3; Deut 20:8.

49 The homonym *zåråk* is discussed in §2.10.6; *yēkåfər* and *šallāʔu* in §2.10.9.

and שלחו (‘send’, *šallāʔu*, Gen 44:3, wherein the subject is preposed but no object is realized).[50] Although a conclusive analysis of every verbal form in SP is difficult to make, I assume that in ambiguous active-passive predicates, and more so with homonyms, the active reading was probably the default choice of the parser. In other words, the actual rate of change of internal passives in SP is probably greater than 17%.

Table 1: MT internal passive clauses>SP active clauses

MT internal passive	**Active in SP**			**MT homograph**	**SP different orthography**
Passive-*Qal*: **36**	6 (17% of 36)			6	2
	Qal: 5	*Hifʕil*: 0	*Piʕʕel*: 1		
Hufʕal: **139**	14 (10% of 139)			4	12
	Qal: 1	*Hifʕil*: 12	*Piʕʕel*: 1		
Puʕʕal: **69**	22 (32% of 69)			22	5
	Qal: 5	*Hifʕil*: 0	*Piʕʕel*: 17		
Total: 244	*Qal*: **11**	*Hifʕil*: **12**	*Piʕʕel*: **19**	**32** (76% of 42)	**20** (48% of 42)
	42 (17% of 244)				

Consider the following representative examples of internal passive clauses in MT that changed to active clauses in SP. (Coreferential elements are co-indexed wherever relevant.)

[10] Ex 5:14
MT: וַיֻּכּוּ שִׁטְרֵי בְּנֵי יִשְׂרָאֵל
‘And the foremen of the people of Israel were beaten’
SP: ויכו שוטרי בני ישראל
RT: wyakku šūṭåri båni yišrå?əl
‘And the foremen of the people of Israel beat’

In MT, שטרי בני ישראל (‘the foremen of the people of Israel’) were beaten in 3.m.pl *Hufʕal* וַיֻּכּוּ. Pragmatically, the context supports MT’s version of the event, in which הנגשים (‘the taskmasters’) in Ex 5:13 are the inferred agent. According to RT, ויכו is read as an active-agentive *Hifʕil* form. Two possible interpretations of the reading in SP are suggested: (a) שטרי בני ישראל is the patient-object (with no accusative marker) of ויכו, and the inferred subject is הנגשים in the previous verse; or (b) שטרי בני ישראל is the agent-subject of the transitive ויכו, with no realized object in the context. From a processing perspective, option (b) is predicted by an *agent-first* strategy: שטרי בני ישראל is the first NP after the predicate, and a good candidate for an agent-subject (animate, plural form agreeing with the plural ויכו); hence (b) is preferred. Note that the pragmatically odd reading that this leads to in RT does not prevent this. Other anomalies are attested elsewhere in SP and in other transmitted texts, and may support the involvement of unintentional operations in the copying process; compare, for example, the case of Gen 17:17: וַיִּפֹּל אַבְרָהָם עַל־פָּנָיו וַיִּצְחָק וַיֹּאמֶר בְּלִבּוֹ הַלְבֶן מֵאָה־שָׁנָה יִוָּלֵד (‘Then Abraham fell on his face and laughed and said to himself, “Can [a child] be born to a man who is a hundred years old?”’).[51] The passive 3.m.sg imperfective *Nifʕal* יִוָּלֵד (shall be born’) in MT appears as *Hifʕil* 1.sg אוליד (‘I shall beget’) in SP, resulting in the difficult reading הלבן מאה שנה אוליד (‘shall I beget to a man who is a hundred years old?’).

50 שלח in SP is conjugated only in *Piʕʕel* (i.e., with a geminated *Lamed*), including against MT *Qal*. In MT, not all *Qal* forms have a realized object (e.g., Gen 27:45; Ex. 4:13; 9:7).

51 יִוָּלֵד has no subject (‘a child’) in MT.

[11] Num 26:54
MT: אִישׁ לְפִי פְקֻדָיו יִתַּן נַחֲלָתוֹ
'every tribe$_i$ shall be given its$_i$ inheritance according to the number of those listed'
SP: אישׁ לפי פקדיו יתן נחלתו
RT: īš alfi fēqādo yittən nå:låtu
'every tribe$_i$ shall give its$_i$ inheritance according to the number of those listed'

Num 26:54 is an impersonal passive-*Qal* clause of a transitive predicate, יתן ('give'), in which the indirect object אישׁ (lit: man; 'tribe') is preposed.[52] In RT, יתן is active ('shall give'). It seems that אישׁ, which is not marked as dative/goal in MT, was assigned the agent role in subject position, as predicted by the operation of *agent-first*.

The resulting reading in SP is semantically and pragmatically odd. In the immediate context of Num 26:54, God is instructing Moses on how to divide the land among the tribes: לָרַב תַּרְבֶּה נַחֲלָתוֹ וְלַמְעַט תַּמְעִיט נַחֲלָתוֹ ('To a large tribe you shall give a large inheritance, and to a small tribe you shall give a small inheritance'). Accordingly, an expected active form of the next predicate would have been 2.m.sg תתן, maintaining Moses as the agent (and topic) of the predicate. However, the RT suggests that אישׁ is probably the agent-subject,[53] although this reading is not supported by the context.

[12] Deut 17:4
MT: וְהֻגַּד־לְךָ וְשָׁמַעְתָּ וְדָרַשְׁתָּ הֵיטֵב
'And (it) will be told (3.m.sg) to you and you shall hear and inquire diligently'
SP: והגידו לך. ושמעת ודרשת הייטב
RT: wåggīdu låk. wšāmātta wdåråštå å?īṭåb
'And (people) shall tell (3.pl) you. And you shall hear and inquire diligently'

The change from passive to active in Deut 17:4 is evident in the SP text, where the *Huffal* form וְהֻגַּד ('be told', 3.m.sg) in MT appears in SP as the plural active transitive *Hiffil* והגידו.[54] As with the reading in MT, the reading of Deut 17:4 in SP appears to be impersonal, but with an active-agentive predicate. It is possible that the first clause, והגד לך ('And (it) will be told to you'), was interpreted as impersonal, but then was retrieved as the semantically equivalent active alternative that may have been in use in SH. Importantly, it is not argued that changes from passive to active are intentional 'updates' of the text in SP, even when the resulting reading is semantically equivalent. Rather, in most examples, the active interpretation or retrieval is assumed to be the cause of the textual change, regardless of the resulting reading.

[13] Ex 27:7
MT: וְהוּבָא אֶת־בַּדָּיו בַּטַּבָּעֹת
'and shall be put ACC its poles through the rings'
SP: והבאת את הבדים בטבעות
RT: wībåttå it abbaddəm baṭṭåbbē?ot
'and you shall be put ACC the poles through the rings'

The impersonal passive in Ex 27:7 has the *Huffal* form והובא (lit: be brought; 'be put', 3.m.sg) followed by the accusative marker את. The text in SP reads 2.m.sg והבאת, with a realized agent-subject marked on the verb, entailing AP mapping in SP. Since והובא is not an active-passive homograph, the active reading was probably facilitated by the previous 2.ms.sg predicates in the input and by the ac-

52 See Notarius (2021: 26, example 41, and n.54).

53 Theoretically, a 3.m.sg active impersonal reading in SP is also possible; i.e., אישׁ is the indirect object of יתן, and the agent is a covert animate indefinite pronoun: '(one) shall give a man$_i$ its$_i$ inheritance.' See Notarius (2021: 7).

54 This type of change, from passive clauses to 3.pl active impersonal clauses, is attested in Late Biblical Hebrew onwards, as shown by Kropat (1907) and Kutscher (1974). For example, the first *Puʕʕal* predicate in Is 16:10 וּבַכְּרָמִים לְא־יְרֻנַּן (example [3] above) appears in 1QIsa^a as active 3.m.pl *Piʕʕel* ובכרמים לוא ירננו.

cusative marker את. Throughout Ex 25–27, God explains to Moses the plans for the construction of the Tabernacle. Accordingly, many verbal forms in these chapters are 2.m.sg. In the immediate context of Ex 27:6, Moses is the designated agent of two 2.m.sg predicates, ועשית ('you shall make') and וצפית ('you shall overlay'): וְעָשִׂיתָ בַדִּים לַמִּזְבֵּחַ בַּדֵּי עֲצֵי שִׁטִּים וְצִפִּיתָ אֹתָם נְחֹשֶׁת ('You shall make poles for the altar, poles of acacia wood, and overlay them with bronze'). Prior and immediate contexts have probably primed the change from impersonal passive והובא to active-agentive והבאת. The second assumed facilitator is the accusative marker את. Although את appears in some impersonal passive clauses in BH,[55] it is much more common in active transitive clauses (over 10,000 instances), and thus may have cued the integration of its following NP בדיו ('his poles'; changed to הבדים 'the poles' in SP) as the patient-object of an active transitive predicate. את may have facilitated similar active readings in Gen 17:25; 29:27; Ex 10:8, 25:28; Num 7:89; 22:6; 26:55; 32:5.

[14] Ex 12:39
MT: וַיֹּאפוּ אֶת־הַבָּצֵק אֲשֶׁר הוֹצִיאוּ מִמִּצְרַיִם עֻגֹת מַצּוֹת כִּי לֹא חָמֵץ כִּי־גֹרְשׁוּ מִמִּצְרַיִם
'And they$_i$ baked unleavened cakes of the dough which they$_i$ had brought out of Egypt, for it was not leavened, because they$_i$ were thrust out of Egypt'
SP: ויאפו את הבצק אשר הוציאו ממצרים עגות מצות כי לא חמץ כי גרשום מצרים
RT: wyåfu it abbåṣåq ēšår ūṣiyyu mimmiṣrəm iggot måṣṣot kī lå åmåṣ kī garrēšummå miṣrəm
'And they$_i$ baked unleavened cakes of the dough which they$_i$ had brought out of Egypt, for it was not leavened, because Egyptians thrust them$_i$'

Ex 12:39 is a personal passive clause, in which גרשו is a *Piʕʕel-Puʕʕal* homograph. Its active variant in SP is the form גרשום, with an apparent 3.m.pl bound object morpheme ('thrust them'). The sequence of two *Mem*s following גרשו in Ex 12:39, the first of which can be interpreted as an object marker, has probably facilitated the interpretation of גרשו as an active transitive verb. Assuming incremental processing and the default operation of *agent-first*, the first available NP מצרים was then assigned the agent role. Note that in RT, מצרים (*miṣrəm*) is semantically ambiguous between 'Egypt' and 'Egyptians';[56] in SP, it was probably interpreted as 'Egyptians'.

As seen in [10]–[14] above, more than one factor may have been involved in the generation of each variant in SP. In some cases, the operation of *agent-first* is quite clear; i.e., the first NP in the input is assigned the agent role in subject position, as in [10], [11], and [14]. In others, no full NP or pronominal form is realized in subject position in SP. However, the active reading necessarily entails an agent, definite in the 1st and 2nd persons as in [13], and sometimes in 3rd person (identifiable in the context, as in [10]), or indefinite in 3rd person as in [12].

Other internal passives in MT>active in SP: Gen 4:26; 6:1; 7:19, 20; 10:21; 33:11; 40:15; 44:3; 45:19; 46:22; Ex 5:16; 10:8; 12:9; 16:14;[57] 22:1; 25:29; 34:34; Lev 4:31, 35; 5:23; 6:15; 18:21 (x2); 8:35; 10:13; 13:58; 15:17; 16:10; Num 3:16; 15:34; 19:13, 20; 32:5; 35:33 (x2); 36:2.

4.3 Changes of passive *Niffal* clauses: 48 examples

A total of 877 *Niffal* clauses occur in the Pentateuch. In many cases their semantic interpretation is context dependent.[58] For this study, I have employed Bicknell's[59] list of passive *Niffal* forms with corresponding actives, which has yielded a total of 448 clauses in MT. As shown in Table 2, of these 448 clauses, 48 (11%) seem to have changed into active clauses in SP. In 21 of them (44%), the verbal form

55 About 40 instances, according to Samet (2020: 241–242).
56 See Qimron and Ariel (2023: 133).
57 The SP reading may be unaccusative.
58 For a comprehensive recent review of the literature on *Niffal* in BH, see Jones (2020), and references on p. 427, n.1.
59 Bicknell's corpus is Gen–2 Kgs.

in MT is homographic. In 26 examples (54%), the active reading in SP is not only evidenced in the RT, but also in the text.

Notably, 12 examples (25%) are MT *Nifʕal* clauses of the root מו"ל (‘circumcise’) that changed to *Qal* in SP. Hornkohl (2021: 10) notes that מו"ל in SP regularly has *Qal*, as opposed to MT *Nifʕal*, but does not discuss a semantic difference between the two.[60] However, in three occurrences (Gen 17:26, 27; 34:22), SP has passive-*Qal* of the secondary root נמ"ל as opposed to MT *Nifʕal,* and hence a distinction between passive and active reading of this root in *Qal* is probably maintained in SP.

Table 2: MT Pentateuch passive *Nifʕal* clauses>SP active clauses

MT passive *Nifʕal*	**Active in SP**			**MT homograph**	**SP different orthography**
448	*Qal*: 33 (69%)	*Hifʕil*: 13 (27%)	*Piʕʕel*: 2 (4%)	21 (44% of 48)	26 (54% of 48)
Total: 448	**48 (11%)**				

Consider the following representative examples of passive *Nifʕal* clauses in MT that appear as active clauses in SP.

[15] Ex 25:31
MT: וְעָשִׂיתָ מְנֹרַת זָהָב טָהוֹר מִקְשָׁה תֵּעָשֶׂה הַמְּנוֹרָה יְרֵכָהּ וְקָנָהּ
‘You shall make a lampstand of pure gold. Of hammered work shall be made (3.f.sg) the lampstand, its base and its shaft’
SP: ועשית מנורת זהב טהור מקשה תעשה **את** המנורה
RT: waššītå mēnūråt zåb ṭå?or måqåša tēšši **it** ammēnūra
‘You shall make a lampstand of pure gold. Of hammered work you shall make **ACC** the lampstand’[61]

Ex 25:31 is a personal passive clause, in which the verbal form תעשה is homographic. In MT it is a passive 3.f.sg *Nifʕal* form, assigning the patient role to the compound NP המנורה ירכה וקנה (‘the lampstand, its base and its shaft’) in subject position. In RT, תעשה is read as a 2.m.sg active *Qal* form, ‘you shall make.’ The active reading of תעשה maintains the canonical mapping (and the topic) of the previous clause, ועשית מנורת זהב טהור (‘you shall make a lampstand of pure gold’), in which the agent-subject of ועשית is 2.m.sg, and מנורת זהב טהור is the patient-object. The patient-object interpretation of המנורה in SP is also evidenced by the added accusative marker את in SP, תעשה את המנורה (‘you shall make **ACC** the lampstand’).

[16] Lev 26:43
MT: וְהָאָרֶץ תֵּעָזֵב מֵהֶם וְתֶרֶץ אֶת־שַׁבְּתֹתֶיהָ
‘For the land shall be deserted by them and shall restore its Sabbath years’
SP: והארץ תעזב מהם והרצתה את שבתתיה
wå:rəṣ tåzzåb miyyimma wårṣåtå it šabbētūtiyya
Lit: and-the-land shall-leave from-them and-shall-restore her-Sabbath-years’

The preposed NP הָאָרֶץ (‘the land’) in MT is the patient-subject of the passive *Nifʕal* תֵּעָזֵב. In SP, it is the agent-subject of a *Qal* form. The agentive reading in SP, which is syntactically and semantically odd, may also be evident in the change of the next jussive verb וְתֶרֶץ (‘restore’) to *Hifʕil* והרצתה (*wårṣåtå*) in SP (though the difficult reading is not resolved by this change).

60 By contrast, the root שכ"ח in SP usually conjugates in *Nifʕal*, as opposed to MT *Qal* (Hornkohl, 2021: 4). The *Nifʕal* form with the bound object morpheme in Gen 40:23, וישכחהו (*wyiššåkå?ē?u*) suggests that *Nifʕal* of שכ"ח in SP is not passive.

61 The next input in SP, the NPs ירכיה קניה (‘its base its shaft’), was probably interpreted as part of the conjoined subject in the next clause, as may be indicated by the omission of *waw* before קניה (and as reflected, e.g., in EVS: ירכיה קניה גביעיה כפתריה ופרחיה ממנה יהיו (‘its base, its stem, its cups, its calyxes, and its flowers shall be of one piece with it’).

[17] Gen 44:12
MT: וַיְחַפֵּשׂ בַּגָּדוֹל הֵחֵל וּבַקָּטֹן כִּלָּה וַיִּמָּצֵא הַגָּבִיעַ בְּאַמְתַּחַת בִּנְיָמִן
'And (he) searched, beginning with the eldest and ending with the youngest; and the cup was found in Benjamin's sack'
SP: ויחפש בגדול החל ובקטן כלה וימצא הגביע באמתחת בנימים
RT: wyåbbəš baggådol åʔəl wbaqqåṭån kalla wyimṣå aggēbi bamʿtåt binyåməm
'And (he)$_i$ searched, beginning with the eldest and ending with the youngest; and (he)$_i$ found the cup in Benjamin's sack'

In Gen 44:12, three active-agentive 3.m.sg predicates precede the passive *Nifʿal* ימצא ('was found', 3.m.sg): ויחפש ('searched'), החל ('began'), כלה ('finished'). The inferred agent-subject (and topic) in these events is the steward of Joseph's house,[62] realized in the surface structure of Gen 44:4. The sequence of agentive actions may have facilitated a similar interpretation of the next 3.m.sg predicate,[63] the homographic passive-active ימצא, as active and agentive. As discussed in §2 above, the canonical word order in finite clauses in BH is VSO (Moshavi, 2010), but a shift towards SV(O) is attested in the Second Temple period (Fassberg, 2013). In this consolidating order, not only does the subject precede the verb, but the object also follows the verb. This factor may also have facilitated the patient-object interpretation of הגביע in this verse.

[18] Lev 11:13
MT: וְאֶת־אֵלֶּה תְּשַׁקְּצוּ מִן־הָעוֹף לֹא יֵאָכְלוּ שֶׁקֶץ הֵם
'And-ACC these$_i$ you shall detest among the birds. They$_i$ shall not be eaten; they$_i$ are an abomination'
SP: ואת אלה תשקצו מן העוף לא תאכלו שקץ הם
RT: wit illa tēšåqqeṣu man åʿūf lå tåʔūkēlu ašqeṣ imma
'And-ACC these$_i$ you shall detest among the birds. You shall not eat (them)$_i$; they$_i$ are an abomination'

The homograph יאכלו in Lev 11:13 permits at least two readings: 3.m.pl personal passive *Nifʿal*, as in MT; and 3.m.pl active transitive *Qal* form. The SP text and RT indicate neither of these options. Rather, תאכלו לא is probably 2.m.pl active transitive *Qal*, 'you shall not eat.' This interpretation may have been facilitated by the preceding 2.m.pl active-agentive predicate תשקצו ('you shall detest'); and the clear marking of אלה by the accusative marker את, establishing אלה as the object of the verbal predicates in this verse.

[19] Lev 25:34
MT: וּשְׂדֵה מִגְרַשׁ עָרֵיהֶם לֹא יִמָּכֵר כִּי־אֲחֻזַּת עוֹלָם הִוא לָהֶם
'And the fields of common land belonging to their cities may not be sold, for that is their perpetual possession'
SP: ושדה מגרש עריהם לא ימכרו כי אחזת עולם היא להם
RT: wšådi magrəš ʕarrīyyimma lå yēmakkēru kī åzzåt ūlåm ī lēmma
'And the fields of common land belonging to their$_i$ cities (they)$_i$ will not sell, for that is their$_i$ perpetual possession'

In MT, the subject שדה ('field') of the personal passive *Nifʿal* ימכר ('be sold') is preposed to the beginning of the sentence. Assuming the operation of *agent-first*, שדה is expected to be assigned the agent role. However, שדה is inanimate and thus not a probable candidate for agency. In the active interpretation of the transitive *Qal*/passive *Nifʿal* homograph ימכר, the agent role is assigned to הלוים ('the Levites'), which is realized in various positions in the prior context of Lev 25:32–33 and inferred as the subject in verse 34; and the patient role is assigned to שדה in object position.

62 אֲשֶׁר עַל־בֵּיתוֹ; see Tal and Florentin (2010: 651). By contrast, Ben-Ḥayyim (2000: §2.10.7) asserts that *wyimṣå* is a certain passive form.

63 On priming effects in language comprehension, see, e.g., Tooley and Traxler (2010).

[20] Deut 28:24
MT: יִתֵּן יְהוָה אֶת־מְטַר אַרְצְךָ אָבָק וְעָפָר מִן־הַשָּׁמַיִם יֵרֵד עָלֶיךָ עַד הִשָּׁמְדֶךָ
'The LORD will make the rain of your land powder and dust; from heaven it shall come down upon you until you are destroyed'
SP: יתן יהוה את מטר ארצך אבק ועפר מן השמים ירד עליך עד השמידך
RT: yittən šēmå it mēṭår årṣåk åbåk wåfår man aššåməm yēråd ʕālək ʕad ašmīdåk
'The LORD will make the rain of your land powder and dust; from heaven it$_i$ shall come down upon you until (it)$_i$ shall destroy you'

In MT, השמדך is an infinitive construct of *Nifʕal*. The active counterpart of the passive נשמד ('be destroyed') in BH is probably השמיד ('destroyed') in *Hifʕil*.[64] The form השמידך in SP is classified by Ben-Ḥayyim (1977) and by Tal[65] as an infinitive construct of *Hifʕil*, i.e., an active-agentive form. Note, however, that השמידך (*ašmīdåk*) is ambiguous between an infinitive construct and an inflected *qatal* form. I suggest that מטר ארצך ('rain of your land'), which is both the realized object of יתן ('will make') and the inferred subject of the preceding unaccusative predicate ירד ('shall come down'), was assigned the agent role by an *inflected* השמיד, preserving a sequence of inflected active predicates in SP.[66] Another six *Nifʕal* infinitive constructs השמד in Deuteronomy were changed to *Hifʕil* in SP, as is evidenced by the RT and SP text: 7:23; 12:30; 28:20, 45, 51, 61.

As in the case of internal passives, several factors may have been involved in the active reading of each of the passive *Nifʕal* clauses in SP. A possible priming of active predicates in the preceding context, maintaining the topic in the changed clause, is one such factor, as seen in [15], [17], [18] and [20]. The assumed operation of *agent-first* is observed in [16]. However, the active reading in all the examples entails an agentive subject.

Other *Nifʕal* passive in MT>active in SP: Gen 8:2, 12; 9:2; 10:1; 14:15; 17:10, 12, 13 (x2), 14, 17, 24, 25; 18:4; 29:27;[67] 34:15, 17, 22, 24; 12:48; 19:13; 25:28; 34:19; 36:6; Lev 6:18 (x2); 12:3; 13:7; 26:43; Num 26:53, 55, 56; 28:17; Deut 4:19; 7:23; 12:30; 14:19; 19:5; 28:20, 45, 51, 61; 29:22; 30:17.

4.4 MT active clauses>SP passive clauses: 17 examples

All the variant readings presented in §4.2 and §4.3 indicate the interpretation of passive clauses in MT as active clauses in SP. However, several passive clauses in SP correspond to active clauses in MT:[68] Gen 15:13; 34:1; 48:1, 2; Ex 1:14; 5:19; 22:8; 24:1; 25:18; Lev 4:20; 6:20; 13:58; 17:10; 25:45; Num 9:15; 35:30; Deut 18:21.[69] The first explanation for such changes, which may account for some of them, is deliberate intervention in SP as a means of reconciling difficulties in MT. Consider Gen 48:1, where the active *Qal* יאמר (3.m.sg *wayyiqtol*) in MT is read as an impersonal 3.m.sg *Nifʕal* clause in SP.

[21] Gen 48:1
MT: וַיְהִי אַחֲרֵי הַדְּבָרִים הָאֵלֶּה וַיֹּאמֶר לְיוֹסֵף הִנֵּה אָבִיךָ חֹלֶה
'After this (he) said to Joseph, "Your father is ill"'
SP: ויהי אחר הדברים האלה ויאמר ליוסף הנה אביך חלה
RT: wyåʔi åʔər addēbårəm åʔilla wiyyåmər alyūsəf inna åbək ålå
'After this Joseph was told, "Your father is ill"'

64 See Joüon-Muraoka (2006: §132 ca).
65 See n.1 above.
66 Christian Stadel has pointed out to me that this change occurred despite the use of the perfective form to refer to an imperfective event. Note that the NP עפר ('dust') can also be interpreted as the subject of ירד and השמידך.
67 וְנִתְּנָה may be *Qal* 1.pl cohortative/3.f.sg *Nifʕal*. in SP: *Qal* 1.sg ואתן.
68 As with MT passives>SP unaccusatives, MT unaccusatives>SP passives were not included, e.g., ימות (*Qal*)>יומת (*Hufʕal*) in Num 18:28; 27:65.
69 No example in SP is in *Hitpaʕʕel*.

Ben-Ḥayyim (2000: 178, n.119) did not discuss or explain variants of MT active-SP passive, but he did comment on the active reading in this verse. Regarding this variant, Tal and Florentin (2010: 654) noted that SP regularly uses passive to express impersonality. The impersonal interpretation of ויאמר ('said', 3.m.sg *wayyiqtol*) is plausible, as no candidate for an agent-subject is realized in the context. Accordingly, it is possible that the RT is secondary, reading ויאמר as passive *Nifʕal*, as opposed to active *Qal* in MT. Another possibility is that ויאמר in MT is active impersonal, although quite rare in 3.m.sg time-anchored forms as *wayyiqtol*.[70] A third possibility is that an active reading of an impersonal passive *Nifʕal* ויאמר occurred during the transmission of MT. That is to say, the SP may have preserved an earlier passive reading in Gen 48:1. An accidental active interpretation in MT may also be attributed to 10 other examples, including the following verse, Gen 48:2, where the active reading in MT may seem contextually difficult, since no identifiable agent appears in the context; Gen 15:13; 34:1; Ex 24:1, 25:18; Lev 4:20; 10:17; 20:14; 25:45; Num 9:15; Deut 18:21.

[22] Deut 18:21
MT: וְכִי תֹאמַר בִּלְבָבֶךָ אֵיכָה נֵדַע אֶת־הַדָּבָר אֲשֶׁר לֹא־דִבְּרוֹ יְהוָה
'You may say to yourself, "How can we recognize ACC the word that the LORD has not spoken?"' = active transitive
SP: וכי תאמר בלבבך איך נודע את הדבר אשר לא דברו יהוה
RT: wkī tå?umər ablēbåbåk ik nūda it addēbår ēšår lå dabbēru šēma
'You may say to yourself, "How was (it) recognized ACC the word that the LORD has not spoken?"'

In Deut 18:21, Lev 10:17, 20:14, and Num 9:15, the accusative marker את in a passive clause in SP may have facilitated an active reading in MT, as this is assumed for similar changes in SP. However, the direction of change in these verses (with את) is inconclusive. The same is true for Ex 5:19; Lev 6:20, 13:58.

Active clauses in MT that appear as passive in SP require further consideration. Some may be the result of deliberate intervention in the text of SP, or an unintentional active-agentive reading in MT. However, a default passive interpretation of a clause in either tradition, specifically in cases of active-passive homographs, is not assumed.

5 Conclusions

Unintentional active readings in SP of passive clauses in MT have long been noticed by SP scholars. To date, these variants have mainly been explained in terms of morpho-phonological and morpho-semantic developments in SH. According to Ben-Ḥayyim, internal passives did not exist in SH and were replaced by (new versions of) *Nifʕal* and *Hitpaʕʕel*. Given these developments, we would expect the following: (a) that internal passives in MT would be replaced by active forms, specifically in internal passive-active homographs, or by *Nifʕal* and *Hitpaʕʕel*; (b) that passive *Nifʕal* forms would not be likely to change; and (c) that active clauses in MT would not likely be read as passives in SP. However, it has been shown that (a) most internal passives in MT are retained in SP, and changes from passive to active are not limited to homographs; (b) 48 (53%) of 90 passive>active changes in SP occur in *Nifʕal*; and (c) at least 17 MT active clauses appear as passive in SP (none of them in *Hitpaʕʕel*). To account for these data, a sentence-processing perspective has been suggested. Based on findings about the processing of passive structures in living languages, I have argued that the non-canonical mapping in passive structures is another factor involved in passive-active variants, as non-canonical passive structures may be harder to remember and accurately retrieve from WM. Unlike languages

70 See Notarius (2021: 8). Notarius reports five examples of this type, and notes that not all of them are necessarily impersonal.

that clearly mark passive structures and thus increase the comprehender's expectation of a passive clause, BH has no such marking (with a few exceptions), and many verbal forms in the consonantal text present active-passive ambiguity. In such cases, a passive interpretation would not be the parser's first choice.

As has been found in processing studies, inaccurate interpretation or retrieval of passives is never consistent, but only probable. Notably, the misinterpretation rate of passives reported in Ferreira (2003) was 19%, which is quite close to the rate of active interpretation/retrieval of MT internal passives in SP in the current study (17%; perhaps higher, as discussed in §4.2 above).

The variants of active readings in MT that correspond to passive readings in SP require further consideration, as do variants of passives in MT that appear as unaccusatives in SP, and MT unaccusative clauses that appear as agentive in SP. These changes may suggest different processing patterns for different single-argument structures in SH.

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Abbreviations

AP	Agent-before-Patient
PA	Patient-before-Agent
ACC	accusative
NP	Noun Phrase
RT	Samaritan reading tradition
SO	Subject-before-Object
OS	Object-before-Subject
VSO	Verb-Subject-Object
WM	working memory

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