## THE GRAMMATICALIZATION OF BIPARTITE RECIPROCAL MARKERS IN HEBREW

## **ABSTRACT**

Grammaticalization is generally viewed as a diachronic process of: *lexical* > *grammatical* and *grammatical* > *more grammatical* (Meillet 1912; Kuriłowicz 1965/1975). This paper deals with the grammaticalization of bipartite reciprocal markers (BRMs) in Hebrew as a striking example of a process whereby lexically meaningful morphemes are gradually emptied of their content and become "function" elements (i.e. reciprocal pro-Nouns), forming an evolutional continuum from a less grammaticalized (i.e. less fossilized) category into a more grammaticalized one (i.e. that of BRMs). It is argued here that Hebrew is notable in that its BRMs demonstrate a less advanced stage of grammaticalization than their counterparts in many languages worldwide.

## 1. INTRODUCTION

In Hebrew, as in many languages worldwide, the conventionalized (i.e., grammaticalized)<sup>1</sup> representation of mutual events involves a periphrastic construction featuring bipartite reciprocal markers (henceforth BRM construction). The reciprocal markers are grammaticalized pro-Nouns (distinct from canonical pronouns) representing the coparticipants in the mutual event. The paired pro-Nouns are derived from the same semantic and morphosyntactic category, and some of them retain certain characteristics of simple

<sup>1</sup> 

Although the concept of grammaticalization is an old one, going back to the beginning of Indo-European linguistics and the work of Bopp and Humboldt, Antoine Meillet (1912/1926) is credited with coining the term. The "classical" definition most frequently cited today is that of Jerzy Kuryłowicz ("The Evolution of Grammatical Categories", *Diogenes* 51, (1965), reprinted in his *Esquisses Linguistiques*, vol. II, Munich: Fink, 1975, p.52): "Grammaricalization consists in the increase of the range of a morpheme advancing from a lexical to a grammatical, or from a less grammatical to a more grammatical, status, e.g. from a derivative formant to an inflectional one". In the last three decades there has been a great reawakening of interest in grammaticalization theory.

nominals. Cognitively, both of them are pro-subjects, as they take alternate roles in the reciprocal relationship, but formally, one of the co-participants is backgrounded and typically appears in the object position. Although the antecedent (i.e., the first reciprocal pro-Noun) is associated with the subject-argument, it tends to remain close to the reciprocant (i.e. the second reciprocal pro-Noun), instead of appearing in subject position or adjoined to it.

In modern European languages, BRM-constructions generally consist of two elements from the same nominal domain, most significantly quantifiers ('one', 'each') and alterity expressions ('other'), e.g. English each other and the less frequent one another. BRMconstructions are also prevalent in many Semitic languages, notably in Akkadian, Syriac, Neo-Eastern Aramaic<sup>2</sup>, Amharic,<sup>3</sup> and most prominently in Hebrew through its various diachronic layers. However, compared to very many languages where BRMs are employed, Hebrew BRMs are noteworthy in that they demonstrate a less advanced stage of grammaticalization.

In what follows, we shall analyze the structure and grammaticalization of three BRMconstructions in Hebrew, the first containing numeral nouns: אחד ... השני/משנהל (lit. 'one ... second'); the second featuring a human-denoting pronoun in antecedent position and a term denoting kinship/fellowship in reciprocant position: איש ... רעהו/אחיו; אחד ... חברו (lit. 'man ... his companion/brother; one ... his friend'); and a third construction featuring demonstrative pronouns:. זה ... זה (lit. 'this ... this', i.e. 'this one ... this one'). Interestingly, in Hebrew (crucially in Modern Hebrew), BRMs can co-occur also with lexical reciprocals appearing in the templates of נפעל and התפעל, e.g.:

## הם אוהבים להתחרות זה בזה

<sup>&</sup>lt;sup>2</sup> For references, see A. D. Rubin, Studies in Semitic Grammaticalization [Harvard Semitic Studies 57] (Winona Lake, Indiana :Eisenbrauns 2005), pp. 22–23.

<sup>&</sup>lt;sup>3</sup> See G. Goldenberg, "'Oneself', 'one's own' and 'one another' in Amharic", in *Studies in Semitic Linguistics* (Jerusalem: Magness, 1998), pp. 384-402 [reprinted from A.S. Kayne (ed.), Semitic Studies in Honor of Wolf Leslau, Wiesbaden 1991, pp. 531-549].

They like to compete with each other

הם לא מפסיקים להתווכח (ה)אחד עם השני

They never stop arguing with each other

Since the post-Biblical era, grammaticalized BRMs have played an increasingly prominent role in encoding mutual events in Hebrew, apparently as a result of paradigmatic changes in the verbal system, most crucially in the grammatical functions of מפעל, which conventionalized as verbal templates encoding the passive, instead of conveying the "classical" meanings of middle-reflexive.<sup>4</sup>

## 2. THE GRAMMATICALIZATION OF BRMs WITH NUMERAL NOUNS

## 2.1. האחד ... האחד (lit. 'the one ... the one')

In this repetitive construction, attested in Biblical Hebrew only once, the antecedent and reciprocant are both represented by אחד ('one') in masculine singular and with a definite article. This construction occurs exclusively with the object marker את intervening between the two identical elements, e.g.:

הָאוֶחַבַּ,ָדֹא ֶת־הֹא ֶח ֶד

And they hit one another (Sam 2, 14:6)

for example whereas in Riblical Hebrew reciprocity is generally encoded using

<sup>&</sup>lt;sup>4</sup> For example, whereas in Biblical Hebrew reciprocity is generally encoded using נפעל (and less frequently התפעל), often in conjunction with יחדיו, e.g. ונעצים/נועצו יחדיו, Mishnaic Hebrew tends to employ a periphrastic construction containing a BRM, e.g. נוטלים עצה זה מזה/בזה. And similarly in expressing reflexivity: Biblical Hebrew commonly employs , החביעל/נפעל, while Mishnaic Hebrew employs the periphrastic construction with the reflexive pronoun עצם, e.g. א' בנדויד, לשון מקרא ולשון חכמים. See: א' בנדויד, לשון מקרא ולשון חכמים. (1971), ארביב, 1971)

Babylonian Aramaic features a comparable construction in which the phrasal independence of the elements gradually eroded, and the determiner of the second was omitted and reanalyzed as part of a condensed adverbial expression, yielding 'אהדהַ' ('mutually') – a fusion of אהדהַ ('one') + קור ('one') + plural suffix '-. In the following example, the doublet הדא ... הדא ('the-one ... the-one') co-occurs with the condensed expression אהדהַ', e.g.:

## ובין חדא לחדא פרסה וקא קפדֵי אהדדֵי

And between one and the other there are a hundred parasangs, and they are strict about each other (Babli, Qid. 71b)

That Aramaic expression is the origin of the common Modern Hebrew adjective הדדי ('mutual'), e.g. זיקה הדדית ('mutual relation') and the adverbial expression באופן ('in a mutual way/mutually'). Literary Hebrew sometimes employs the Aramaic form itself, which can co-occur with the common BRMs such as זה... זה, as shown in the following example:

## הם חיים זה לצד זה בהרמוניה ואפילו מושפעים אהדבי

They live side by side in harmony and are even mutually influenced (by one another) (Ha'aretz 9.4.08)

Clearly, the reciprocal construction involving a repetition of the numeral אחד, as well as the Modern Hebrew construction ... השני ('the one ... the other one'), both evolved from the distributive use of these pronouns, which has been common in Hebrew since Biblical times. E.g.:

One's name is Geršom and the other's name (lit. 'the one's name') is 'Eli<sup>c</sup>ezer (Ex 18:3-4)

2.2 האחד ... משנהו (lit. 'the one ... his second, i.e. the second one')

This bipartite reciprocal construction is widespread in written and/or formal register of Modern Hebrew. Here, the numeral nouns are not identical but sequential. Like the repetitive numeral construction, it occurs only in third person singular masculine, e.g.:

שני הפסנתרנים השלימו נהדר האחד את משנהו

The two pianists complemented each other ('the one... his second') wonderfully (Ha'aretz 25.4.10)

2.3 השני/השנייה ... השני/השנייה (lit. '(the) one-M/F.S ... the second-M/F.S')

This variant of the bipartite numeral construction is common in colloquial Modern Hebrew, and, in contrast to the construction described in 2.2, can occur in the feminine singular, as in the following example:

כבר שנים שהן לא מדברות האחת עם השנייה

For years, they haven't been speaking to each other

Both variants of this Modern Hebrew construction (אחד ... משנהו and אחד ... משנהו may have evolved as a calque of the German (or Yiddish) expression *einander* by mistakenly associating the alterity word *ander* with its distributive meaning, 'the second one'.<sup>5</sup> But, in my view, it could equally have evolved through an internal process of reanalyzing as a

<sup>5</sup> See. A. Kaminka, "מדור לשוננו לעם תכז (Linguistics column) Ha'aretz 20.10. 1943. I thank Mrs. Ronit Gadish, academic secretary of the Academy of Hebrew Language, for pointing out this reference.

cardinal numeral (שניים as opposed to שניים) and pairing it with the ordinal number מצד, as frequently happens in spoken language, and can also be seen in the case of מצד אחד... מצד אחד... מצד אחד ('on one hand ... on the other hand').

Like the classical, essentially Aramaic, construction of  $(\aleph)$  +  $(\aleph)$ , this modern construction is basically a reinterpretation of the distributive construction widespread in Modern Hebrew, e.g.:

כל אחד מהם אוהב אוכל אחר. האחד אוהב אוכל מזרחי והשני אוהב אוכל צרפתי

Each of them likes a different [kind of] food. One likes Oriental food and the other (lit. the second one) likes French food

# 3. GRAMMATICALIZATION OF TERMS DENOTING 'MAN' PAIRED WITH KINSHIP/FELLOWSHIP TERMS

In this construction, the antecedent position is occupied by the noun איש/אישה ('man'/'woman'), and the reciprocant is represented by the construct noun -ערעות- ('friend of', 'fellow of'), or in Mishnaic Hebrew (probably due to Aramaic influence), by the synonymous lexeme -הבר- ('brother of') אחיר ('brother of') אחיר ('brother of'), a construction common in Biblical Hebrew. The reciprocant is obligatorily inflected with a possessive suffix in the third person singular that agrees with the antecedent in gender (i.e. 'his friend/fellow', 'her friend/fellow'), while the antecedent (ה') איש ('wo)man' is deprived from morphosyntactic properties as an autonomous participant, significantly it is deprived from definite article and

<sup>&</sup>lt;sup>6</sup> Reciprocal markers which evolved through a semantic bleaching of the words 'fellow', 'brother', 'relative/kin' and similar terms are also evidenced in other languages, e.g. Welsh, some African and indigenous Mesoamerican languages (cf. N. Evans, "Reciprocal Constructions: Towards a Structural Typology". In: E. König and V. Gast

<sup>(</sup>eds.). Reciprocals and Reflexives: Cross-linguistic and Theoretical Explorations, Berlin: Mouton de Gruyter 2008, pp. 51-52, 55), and notably also in Akkadian, which uses an expression that repeats the word aħu "brother" to convey reciprocity (cf. W. von Soden, Akkadisches Handwörterbuch. Wiesbaden: Harrassowitz 1965: §43).

case assignment (i.e. the case marking, by a preposition or genitive suffix, precedes the reciprocant).<sup>7</sup> In this construction, as in all Hebrew BRM-constructions, the verb obligatory appears in the plural. This follows from the fact that the nominal bipartite expression is grammaticalized and reanalyzed as a BRM construction rather than as an expression consisting of two independent nouns. E.g. in Biblical Hebrew:

And they said to one another: Come, let us make bricks (Gen 11:3)

Do not swindle one another (Lev 25:14)

And in Mishnaic Hebrew:

ומכין איש את חבירו

And they are hitting one another (Suk 4:4)

In the initial stage of grammaticalization – though there are already signs of paradigmaticity, especially in the antecedent ('each'), which obligatorily occurs as איש ('man')<sup>8</sup> in the singular – the semantic bleaching is not yet advanced, and the literal meaning is fairly transparent. When the construction is used literally, the second argument can be represented by other elements, which can in fact occur simultaneously, as in the following example, where 'his brother',

<sup>&</sup>lt;sup>7</sup> Syntactically, the antecedent in the BRM-construction is an appendix, or extra element which does not belong to the thematic structure of the clause.

<sup>&</sup>lt;sup>8</sup> Other synonyms are typically excluded, e.g. אדם, גבר.

'his friend' and קרובו 'his kinsman' co-occur as reciprocants though in this particular case the meaning of הרג 'kill' blocks a reciprocal meaning):

And each (lit. man) kill his brother, his friend and his relative (Ex 32:27)

As is well known, metaphorical language use is often responsible for desematicization, and hence grammaticalization. This explains why this construction, involving human and kinship/fellowship terms, can refer to animate but non-human entities, namely animals, e.g.

None [of the locusts] is pushing the other (lit. 'a man ... his brother') (Joel 2:8)

and also to parts of animals, as in the following examples:

[The Leviathan's scales] are joined to one another (lit/ 'man to his brother') (Job 41:9)

And he cleaved them [the animals] in half, and laid each half against the other (Gen 15:10)

A further stage in the semantic bleaching of the component elements איש/אישה ... אהיו/אחותה ... his-brother/her-sister') is manifest in the reference to inanimate entities, such as the curtains of the Sanctuary:

And the five curtains are bound each to the other (Ex 26:3)

However, in semi-grammaticalized occurrences of the construction, the antecedent (i.e. the subject argument) can be a full lexical noun – rather than איש ('man'), which is the grammaticalized (desemanticized) pro-Noun – for example, it can be the name of an animal, e.g.:

And the wild-cats shall meet with the jackals, and the satyr shall cry to his fellow (Isaiah 34:14)

This also happens with inanimates, as in the following two examples from Mishnaic Hebrew, where the antecedent position is not occupied by אהד (the counterpart of Biblical איש (beams'), but by the nouns עצים ('ship') and עצים ('beams'), respectively. However, the alterity word is already encoded by the grammaticalized lexeme - הבר 'fellow/companion' (counterpart of Biblical רע in its possessive form, reflecting a decrease in semanticity and an increase in grammaticality:

## מספינה לחברתה

From one ship to the other (lit. 'to its fellow-F.S') (Shab. 11:5)

בין פצים (עצים) לחברו

Between one beam and another (lit. 'between beams to its fellow-M.S') (Shab. 7:7)

Interestingly, in the second of these examples, חבר ('fellow') does not agree in number with its antecedent עצים ('beams'), which indicates clearly that the second component of the BRM construction has already undergone grammaticalization.

A more advanced stage of grammaticalization is evident in the combination of a numeral noun (אהד/אחת) in the antecedent position and a fellowship term in the reciprocant position, as is manifested in the construction אחת/האחת (lit. 'one-F.S ... her friend/companion-F.S'), e.g. in Modern Hebrew:

אנחנו הנשים מבינות אחת את רעותה טוב יותר

We women understand each other better (lit/ 'one ... her companion-F.S.') (Ha'aretz 7.3.10)

Yet it is noteworthy that, with inanimate entities, the literal meaning of the construction's component elements is still quite transparent, and as a result, a metaphorical (anthropomorphized) reading is available, as shown in the following example, in literary Modern Hebrew:

יש שם מרפסות שחודרות האחת לתחום רעותה

There are porches there that penetrate each into the other's space (lit. 'one into the space of its companion'). (Ha'aretz, 27.8.03)

A mixed bipartite construction of numeral and companionship term is already attested in Babylonian Aramaic, in the construction הד לחברה (lit. one to his friend) e.g.:

## אמר לה חד לחברה

One said to the other (lit. 'to his companion') (Ber 18b.14)

## 4. GRAMMATICALIZATION OF DEMONSTRATIVES

This kind of BRM is basically an inheritance from Mishnaic Hebrew. It is also attested (infrequently) in Biblical Hebrew, in the expression זה אל זה ('to each other'), though this construction still retains its essentially distributive meaning, e.g.:

And it was the cloud and the darkness ... and this-one did not approach the other-one all night (Ex 14:20)

'Serafim standing-M.PL ... and this-one called-M.S to the other-one (=each of them called to the other) and said-M.S.' (Is 6:2-3)

The fact that the verbs בֹּרְ יְּשׁ the first example) and אֹי, רְ (זְּחׁ the second) appear in the singular – and not in the plural, to agree with the coordinated subject בּי שׁ הֹי שׁ בְּבְּיִם with the subject בּי בּים בּשׁ thearly shows that these constructions are still understood as distributive.

That is, the verbs בֹּרִ בִּשׁ בְּּבְּרִים אֹיִרְ בְּּבּר to each of the participants as role-players in a distributive action (i.e. each was performing the denoted action).

This construction consists of two identical demonstratives which in Mishnaic Hebrew grammaticalized into reciprocal markers. It is commonly used also in Modern Hebrew, usually in the masculine singular e.g., זה ... זה:

בשביל ארבעה דברים מתו... ועל שלא נטלו עצה זה מזה

They died because of four things... And because they did not consult with each other (Vayiq.R 20: 8)

And in Modern Hebrew, e.g.:

בעבר חיו כאן יהודים וערבים זה לצד זה

In the past, Jews and Arabs lived here side by side (lit. 'this one next to this one')

However, the construction can also appear in the feminine singular, e.g.:

בשבוע האחרון פרצו שרפות בזו אחר זו

This past week fires broke out one after the other

Accordingly, when referring to two sets of referents, the demonstratives can come in the plural (though the default option, the masculine singular, is still available), e.g., in Mishnaic Hebrew:

בזמן שמקצתן רואין אלו את אלו

While a few of them see one another (lit. 'these ones ... these ones') (Mak1:9)

And similarly in Modern Hebrew:

הילדים של שתי המשפחות קרובים מאוד אלו לאלו

The children of the two families are very close to each other

As in the case of numerals, the immediate precursor of this BRM is the distributive use. That is, its grammaticalization "chain" is: *demonstrative* > *distributive* > *reciprocal*. Below are examples of the distributive construction:

Mishnaic Hebrew:

זה אומר ... וזה אומר

This one says ... and the other one (lit. 'this one') says (BM 1:1)

אלו ואלו מתערבין

Both these and these mingle (Yo 5:6)

Modern Hebrew:

זה אוהב מוסיקה מודרנית וזה אוהב מוסיקה קלסית

This one likes modern music and the other one (lit. 'this one) likes classical music.

5. MORPHOSYNTACTIC FEATURES OF INCOMPLETE GRAMMATICALIZATION

In many languages where BRMs are found, the semanticization of the bipartite expression (i.e. the demotivation of its lexical meaning) takes place through a gradual condensation and coalescence of the pro-Nouns – condensation and coalescence being typical syntagmatic processes involved in grammaticalization. An example is English, where *each other* became one phrase, as opposed to constructions where *each* and *other* are separate, e.g., *they each watched the other* or *each of them watched the other*. In German, the entire bipartite reciprocal complex, including the preposition, became a simplex expression, i.e., one single morphosyntactic unit: *miteinander* (lit. with-each-other.) That is, the governing preposition (or case marker) precedes the bipartite expression and is attached to it as a whole. Similarly in Aramaic, most notably in Eastern Aramaic, where the grammaticalization of Th... The ('one' ... 'one') culminated in fusion and univerbalization, producing haāae ('each other') and its variants.

In Hebrew, on the other hand, there has not yet been a complete loss of syntactic flexibility, and the component elements still retain a certain degree of autonomy. Crucially, most Hebrew BRMs can still be inflected for gender and number in agreement with the participants involved. Furthermore, although Hebrew conforms to a gender-resolution rule according to which agreeing elements with mixed controllers appear in the masculine (e.g., 'the boy and the girl are happy M.PL'), in reciprocal constructions, the BRMs can take different genders when denoting human referents of different sexes (this happens mostly, but not exclusively, in the colloquial register). For example:

## בלילה שכזה אהבנו זה את זו וזו את זה

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<sup>&</sup>lt;sup>9</sup> Cf. Ch. Lehmann, "Grammaticalization: Synchronic Variation and Diachronic Change", *Lingua e Stile* 20.3 (1985), p. 309.

For example, <u>hdode</u> in the Turoyo dialect; and  $\dot{g}\underline{d}\bar{a}\underline{d}$  in North-Eastern Neo-Aramaic dialects, such as the dialect of Qaraqosh. For references see Rubin 2005, pp. 22-23.

<sup>&</sup>lt;sup>11</sup> Such "mixed gender" usage is frowned upon by linguistic "purists", e.g. א' בנדויד וה' שי, מדריך הלשון לרדיו (Guide to the Language of Radio and Television) (1974 רשות השידור: ירושלים), p. 183.

On such a night we loved each-M.S other-F.S, and each-F.S other-M.S (Israeli Song by Naomi Shemer)

Additionally, a notable feature of Hebrew BRMs is that the direct-object marker אח or the governing preposition is obligatorily interposed between the bipartite markers. More remarkable are BRMs in which two case-markers, as well as a noun, appear between the antecedent and the reciprocant. This is illustrated by the Biblical example below, where בחרב ('by the sword of'), as the first element in the genitive relation, is interposed between the components of the BRM:

And horses and their riders will descend, each by the sword of his brother (Hag 2:22)

Similarly in Modern Hebrew, in the BRM-construction זה. .. זה where only the reciprocant appears in the genitive case, and is the one which refers to the possessor of the mutual object ('his song') interposed between the two components of reciprocal expression:

שניהם יופיעו יחד וישירו זה את שירו של זה

Both of them will perform together, and each will sing the song of the other (Ha'aretz 9.11.10)

## 6. CONCLUSION

From a synchronic perspective, it appears that Hebrew BRM-constructions demonstrate a less advanced stage of grammaticalization than their counterparts in many languages worldwide. In the vast majority of these Hebrew constructions, the bipartite lexical components are

conventionalized as reciprocal markers, and exhibit some additional conspicuous effects of grammaticalization, such as decreased pardigmatic variability and increased syntagmatic cohesion – yet the basic literal meaning is still transparent or motivated. From the morphosyntactic perspective, this 'conventionalized' half-grammaticalization is manifest in decreased grammatical productivity of the relevant components but without full morphological degeneration. Finally, the grammaticalization of BRMs in Hebrew shows that grammaticalization process can stop at any point of development and does not necessarily proceeds to the zero point (e.g. of univerbalization) as is often claimed in the literature.