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That's what I need: A multimodal study of Hebrew 'Reversed Pseudo-Clefts'

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Abstract

Employing Interactional Linguistic methodology and multimodal interactional analysis, we investigate the Hebrew [*ze ma she-* 'this is what' + clause] structure, known as a 'reversed pseudo-cleft'. The corpus consists of 9 hours of video-recorded casual conversation among friends and relatives, manifesting 70 [*ze ma she-* + clause] tokens. Instead of the traditional grammatical analysis of this structure as consisting of a nominalized clause functioning as predicate, embedded within a matrix clause, we argue for an analysis of *ze ma she-* as a 'fixed chunk', a construction which has grammaticized from repetitive discourse actions to serve particular functions in interaction. Furthermore, we argue that there is no justification for viewing this structure as a 'reversed' form of a Hebrew pseudo-cleft. We support our claims with evidence from prosodic, lexico-semantic, syntactic, pragmatic, and embodied patterning of the [*ze ma she-* + clause] tokens found in our corpus. We show that the structure functions in 71% of the instances for (1) framing prior talk metalingually or (2) claim-backing. Other, less frequent uses include (3) seeking clarification, (4) postulating some general truth, (5) disclaiming responsibility, and (6) getting back to a previous topic. Only two tokens throughout our data display (7) the summative function, claimed as by far the most common function for English reversed pseudo-clefts. Our study supports a view of grammar as a temporally-unfolding, tightly interwoven with embodied conduct, ever-evolving resource for carrying out social actions in the dialogical process of interaction.

Keywords: reversed pseudo-clefts; interactional linguistics; multimodality; Hebrew syntax; embodied syntax; fixed fragments.

1. Introduction

In the context of the special issue "Naturally Occurring Data in and beyond Linguistic Typology" of which this article is a part, we would like to argue that in the study of language, it is indeed necessary – but not sufficient – to focus on naturally occurring data. We must approach this type of data with a specific methodology and from a particular theoretical framework. Interactionally oriented approaches to language such as "Emergent Grammar" (Hopper 1987), "on-line syntax" (Auer 2009), and "dialogical grammar" (Linell 2009; Du Bois 2014) have brought about a radical change in our conceptualization of language from a hierarchical, autonomously-structured mental construct (Saussure 1959[1913]) to a usage-based, temporally-unfolding, tightly-interwoven with embodied conduct, ever-evolving resource for carrying out social actions in the dialogical process of interaction. Embracing these interactional approaches, we focus here on Hebrew[1] structures of the type:[2]

(1) ***ze*** ***ma*** ***she***-*'ani* *tsarix.*
this.M.SG what that-I need.PRS.M.SG
'that's what I need.'

(2) ***ze*** ***ma*** ***she***-*'ani* *rotse* *lehaspik,*
this.M.SG what that-I want.PRS.M.SG get_done.INF
'that's what I want to accomplish,'

(3) ***ze*** ***ma*** ***she***-*limdu* *'et-xem?*
this.M.SG what that-teach.PST.3M.PL ACC-3M.PL
'that's what they taught you?'

This structure, known as a 'reversed pseudo-cleft' – in Hebrew, *mishpat mevuka mehupax* (Azar 1992: 94) –, is composed of the masculine singular demonstrative pronoun *ze* 'this', followed by the interrogative question word *ma* 'what' and the complementizer (and general Hebrew subordinator) *she-* 'that' – all followed by a clause:

[1] Heb; Afro-Asiatic; Semitic.

[2] Unless otherwise noted, all Hebrew examples come from our data, see below. For transcription conventions, see Appendix.

(4) ***ze*** ***ma*** ***she-*** *[clause]*
this.M.SG what that-
'That's what [clause]'

According to traditional Hebrew grammar, such structures belong in the realm of complex syntax and can be analyzed as a nominal (or copular) matrix clause in which *ze* 'this' would be considered subject and the following '*ma she-* + [clause]' complex would be considered a nominalized clause functioning as predicate, embedded in the matrix clause. However, we would like to suggest viewing *ze ma she-* as **a fixed chunk** (Bybee 2003: 603), a construction which has grammaticized from repetitive discourse actions to serve particular functions in interaction. Furthermore, we will show that there is no justification in the data for perceiving this structure as a 'reversed' form of a pseudo-cleft.

Following a section on data and methodology (Section 2), we provide a survey of previous studies of related structures in several languages (Section 3). In Section 4 we present the lexico-semantic, syntactic, and prosodic patterning associated with the [*ze ma she-* + clause] structure found in our data. In Section 5 we turn to the heart of this study, a multimodal interactional analysis of the structure, investigating its functions in Hebrew casual conversation. Section 6 summarizes our findings and discusses their implications.

2. Data and methodology

Our data come from the Haifa Multimodal Corpus of Spoken Hebrew (Maschler et al. 2024). At the time of data collection, the corpus consisted of 9 hours of video-recorded casual conversation among friends and relatives, 2–6 participants per interaction, altogether 16 informal interactions between 42 different interlocutors, recorded during the years 2016–2019.

We manually searched for the *ze ma she-* construction throughout the data and found 70 tokens. These 70 tokens constitute the database for the present study.

The 'equivalent' English structure, sometimes termed a 'reverse(d) pseudo-cleft' (see Section 3 below) allows for a variety of question words to follow the '*that's*' part of the 'equivalent' structure, as in:

(5) *That's where Cathy Reid is.* (Küttner 2020: 252)

(6) *That's how Linda got her job in Puerto Rico.* (Küttner 2020: 262)

However, the only question word found in the Hebrew structure throughout our data is *ma* 'what'.

We included tokens with an adverb or a quantifier preceding the question word, such as:

(7) ***ze*** ***bediyuk*** ***ma*** ***she***-*'ani* *'omeret.*
this.M.SG exactly what that-I say.PRS.F.SG
'that's **exactly** what I'm saying.'

(8) ***ze*** ***kol*** ***ma*** ***she***-*mikro* *yode'a* *la'asot.*
this.M.SG all what that-microwave know.PRS.M.SG do.INF
'that's **all** a microwave can do.'

Altogether, 9 tokens of this kind were found among the 70 cases in our corpus.

Fully embracing the temporality and contingency of the moment-by-moment incremental unfolding of interaction (Hopper 1987; 2011; 2020), we employ the methodology of Interactional Linguistics – the study of language and languages in social interaction (Couper-Kuhlen & Selting 2018) – to study the ways in which the grammatical resource of the [*ze ma she-* + clause] structure is employed to produce social actions. To analyze the participants' embodied conduct involved in production of this target structure, we employ multimodal interaction analysis (Goodwin 2000, 2018; Mondada 2006).

3. Previous research on reversed pseudo-clefts and related structures

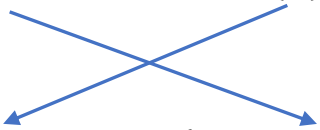
In the literature about 'equivalent' structures in European languages (mostly English, but there is some research also on German, Italian, and Norwegian), the structure is known as a 'reverse(d) pseudo-cleft' or a 'reverse *wh*-cleft' (e.g., Geluykens 1984; Erdmann 1986; Collins 1991; Oberlander & Delin 1996; Weinert & Miller 1996; Lambrecht 2001; Traugott 2008; De Cesare 2014) because of its ties with the pseudo-cleft structure.[3] We restrict our study to what has been characterized as 'headless'

[3] Some linguists distinguish between reversed pseudo-clefts and demonstrative reversed pseudo-clefts by terming the latter construction 'the DEM-BE-WH construction' (Ball 1991), 'demonstrative *wh*-clefts' (Biber et al. 1999: 961), 'demonstrative clefts' (Calude 2008), 'Type 2 reverse pseudo-cleft sentences'

reversed pseudo-clefts, i.e., those opening with a demonstrative – the most common type of reversed pseudo-cleft found in studies of the 'equivalent' English structure (e.g., Erdmann 1986; Collins 1991; Weinert & Miller 1996; Oberlander & Delin 1996; Calude 2008).[4]

An English pseudo-cleft, according to traditional grammar, constitutes "a Subject Verb Complement sentence with a *wh*-nominal clause as subject or complement" (Quirk et al. 1985: 1387–1389), as in (9a):

(9)	**A**	**COP**	**B**	
	Subject	**Verb**	**Complement**	
(9a)	*What he's done*	*is*	*(to) spoil the whole thing.*	(Quirk et al. ibid.)



	Complement	**Verb**	**Subject**
(9b)	*That*	*is*	*what he's done.*

The parallel reversed pseudo-cleft (9b) would consist of the same components – subject, verb, complement – in a reversed order, only with 'that' replacing the complement ('to spoil the whole thing'). In both cases – the pseudo-cleft and the reversed pseudo-cleft – we have an 'A copula B' structure.

A Hebrew pseudo-cleft structure (Azar 1992; Yatsiv-Malibert 2009; Maschler & Fishman 2020; Maschler & Pekarek Doehler 2022) consists of the *ma she-* 'what that' construction in part A, the demonstrative *ze* (or *hu*, the masculine singular personal pronoun) as copula, and a *that*-clause as part B, as in (10a):

(10)	**A**	**COP**	**B**
(10a)	***ma*** ***she-****kara*	*ze*	*she-[clause]*
	what that happen.PST.3M.SG	this.M.SG	that [clause]
	'what happened is that [clause]'		

(Garassino 2014), the '*that's what* construction' (Johansson 2001), or 'the [*that's wh*-clause] format' (Küttner 2020).

[4] Thus, we will not be dealing with cases in which part A carries a fuller lexical form, such as *the thing that…, the reason that…, the one that…* (cf., Ball 1991; Oberlander & Delin 1996: 197) or a NP as in examples such as ***Champagne*** *is what I like* (cf. De Cesare 2014: 10).

And the so-called 'reversed pseudo-cleft' structure consists of the demonstrative pronoun *ze* 'this'[5] in part A (instead of part B of the *pseudo-cleft*), no copula (Hebrew allows for non-copular nominal clauses), and the *ma she-* construction in part B, as in (10b):

	A	**COP**	**B**	
(10b)	*ze*	*Ø*	***ma***	***she**-kara*
	this.M.SG		what	that happen.PST.3M.SG
	'that's what happened.'			

According to Azar, such a reversed pseudo-cleft is a reduced form of a fuller sentence, in which the demonstrative *ze* 'this' stands for a full clause or infinitival phrase. The example he gives is:

(11a)	*hem*	*rotsim*	*le'exol*	*'otanu*	*bli*	*melax.*
	they	want.PRS.M.PL	eat.INF	us	without	salt
	'they want to eat us alive.'					

ze	*ma*	*she-hem*	*rotsim.*
this.M.SG	what	that they	want.PRS.M.PL

'that's what they want.' (adapted from Azar (1992: 94), our translation)

According to him, this reversed pseudo-cleft stands for the fuller form:

(11b)	**A**				**COP**	***B***		
	le'exol	***'otanu***	***bli***	***melax***	*ze*	*ma*	*she-hem*	*rotsim.*
	eat.INF	us	without	salt	this.M.SG	what	that they	want.PRS.M.SG
	'to eat us alive is what they want.'							

In traditional grammar and Information Structure approaches, the function of the pseudo-cleft is considered to be the backgrounding of material in part A in order to focus on part B (e.g., Jespersen 1949; Prince 1978; Geluykens 1988; Collins 1991; Azar 1992; Biber et al. 1999; Lambrecht 2001; Yatsiv-Malibert 2009, see literature review in Maschler & Pekarek Doehler 2022). However, it's been shown, in Interactional Linguistic studies on several languages, including Hebrew, that

[5] There is no *this* vs. *that* distinction in the Hebrew demonstrative system, thus *ze* can be translated as either one. When *ze* appears in a Hebrew reversed pseudo-cleft, we translate it with 'that', the more common demonstrative in English reversed pseudo-clefts (Weinert & Miller 1996: 181; Oberlander & Delin 1996: 189; Calude 2008: 79).

focusing, if it occurs, is a by-product of a different function, an epiphenomenon (Hopper 2001: 111). A more rigorous account of these structures is that part A functions as a *projecting construction* (Auer 2005; Günthner 2011), delaying the production of part B for various cognitive and interactional reasons. It also functions to frame (Goffman 1981) the discourse to come in particular ways (e.g., Hopper 2001; 2004; Hopper & Thompson 2008; Günthner & Hopper 2010; Günthner 2011; Pekarek Doehler 2011; Maschler & Fishman 2020; Maschler & Pekarek Doehler 2022).

In a special issue of *Lingua*, Maschler et al. (2023) compared the use of pseudo-cleft constructions in talk-in-interaction across six languages. We found that even though the languages are often quite different typologically from each other, and for some languages there is very little documentation of pseudo-clefts (Japanese, Mandarin, Swedish, Estonian), there are many similarities in the ways such structures are employed in interaction in those languages, suggesting possible universal interactional motivations for the grammatical properties of pseudo-clefts across languages.

As for the functions of reversed pseudo-clefts, they, too, have been studied within Information Structure approaches. According to most studies, the demonstrative pronoun denotes Given information, while the clause, which contains the prosodic nucleus of the tone unit, denotes New information (e.g., Stubbs 1983; Collins 1991; Weinert & Miller 1996[6]; Oberlander & Delin 1996[7]; Lambrecht 2001; De Cesare 2014). Oberlander & Delin (1996) found that the demonstrative is in many cases anaphoric but that it can also be cataphoric (cf. Collins 1991; Erdmann 1986; Calude 2008) or exophoric (cf. Calude 2008), and that the demonstrative may refer to long discourse segments (cf. Garassino 2014; Johansson 2001; Calude 2008). Similarly, Weinert and Miller (1996: 173) found that the demonstrative can refer to an entity in the immediately surrounding discourse or situation, allowing the speaker to hold onto previous ideas before moving on, and thus "creating a slight backwards pull" (cf. Erdmann 1986: 854).

[6] However, Weinert & Miller found that a large majority of reversed pseudo-clefts in their data manifest a stressed element in both part A and part B (1996: 189).

[7] However, Oberlander & Delin also found some instances in their data in which part A contains New information, and they found that part B of reversed pseudo-clefts more often manifests Given/Inferrable rather than New information (1996: 201).

As for part B of reversed pseudo-clefts opening with *what*, Oberlander & Delin (1996) found that it often expresses presupposed information which is connected to what was said or assumed in the previous discourse (see footnote 7), evoking it and making it relevant again. According to them, in this way reversed pseudo-clefts can function metalingually (cf. Calude 2008: 100-106; Garassino 2014: 71): "This category captures cases in which a speaker is using a presupposition to topicalize, summarize, clarify, or pass judgement on the relevance or importance of a topic under discussion, or the effectiveness of an argument" (Oberlander & Delin 1996: 207).

By far the main discourse function claimed for headless reversed pseudo-clefts, however, is a summative, or ending function (Erdmann 1986; Collins 1991; Oberlander and Delin 1996; Weinert and Miller 1996; Lambrecht 2001; Johansson 2001; Garassino 2014). According to Collins (1991), since this construction is informatively low and has an equational nature, it does not present new content and is thus suitable for summarizing.

We found only one interactional linguistic study dealing with reversed pseudo-clefts – Küttner's article on the English [*that's* + *wh*-clause] format (2020), constructions like *that's what I'm gonna do*. Küttner shows that in third position (Schegloff 1992) the construction functions as a pivot-like nexus between one sequence and the next: It initiates a new sequence and at the same time connects it – via the demonstrative pronoun *that* – to the previous sequence.[8] According to Küttner, the construction sometimes functions to convey agreement (2020: 265, cf. Calude 2008: 102), but more often it functions as an announcement and is usually deployed immediately after an adjacency pair (Schegloff & Sacks 1973), in order to naturally shift from one sequence to the next, thus projecting the continuation of the turn. The format can also be deployed in second position, to initiate actions that were not made relevant by the action of the first pair part. In this way the format is employed as a new first pair part, making a different action relevant. In such cases, there is indeed no alignment with the previous turn, but the coherence of the discourse is preserved: the format serves as a resource for initiating actions that would otherwise seem inappropriate in the sequence and impair its coherence.

[8] Earlier studies (e.g., Weinert & Miller 1996: 193; Oberlander & Delin 1996: 193; Calude 2008: 88–89) have also pointed out that the demonstrative in this structure can function simultaneously in a forward-oriented and backward-oriented fashion.

The headless reversed pseudo-cleft differs in distribution across languages: it is very frequent in spoken English (Oberlander and Delin 1996; Calude 2008), but very rare in Italian (Garassino 2014). In French and Spanish, it does not exist (Lambrecht 2001: 492), and in German and Norwegian syntactically similar structures do exist, but their functions are different: Johansson (2001) found that when an English headless reversed pseudo-cleft is translated into German or Norwegian, other constructions are employed. Thus, to understand the functions and properties of the headless reversed pseudo-cleft in a particular language, a close study of its deployment in the moment-by-moment unfolding of conversation must be conducted.

4. Lexico-semantic, syntactic, and prosodic patterning

4.1. Lexico-semantic patterning

Hopper and Thompson (2008) found that the most frequent predicates in part A of the English pseudo-clefts in their data are the verbs *do* (66%), *happen* (13%), and *say* (8%), showing that in 87% of the cases, part A functions as *a formulaic fragment* classifying upcoming discourse as an action (e.g., *what we're gonna do…*), an event (e.g., what *happened..*), or a paraphrase of what has been said before (e.g., *what I'm saying…*).

In an ongoing cross-linguistic study of pseudo-clefts in French, Hebrew, Swedish and Estonian (Maschler, Pekarek Doehler, Lindström & Keevallik, forthc., cf., Maschler & Pekarek Doehler 2022), we found that the most frequent predicates in the A-parts in our 4 datasets are generally the semantic 'equivalents' of these DO / HAPPEN / SAY verbs, but these account for a much smaller percentage of the tokens compared to the figures in Hopper & Thompson's study (2008), as demonstrated in Table 1.

	English (Hopper & Thompson 2008)	**French**	**Hebrew**	**Swedish**	**Estonian**
DO	66%	9 (16%)	20 (22%)	2 (8%)	2 (14%)
HAPPEN	13%	2 (4%)	20 (22%)	2 (8%)	1 (7%)
SAY	8%	7 (13%)	9 (19%)	3 (13%)	3 (21%)
TOTAL	87%	18 (33%)	49 (53%)	7 (29%)	6 (43%)

Table 1: Lexico-semantic patterning of pseudo-clefts in English, Hebrew, French, Swedish, & Estonian.

An additional 31% of the Hebrew predicates are employed to display a stance concerning what is about to be verbalized in part B (for example, '*what's cool, annoying, scary,…* ' or '*what I like, want…*'). The percentages of stance-taking predicates in pseudo-cleft structures are even greater in French (60%), Swedish (42%), and Estonian (36%) in our databases (Maschler, Pekarek Doehler, Lindström & Keevallik, forthc.).

As for predicates employed in the *ze ma she-* construction, very few of them involve stance-taking predicates (only '*need/ want/ care about*', see Table 2), suggesting that the *ze ma she-* construction is generally *not* employed in our corpus to convey stance.

Predicate	Translation	**N**	**%**
'amar/higid 'say'/ *sha'al* 'ask'/ *hisbir* 'explain'	SAY	22	31.4%
'asa	DO	17	24%
kara 'happen'/*haya 'be'/ yesh 'there is'*	HAPPEN	11	16%
limed	teach	2	3%
hevin	understand	2	3%
tsarix	need	2	3%
ratsa	want	1	1.4%
'ixpat	care about	1	1.4%
kara 'read'; *simen* 'mark'; *hispik* 'accomplish'; *hevi* 'bring'; *nixtav* 'meant to be'; *xava* 'experience'; *hexya* 'revive'; *notsar* 'emerge'; *higi'a* 'arrive'; *tsipa* 'expect'; *ze* 'this'; no predicate		1 each	1.4 % each
TOTAL		70	100%

Table 2: Predicates in reversed pseudo-cleft structures.

Furthermore, whereas by far the great majority of predicates in the pseudo-cleft structure are DO and HAPPEN (22% of all Hebrew predicates in each category, see Table 1), in the reversed pseudo-cleft structure it is the SAY category that is the largest (31.4%), but there are also quite a few DO (24%) and HAPPEN (16%) predicates.[9] However, despite the general great similarity in the most frequent predicates in these two structures, our interactional analysis (Section 5) reveals that the functions of reversed pseudo-clefts are actually quite different from those of pseudo-clefts in Hebrew.

[9] English reversed pseudo-clefts in which part B opens with 'what' exhibit a preference for verbs of thinking, saying, and feeling (Oberlander & Delin 1996: 217). Even prior to 1680, they tended not to manifest the verbs 'do' and 'happen' characteristic of pseudo-clefts (Traugott 2008: 16).

4.2. Syntactic patterning

Another difference between the two constructions is that while part B of pseudo-clefts often spans a discourse unit much longer than a clause (Hopper & Thompson 2008; Günthner 2011; Pekarek Doehler 2011; Maschler & Fishman 2020; Maschler & Pekarek Doehler 2022), part B of reversed pseudo-clefts hardly ever exceeds one clause.[10] This happens in only 3 out of the 70 cases, and in all of them the [*ze ma she-* + clause] structure ends in continuing intonation, followed by a clause explicating the content of *ze* 'that', as in:

(12) *'aval* ***ze*** ***ma*** ***she-****'ani* *'amarti* *la,*
but this.M.SG what that-I say.PST.1.SG to-3F.SG
'but **that's what** I said to her,'

she-ze *lo* */bishvilo/.*
that-it not for-3M.SG
'that it's not /for him/.'

In example (12), the following clause explicates what it is that the speaker 'said to her.'[11]

4.3. Prosodic patterning

Finally, whereas in the case of pseudo-clefts, part B is very often separated by an intonation unit boundary (Chafe 1994; Du Bois 2012) from part A, in the case of our structure, we never find an intonation unit boundary[12] between part A (*ze*) and part

[10] According to Calude (2008: 88), clause complexes have not been attested as ever occurring in Part A of English *non*-demonstrative reversed pseudo-clefts.

[11] Our corpus also manifests 6 tokens in which the [*ze ma she-* + clause] structure ends in sentence-final falling intonation and the following intonation units consist of an increment (Ford, Fox & Thompson 2002) explicating the demonstrative (see, e.g., example (13), l. 20–23) and example (14), l. 11–12).

[12] Intonation unit boundaries are determined in this study, and in the entire Haifa Multimodal Corpus of Spoken Hebrew (Maschler et al. 2024), based on the Santa Barbara discourse transcription method (Chafe 1994, as adapted in Du Bois 2012; Du Bois et al. 1992 and adjusted for Hebrew in Maschler 2017). In this transcription method, we listen for cues indicating intonation unit boundaries, such as initial anacrusis, final lengthening, pitch reset, terminal pitch contour, pauses, initial inbreath, final creaky voice, etc. (for a complete list of features, see Du Bois 2012: 28). Each conversation is transcribed by at least 3 highly experienced transcribers, reaching a high degree of intercoder

B (the *ma she-* part). This provides prosodic support for the claim that *ze ma she-* has crystallized into a construction, a single 'processing chunk' (Bybee 2003: 603).

5. Multimodal interactional analysis

We now turn to the functional aspects of the *ze ma she-* construction. Table 3 shows the functional distribution of the [*ze ma she-* + clause] structure in our data.[13]

FUNCTION	N	%
Framing prior talk metalingually	29	41.4%
Claim-backing	21	30%
Seeking clarification	4	5.7%
Postulating some 'general truth'	4	5.7%
Disclaiming responsibility	3	4.3%
Summative, ending	2	2.9%
Getting back to previous topic	1	1.4%
Other	6	8.6%
TOTAL	**70**	**100%**

Table 3: Functional distribution of the [***ze ma she-*** + clause] structure.

We see that only two tokens of the construction accomplish a summative, or ending function, the main discourse function claimed for English headless reversed pseudo-clefts (see Section 3 above). In the continuation of this section, we illustrate the remaining functions found for the [*ze ma she-* + clause] structure in our data, paying particular attention to the position of the structure within the unfolding of actions, to its prosodic features, and to the embodied conduct accompanying it.

5.1. Getting back to a previous topic

We begin with *ze ma she-* as a means for getting back to a previous topic. There is only one such token in our data (1.4% of all cases), but it is an informative one, because it

reliability. Occasionally, we use Praat (Boersma & Weenink 2025), but since visual representation of prosody can be inaccurate, we rely mainly on the hearing of expert transcribers.

[13] The category 'Other' in Table 3 refers to six cases in which we could not pin down the function performed by the structure, thus necessitating further study.

shows that the construction is not necessarily summative, and that it may even carry a projective force, foreshadowing the upcoming action.

In excerpt (13), a couple, Alon and Hillel, are sitting in their living room with their baby, who begins to wake up in Alon's arms. In the moments preceding excerpt (13), following the pseudo-cleft part A *ma she'ani xayav lehaspik maxar* 'what I *must* accomplish tomorrow' (not shown)[14], Alon starts listing several errands he'd like to accomplish: going to Shilav, a baby goods store, preparing the dough for the Challah, the traditional Jewish bread – a list which he does not complete because at this point the baby begins to cry. In the almost two minutes omitted after this in the video clip[15], the couple is debating whether the baby is hungry, Alon goes to the kitchen to prepare a bottle for him, returns, and starts feeding him (not shown). While feeding, Alon addresses the baby:

(13) 'Errands' ('Challah, Shilav, Car' 04:07)

```
1 (Alon):(2.5)'agav,
                by_the_way
          (2.5)'by the way,'

2         ...haxel      me-ha-rega?,
             starting   from-DEF.ART-moment
          '...starting from now?,'

3         ...'ata     muzman    le'exol?,
             you.M.SG invited   eat.INF
          '...you are welcome to eat?,'

4         ...ve-layla   tovi.
             and-night  good_y
          '...and good nighty.'

5         ...'ad    ha-bo*ker.
             until  DEF.ART-morning
        '...until the morning.'
                       *Fig. 1

6         ...'ad    ha-boker.
             until  DEF.ART-morning
          '...until the morning.'
```

Fig. 1

[14] For a detailed analysis of this part of the interaction, see Maschler & Pekarek Doehler 2022.

[15] All video clips analyzed here, with English subtitles, can be accessed at https://drive.google.com/drive/folders/1Y4wV29VhHiaW-3unNIQRUKE0OIWtjnBD

7 Hillel: *@'ad @ha-boker,*
until DEF.ART-morning
'@until the @morning,'

8 *'a*lek.*
as_if
'as if.'
{rolling his eyes}
*Fig. 2

Fig. 2

9 Alon: *'ad ha-boker,*
until DEF.ART-morning
'until the morning,'
{---singing---}

10 Hillel: *yu--!*
PART

11 Alon: *'ad ha-boker,*
until DEF.ART-morning
'until the morning,'
{---singing---}

12 *..'im 'ani 'e/nana/ 'ad ha-bo*
if I until DEF.ART-mor[ning]
'..if I 'e/nana/ until the mor'
{singing, looking to the side, probably at the clock}

13 (inhales)

14 *shmone ve-xamisha.*
eight and-five
'five minutes past eight.'

15 *...'im ba-xayim,*
if in.DEF.ART-life
'...if in life,'
{--singing--}

16 *..'oy 'oy 'oy 'oy.*
{----singing-----}

17 ...(*kisses baby)
*Fig. 3

Fig. 3

Fig. 4

18 (*inhales deeply, straightens back, gazes into space)
*Fig. 4

19 ....*tsk*

→ 20 ..*ze* *ma* *she-'ani* *tsar^i*x.*
this.M.SG what that-I need.PRS.M.SG
'..that's what I need.'
^gaze at Hillel
*Fig. 5

21 ...*xala?,*
'...challah?,'

Fig. 5

22 ...*shilav?,*
'...Shilav?,'

23 ...*sidur* *rexev.*
fixing.of car
'...fixing the car.'

24 ...*'ani* *xaya--v* *lesayem* *'et* *ze.*
I must.PRS.M.SG finish.INF OBJ this.M.SG
'...I must get this done.'

25 ...(inhales through nose)

26 .....*nir'a* *l-i* *re'ali.*
seem.PRS.M.SG to-1SG realistic
'.....seems realistic to me.'

27 Hillel: *shi**lav*** *lo* *yihye* *patuax* *maxar?*
Shilav NEG be.FUT.3M.SG open tomorrow
'Shilav won't be open tomorrow?'
*

28 ..*be-shabat?*
on-Saturday
'..on Saturday?'

Alon is speaking to the baby, expressing his wish that the baby sleep all night until morning (l. 1–6). Hillel ridicules Alon's wish, saying there's no chance this is going to happen (l. 7–8). Alon starts singing and then kisses the baby's forehead (l. 9, 11–17, Fig. 3). At this point Alon takes a deep breath, straightens his back, and focuses his gaze into space (l. 18, Fig. 4). After a rather long pause, focusing his

gaze on Hillel (Fig. 5), he produces a click (l. 19) opening a new sequence (Ben-Moshe & Maschler 2024a),[16] and the *ze ma she-* structure: *ze ma she-'ani tsarix*. – 'that's what I need.' – in sentence-final falling intonation. The primary stress of the intonation unit is on the demonstrative *ze* 'this'. In contrast to what was found in some studies of English reversed pseudo-clefts (e.g., Collins 1991; Oberlander & Delin 1966), in 44% of the *ze ma she-* tokens (32 out of 70), the demonstrative carries the primary stress. In Oberlander & Delin's study, for instance, the figure is 6% (1996: 194).

The construction thus initiates a new sequence, skipping over the almost two-minute baby-episode and tying back to the previous discussion concerning the things Alon must accomplish the next morning, summing them up. However, not only does the construction retroactively frame Alon's previously described actions as things he 'needs to accomplish', it also *projects* an enumeration of those tasks: Challah, Shilav, and fixing the car, an enumeration which indeed follows (lines 21–23). The *ze ma she-* construction thus re-opens a previous discussion, after a very long pause here, and the men continue to discuss those tasks in the following moments (data not shown).

Thus, in contrast to previous literature emphasizing the closing function of English reversed pseudo-clefts, and in line with Küttner's Interactional Linguistic study (2020) (cf. Collins 1991; Oberlander & Delin 1996; Calude 2008 (see footnote 8 above)), we see that the Hebrew construction may carry also a projecting force. However, unlike Küttner's examples, *ze ma she-* also has the capacity to re-open a discussion, skipping over a very long stretch of talk.

5.2. Claim-backing

A claim-backing move is a move made by a participant in order to deal with a dispute (Antaki & Leudar 1990: 284). Our second excerpt demonstrates the second most frequent function of the *ze ma she-* construction in our data – a claim-backing function. Of the 70 tokens in our data, 21 (30%) carry this function. Example (14) comes from a gathering of five friends at Inbal and Omri's flat. Inbal has a stomachache and is therefore resting on the sofa, not visible in the frame. Yair

[16] For a detailed analysis of this part of the interaction, see Ben-Moshe & Maschler 2024a.

suggests preparing a hot water bottle for her to ease the pain but then realizes that they have no kettle. He then thinks of other solutions:

(14) 'Microwave' ('Katamon 2' 00:25:46)

```
1 Ya'ir:'en           lax,
        there_isn't   to-you.F.SG
        'don't you have,'

2       karit   ka-zot,
        pillow  like-this.F.SG
        'this kind of pillow,'

3       she-mitxamemet          be--,
        that-get_warm.PRS.F.SG  in-
        'that can be heated i--n,'
```

Fig. 6

```
4       mikro?
        'a microwave?'

5 Inbal:  lo
          'no.'

6 Ya'ir: ....'efshar        ^lexamem  mayim  ba-mik*ro.
             it's_possible  warm.INF  water  in-the-micro
         '....it's possible to heat up water in the micro.'
                          ^.........---- PUOH -------->1.9
                                                *Fig. 6

7 Inbal:  .../@/

8 Omri:   ....k*en?
              yes
          '....really?'
               *Fig. 7

9 Ya'ir:  ^...^m m--
          ...m m--
          ^moves PUOH to the left, shakes head^---holds PUOH---> 1.10

→ 10      ze          ma    she-hu   yode'a          la'a*sot.^
          this.M.SG   what  that-he  know.PRS.M.SG   do.INF
          'that's what it can do.^'
                                                *Fig. 8
```

Fig. 7

Fig. 8

11 *ze* *kol* *ma* *she-mikro* *yode'a* *la'asot.*
this.M.SG every what that-micro know.PRS.M.SG do.INF
'that's all a microwave can do.'

12 *lexamem* *mayim.*
warm.INF water
'heat up water.'

13 Omri: */ha-'inya/*
the-thin[g]
'/the thing/'

14 *hu martit* *molekulot* *mayim.*
he vibrate.PRS.M.SG molecule.of.PL water
'it vibrates water molecules.'

15 *'ani* *lo* *yode'a* *'im* *hu* *mexamem* *'otam*
I NEG know.PRS.M.SG if he warm.PRS.M.SG OBJ-3m.pl
lenekudat *retixa.*
to-point.of boiling
'I don't know if it heats them up to a boiling point.'

16 Ya'ir: *..hu* *mexamem*
he warm.PRS.M.SG
'..it heats'

17 *...hu* **mexamem* *'otam.*
he warm.PRS.M.SG OBJ-3m.PL
'...it heats them up.'
*Fig. 9

Fig. 9

Upon realizing that they have no kettle, Yair asks Inbal whether she has a pillow that could be heated up in the microwave so that she could put it on her stomach to relieve the pain (l. 1–4). Following her negative reply (l. 5), Yair suggests, while holding his left hand in a Palm Up Open Hand gesture (PUOH), that they could heat up water in the microwave (l. 6, Fig. 6). Yair keeps holding his hand in this gesture until Omri, after a rather long pause, tilts his head, raises his eyebrows, and produces a doubtful *ken?* 'really?' in rising intonation (l. 8, Fig. 7). Yair then moves his hand, still in the PUOH, horizontally to the left, while shaking his head, and produces a response to Omri's doubt: *ze ma she-hu yode'a la'asot.* 'that's what it can do'. (l. 9–10, Fig. 8).

Many of our claim-backing tokens – 56% of them (10 of the 18 in which the speaker is visible) – are accompanied by the PUOH, whereas none of the tokens of the construction accomplishing other functions are. The PUOH has been associated in various studies with obviousness and shared knowledge (e.g., Kendon 2004; Müller 2004; Cooperrider et al. 2018; Maresse et al. 2021; Inbar & Maschler 2023).

The structure – with the verb 'to do' – points out the function of the microwave (heating up water) in order to present evidence that Yair's suggestion was indeed sensible. According to Antaki and Leudar, ''A backing move does two things – it marks the move as disputable in a particular way, and at the same time it presents grounds to deal with that disputability" (Antaki & Leudar 1990: 284). In other words, the [*ze ma she-*+ clause] structure functions here as 'claim-backing'. Accompanying it with the PUOH, which functions as an epistemic stance marker (Inbar & Maschler 2023), upgrades the backing move by marking the claim as obvious, shared knowledge.

Indeed, right after producing the structure, in final falling intonation, Yair produces an upgraded version of it: *ze <u>kol</u> ma she-mikro yode'a la'asot.* 'that's <u>all</u> a microwave can do.' (l. 11), further backing up his claim. He then increments his utterance with the infinitive phrase 'to heat up water.' (l. 12), specifying the demonstrative pronoun employed in the construction. Following the increment, Omri continues to argue with a contrasting assertion (l. 13-15), which Yair counters as well (l. 16-17, Fig. 9).

In this token of our construction, there are two primary stresses – one on *ze* 'this' and one on the final syllable of *la'asot* 'to do'. This can clearly be seen in the following Praat diagram[17] (Diagram 1):

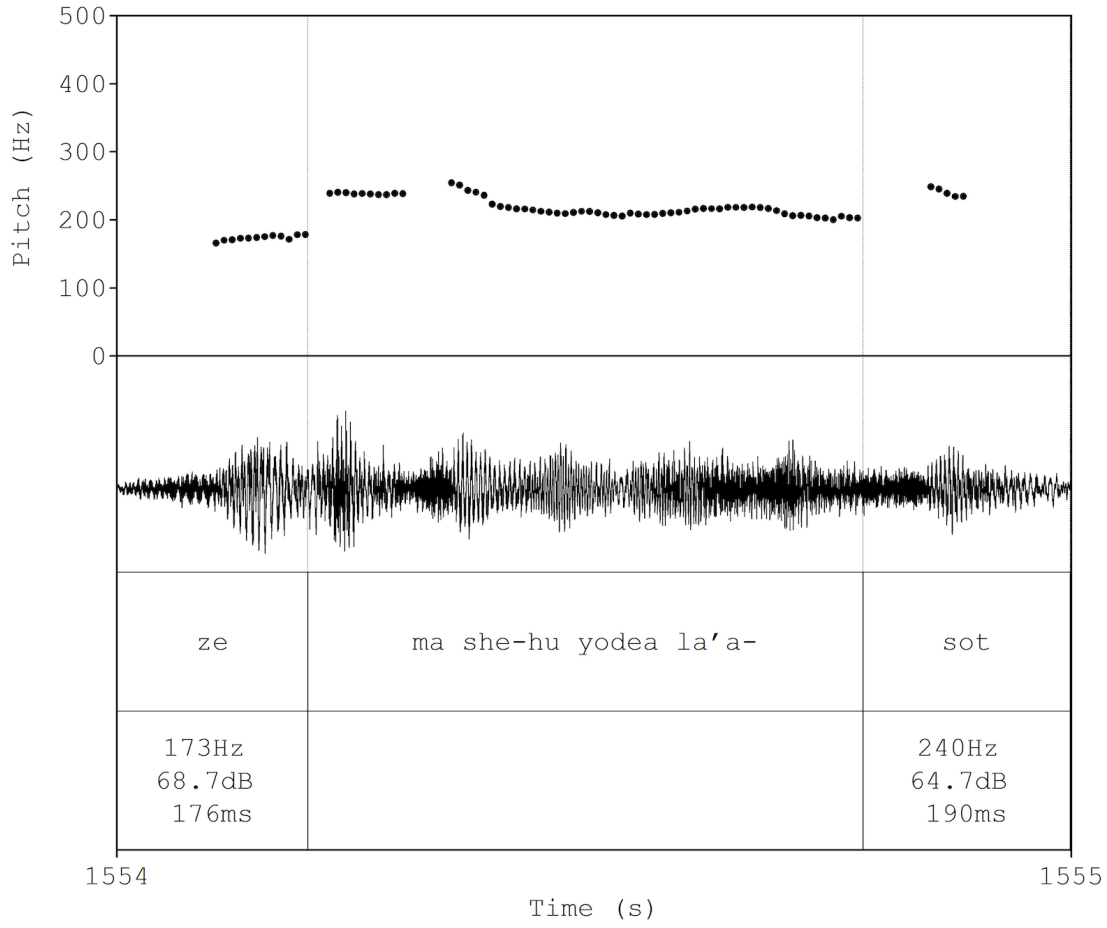


Diagram 1: Praat diagram of *ze ma she-hu yode'a la'asot.* 'that's what it can do'. (l. 10)

Diagram 1 shows that both syllables, *ze* 'this' and *sot* of *la'asot* 'to do', are of roughly the same length: 176 and 190 milli-seconds. The syllable *ze* is somewhat lower in pitch than *sot* (173 Hertz vs. 240 Hertz), but *ze* is higher in intensity than *sot* (68.7 Decibels vs. 64.7 Decibels).[18] These features all contribute to our conceiving both syllables as stressed to the same degree.

[17] We are indebted to Nadav Matalon for help with this acoustic analysis.

[18] As one of the reviewers noted, measurements can be notoriously unreliable, especially in conversational data not collected under controlled laboratory conditions. This diagram is therefore provided here as secondary support for our claim. The main support comes from the fact that at least six different expert transcribers have listened to this intonation unit, all agreeing that it is not possible to determine which of the two stresses of intonation unit 10 is more prominent.

Eighteen of the 70 tokens in our data, 26%, manifest two primary stresses - one on the demonstrative, the other on some syllable in the clause. This is reminiscent of Weinert & Miller's finding that "[t]he large majority of reversed *wh*-clefts have a stressed element in both the clefted constituent and the cleft clause" (1996: 189) (cf. Lambrecht 2001: 482).

5.3. Framing prior talk metalingually

Example (15) illustrates the most frequent function of the [*ze ma she-* + clause] structure in our data – framing prior talk metalingually (cf. Oberlander & Delin 1996; Calude 2008). Of the 70 tokens in our data, 29 (41.4%) carry this function. This example involves one of the only stance-taking predicates found in this structure in our data. In this interaction, a conversation between two close friends, Kelsey recommends the Israeli TV series 'When Heroes Fly' to her friend Naomi:

(15) 'A Brilliant TV Series' ('Armon Hanatsiv' 01:06:05)

```
1 Kelsey: ra'iti,
          see.PST.1SG
         'I watched,'

2      ... male  prakim     shel  bishvila  giborim 'afim,
           full  chapter.PL of    for-3F.SG  hero.PL  fly.PRS.M.PL
       '...lots of episodes of 'When Heroes Fly','

3 Naomi: (nodding and yawning)

4 Kelsey:               ve-siyamti        'et kol  ha-sidra
                        and-finish.PST.1SG OBJ all  DEF.ART-series
                        'etmol?,
                        yesterday
                        'and I finished the whole series yesterday?,'

5         ...bimkom       lilmod?,
             instead_of   study.INF
           '...instead of studying?,'
```

6 Naomi: (smiling with puckered lips)

7 Kelsey: *way,*
PART,

8 ...*'at* *xayevet* *lir'ot* *'et* *ze.*
you.F.SG must.PRS.F.SG see.INF OBJ this.M.SG
'...you've got to watch it.'

9 Naomi: *sidra* *me'ula.*
series superb
'[it's] a brilliant series.'

Fig. 10

10 ..*'ani* *ra'iti.*
I see.PST.1SG
'..I've watched it.'

11 Kelsey: ..^*sidra* *me'u*la,^
series superb
'..a brilliant series,'
^right hand IF touches left hand IF in listing gesture^
*Fig. 10

Fig. 11

12 ^*ha-sax*kanim* *xa^tixim,*
DEF.ART-actor.PL handsome.PL
'the actors are hunks,'
^moves right hand IF to left hand MF^
^presses right hand
IF against left MF,
pushing it backwards ->1.16
*Fig. 11

13 Naomi: *'ani* *ra'iti* *kshe-hi* *hayta* *ba-televizya*
I see.PST.1SG when-she be.PST.3F.SG in-DEF.ART-TV
'I watched it when it was on TV'

14 Kelsey:...*kol* *ka--x,*
{*smiling*}
all this_way
'...su--ch [hunks],'

15 Naomi: ..@@@@@

→ 16 Kelsey: *ze* *ma^* *#she-h*aya* *li* *'ixpat.#*
{----------*smiling*----------}
this.M.SG what that-be.PST.3M.SG to-1SG care
'that's what I cared about.'
#detaches IF from left hand, switches into RIF gesture#

*Fig. 12

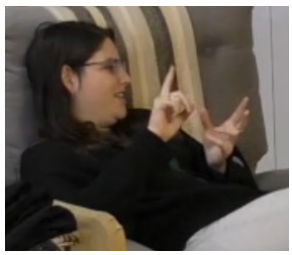


Fig. 12

17 Naomi: @@@@
{*ff*}

18 Kelsey: *^be-'emet,^*
in-truth
'really,'
^brings right
IF closer to left MF and touches it^

19 *'ani kaze,*
I like-this.M.SG
'I'm like,'

20 ...(inhales through teeth)

21 Naomi: @--

22 Kelsey: .../'o/.

23 Naomi: ...'e--,
...u--h,

24 *Matan* *ra'a* *ta-sidra?*
Matan see.PST.3M.SG OBJ.DEF.ART-series
'did Matan watch the series?'

25 Kelsey: ...ken.
'...yes.'

Kelsey evaluates the TV series, detailing a list of features characterizing the series. First on her list, she agrees with Naomi and repeats her evaluation, '...a brilliant series,' (l. 11, Fig. 10). Second on her list is the evaluation that the actors are *xatixim*

'hunks' (l. 12, Fig. 11). She then upgrades this evaluation by adding the lengthened intensifier *kol ka--x* 'su--ch [hunks]' (l. 14), while smiling.

At this point she shifts from evaluating the series and listing its great features, to commenting on her own evaluation. With a bit of self-irony (marked by her smile), looking back at her evaluation and still smiling, she produces the metalingual comment: *ze ma she-haya li 'ixpat.* '**that's** what I cared about.' (l. 16, Fig. 12), with the primary stress of the intonation unit on the demonstrative *ze* 'that', as in example (13). She employs the '[*ze ma she-* + clause]' structure to *retroactively frame* the second item on her list and evaluate it. Thus, the *ze ma she-* construction marks here a shift in the discourse from narrating about the world to metalingual commentary.

This shift is marked also by the speaker's embodied conduct: when listing the features of the series, she deploys listing gestures (Inbar 2020): she moves her right-hand index finger from the index finger to the middle finger of her left hand, counting the features with her fingers (Fig. 10, 11). However, when shifting to metalingual commentary, she detaches her hands from each other and performs the raised index finger gesture (RIF, Fig. 12).

Framing prior talk metalingually via this structure is done in order to accomplish a variety of actions in our data, in the case of example (15) – to ironically evaluate one's own utterance. It is often accompanied by some pointing gesture – here the raised index finger gesture marking contrariness to expectations (Inbar 2022) – *ze ma she-haya li 'ixpat.* '**that's** what I cared about.' (l. 16), as opposed to the content of the series, for example. Thus, the prosodic features of the utterance (primary stress on *ze*) and the embodied conduct of the speaker are perfectly coordinated in production of the [*ze ma she-* + clause] structure. This constitutes embodied support for Chafe's observation that the primary stress of an intonation unit may fall on a pronoun for the expression of contrastiveness (Chafe 1994: 76–78).

5.4. Disclaiming responsibility

Our final excerpt manifests two tokens of the structure, each implementing a different action. The first token is employed for disclaiming responsibility and manifests the predicate *'amar* 'say', the most frequent predicate in our construction (see Table 2). This interaction comes from a family dinner, in which the mother tells the father about an earlier conversation she had had with their two children, during which

Assaf, the younger one, mentioned that this year nobody in kindergarten had talked to them about Prime Minister Rabin's assassination. In response, the father asks his son:

(16) 'Peace' ('Rabin's Murder' 00:15)

```
1 Father: shana    she-'avra            dibru?
          year     that-PAST.PST.3F.SG  talk.PST.3M.PL
          'did they talk to you [about it] last year?'

2 Assaf:  ...ken,
          '...yes,'

3         ...nir'a        li      she--
             seem.PRS.M.SG to-1SG  that
          '...I think tha--t'

4 Ron:          kol   ma    she-hu    zaxar,
                all   what  that-he   remember.PST.3M.SG
                'all he remembered,'

5         ...ze         she-rabin     haya          'ish,
             this.M.SG  that-Rabin    be.PST.3M.SG   man
          '...was that Rabin was a man,'

6         she--,
          that
          'who--,'

7         ...kol  ha-zman     /hu/  'asa          shalom.
             all  DEF.ART-time  he    do.PST.3M.SG  peace
          '...all the time /he/ made peace.'

8 Father: ...kol @ha-zman     @'asa          sha*lom?
             all DEF.ART-time  do.PST.3M.SG   peace
          '...all the time made peace?'
                                              *Fig. 13
9 Assaf:                      'e--,
                              u--h,

10        'a--h!
           o--h!

→ 11 Ron:  ze        ma    she-*'assaf  'amar!
           this.M.SG what  that-Assaf   say.PST.3M.SG
           'that's what Assaf said!'
                                *Fig. 14
```

Fig. 13

Fig. 14

→ 12 Father:....*ze* *ma* *she-limdu* *'etxem?*
this.M.SG what that-teach.PST.3M.PL OBJ-2M.PL
'....that's what they taught you?'

13 Mother: *lo--,*
'no--,'

14 *hu 'amar* *she*
he say.PST.3M.SG that
'he said that'

15 *...kol* *ha-zman* *rak* *ratsa* *shalom.*
all DEF.ART-time just want.PST.3M.SG peace
'...he all the time just wanted peace.'

16 Ron: *naxon.*
'right.'

Ron, the older brother, says that all Assaf remembered, concerning what he was told in kindergarten about Rabin's assassination, was "that Rabin was a man, who--, ...all the time made peace." (l. 5-7). The father ridicules this assertion by repeating it with a smile, slight laugher, and a primary stress on *kol* 'all': '...all the time made peace?' (l. 8, Fig. 13). Ron then disclaims responsibility for the utterance by announcing: *ze ma she-'assaf 'amar!* 'that's what Assaf said!' (l. 11, Fig. 14) with the primary stress of the intonation unit on 'Assaf', the responsible agent of the action, and while pointing at him with his left hand (Fig. 14).

There are only three tokens performing this function throughout our data (4.3% of all cases), but they all manifest only one primary stress, which falls on the 'responsible agent', i.e., in the clause.

5.5. Seeking clarification

The last function illustrated here, also not that common in our data (4 tokens, 5.7%) consists of seeking clarification. One token is found in the continuation of example (16). Following Ron's disclaiming responsibility (l. 11), the father seeks clarification and at the same time criticizes the kindergarten staff via the *ze ma she-* construction in sentence-final rising intonation: *...ze ma she-limdu 'etxem?* '...that's what they taught you?' (l. 12). This time, the primary stress is on the predicate of the *ma she-* clause – 'taught', the object of the criticism, conveying the father's disapproval of the teaching at kindergarten. The mother then clarifies that Assaf had said that Rabin all the time just *ratsa* 'wanted' peace, rather than all the time just *'asa* 'made' peace (l. 13-15).

All four tokens performing the seeking clarification function are verbalized in final rising intonation – by far the most frequent prosodic pattern for Hebrew requests for confirmation (Ben-Moshe & Maschler 2024b) and for Hebrew interrogatives in general (Ozerov 2019). In 3 out of the 4 cases, the primary stress is in the clause (rather than on the demonstrative).

5.6. Postulating some 'general truth'

Four tokens throughout the database (5.7%) appear in short utterances that have sedimented in the language for postulating some 'general truth' about some frequently encountered situation, such as *ze ma she-yesh* 'that's what there is'[19], *ze ma she-ze* 'that's what it is', *ze ma she'osim* 'that's what one does'. We do not illustrate them here for lack of space.

[19] Further support for the crystallization of this utterance comes from the fact that a morphosyntactically reduced version of it exists, although not in our data: *ze ma yesh* 'that's what there is', without the complementizer *she-* preceding the clause.

6. Summary and conclusion

The Hebrew *ze ma she-* construction manifests several properties suggesting that it has crystallized as a single 'processing chunk' (Bybee 2003: 603). Prosodically, we have seen that the demonstrative *ze* in this construction (part A) is never separated from the *ma she-* segment (part B) by an intonation unit boundary. This is initial evidence against viewing parts A and B as two sides of an A COP B equational structure, as claimed in previous studies of reversed pseudo-clefts in a variety of languages (see Section 3). Furthermore, syntactically, unlike pseudo-clefts, we have seen that in Hebrew, a language allowing non-copular nominal clauses, no copula is ever found separating parts A and B of the [*ze ma she-* + clause] structure. Both prosody and syntax thus provide evidence against viewing this structure as a 'reversed' form of the Hebrew pseudo-cleft, in which the copula often occurs, and parts A and B tend not to be verbalized within the same intonation unit (Maschler & Fishman 2020; Maschler & Pekarek Doehler 2022).

Further support for the sedimentation of the *ze ma she-* construction comes from examining its lexical properties: As shown in Table 2, 71.4% of all tokens of the [*ze ma she-* + clause] structure manifest one of three verbs – SAY, DO, or HAPPEN – with SAY accounting for approximately a third of all tokens of the structure throughout the data. The structure is thus relatively fixed in terms of the predicates it occurs with, further pointing towards crystallization and suggesting a strong metalingual component in its usage. Indeed, our functional analysis revealed that 41.4% of all tokens function to frame prior talk metalingually (Table 3, Section 5.3).

The paucity of stance-taking predicates in this construction (only 5.8% of all tokens, Table 3) suggests that unlike pseudo-clefts, the Hebrew [*ze ma she-* + clause] structure has little to do with displaying stance. This contributes further evidence against viewing the structure as a 'reversed' form of the pseudo-cleft, in which nearly a third of all predicates constitute stance-taking predicates (Maschler & Fishman 2020; Maschler & Pekarek Doehler 2022).

Additional attestation for the crystallization of the construction comes from its systematic deployment throughout the corpus. We have seen that it is consistently employed for two main purposes: framing prior talk metalingually (41.4% of all tokens, Section 5.3), and claim-backing (30%, Section 5.2). Thus, 71.4% of all tokens accomplish one of two actions in interaction. The remaining tokens function in several less frequent functions: seeking clarification (5.7%, Section 5.5), postulating some

general truth (5.7%, Section 5.6), disclaiming responsibility (4.3%, Section 5.4), and getting back to a previous topic (1.4%, Section 5.1). Only two tokens throughout the data (2.9%) display the summative function claimed as by far the most common function for English reversed pseudo-clefts (Erdmann 1986; Collins 1991; Weinert & Miller 1996; Oberlander & Delin 1996; Lambrecht 2001; Johansson 2001; Garassino 2014), showing that functionally, the Hebrew [*ze ma she-* + clause] structure has little in common with what has been claimed for English reversed pseudo-clefts.

The fact that some of the Hebrew [*ze ma she-* + clause] tokens consist of utterances that have become fixed expressions for postulating some 'general truth', such as *ze ma (she-)yesh* 'that's what there is', *ze ma she'osim* 'that's what one does', *ze ma she-ze* 'that's what it is' (Section 5.6) constitutes further evidence of the crystallization of the structure. With certain highly fixed predicates, such as the frozen Hebrew existential *yesh* 'there is/are' (cf. Auer & Maschler 2013: 157–159), the impersonal form of the verb with the widest semantic scope, *'asa* 'do' (cf. Polak-Yitzhaki 2017), or with no predicate at all (in the case of *ze ma she-ze* 'that's what it is'), additional sedimentation has occurred, such that entire coined phrases have emerged to deal with frequently-encountered situations.

Additional evidence for the crystallization of the construction comes when examining the speaker's embodied conduct. We have seen that the claim-backing function is accompanied by the PUOH in 56% of its occurrences, whereas none of the other functions is accompanied by this gesture. The co-occurrence of a particular function of the construction with a particular type of embodied conduct is further evidence of crystallization, one involving not only language but also the speaker's bodily conduct.

We have found some correlation between prosody and the function of the [*ze ma she-* + clause] structure. All seeking-clarification tokens were verbalized in sentence-final rising intonation, and all disclaiming-responsibility tokens manifest the primary stress of the intonation unit on the responsible agent.[20] Other than this, we found no correlation between the position of the primary stress of the intonation unit and the function of the [*ze ma she-*+ clause] structure. Furthermore, 26% of all tokens were accompanied by two primary stresses – one on the demonstrative, the other on some element in the clause (cf. Weinert & Miller 1996: 189). In contrast to what has been

[20] However, our numbers are small for these two categories. Furthermore, qualitative analysis of a significantly larger number of tokens of the [*ze ma she-* + clause] structure may reveal additional correlations between function, lexico-semantic variation, prosody, and embodied conduct.

claimed in most studies of English reversed pseudo-clefts (see Section 3), we have found that the demonstrative very often (in 44% of all cases) carries the primary stress of the intonation unit. This is in stark contrast to Information Structure approaches, which claim that demonstratives constitute Given information and are therefore generally unstressed[21] (see Section 3). Stress placement, we argue, is a function of several variables, such as New information, contrastiveness, and the general point being made by the utterance in the particular context. Moreover, in the case of our structure, the stress is often accompanied by prominent embodied conduct, such as pointing, further supporting a holistic view of grammar, involving both acoustic and visual behavior.

In conclusion, and in the context of this special issue focusing on naturally occurring data in and beyond linguistic typology, we hope to have shown that it is not sufficient to focus on naturally occurring data. One must study this type of data employing a specific methodology and within a particular theoretical framework. With the exception of Küttner's Interactional Linguistic study, previous studies of English reversed pseudo-clefts, although often based on spoken corpora, did not examine the data paying close attention to the temporality and contingency of the moment-by-moment incremental unfolding of interaction. Once such an approach is taken, claims of previous studies are not necessarily borne out by naturally occurring spoken data. Similarly, our findings do not support the traditional Hebrew grammatical analysis of the [*ze ma she-* + clause] structure as consisting of a nominalized clause functioning as predicate, embedded in the matrix clause. Nor do they support the traditional grammatical analysis of this construction as constituting a 'reversed' version of a Hebrew pseudo-cleft (Azar 1992). Finally, to the best of our knowledge, no previous study has investigated the embodied conduct accompanying employment of reversed pseudo-clefts, in any language. Our multimodal interactional analysis thus sheds new light on the construction. It illuminates the interlaced nature of grammar, the body, and interaction: Syntax, lexicon, prosody, and the body are resources that "mutually elaborate each other to create a whole that is both greater than, and different, from any of its constituent parts" (Streeck et al. 2011: 2).

[21] One clear exception to this is the occurrence of contrastive information (Chafe 1994: 76–78), as noted in Section 5.3.

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Abbreviations

1 = 1st person	FUT = future	PART = particle
3 = 3rd person	INF = infinitive	PL = plural
ACC = accusative marker	M = masculine	PRS = present
DEF.ART = definite article	NEG = negation marker	PST = past
F = feminine	OBJ = object	SG = singular

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Appendix: Transcription and glossing

Transliteration follows conventional *IPA* values, except for *y* for /j/, sh for /ʃ/, and an uninverted quotation mark (') for the glottal stop phoneme.

The transcription conventions of the Haifa Multimodal Corpus of Spoken Hebrew are based on those of the Santa Barbara Corpus of Spoken American English (Du Bois et al. 1992, Du Bois unpublished manuscript 2012), as adapted for Hebrew (Maschler 2017). Each numbered paragraph denotes a single intonation unit (Chafe 1994):

. . – perceptible pause of less than 0.1 second
. . . – average pause ($0.1 \leq x < 1.0$ s)
. . . . – pause ($1.0 \leq x < 1.5$ s)
. . . . . – pause ($1.5 \leq x < 2.0$ s)
(3.56) – measured pause of 3.56 s
, – comma at end of line – mid-level, mid-rise, mid-fall intonation, regularly understood in Hebrew as "more to come"
. – period at end of line – low fall intonation, regularly understood in Hebrew as final
? – question mark at end of line – high rising intonation, regularly understood in Hebrew as final and seeking response from interlocutor ('appeal')
?, – question mark followed by comma – rising intonation, regularly understood in Hebrew as projecting "more to come" while seeking (minimal) response from interlocutor
! – exclamation mark at end of line – final exclamatory intonation
⌀ – lack of punctuation at end of line – a fragmentary intonation unit, one which never reached completion.
-- – two hyphens – elongation of preceding sound
- – one hyphen – morpheme boundary
<u>un</u>derlined syllable – primary stress of intonation unit
boldfaced syllable – secondary stress of intonation unit
@ – a burst of laughter (each additional @ symbol denotes an additional burst)
[Square bracket to the left of two consecutive lines indicates beginning of overlapping speech, two speakers talking at once

Alignment such that the right end of the top line
is placed over the left end of the bottom line indicates latching, no interturn pause.

Multimodal aspects of interaction (in green font) are rendered using the conventions developed by Mondada (2019). Specifically:

`+nod` A punctual embodied action is described following a single symbol in the line following the transcription (one symbol per participant and per type of conduct), synchronized with an identical symbol in the corresponding stretch of talk.
`§pointing§` Prolonged embodied actions are described between two identical symbols.
`---->` Described embodied conduct continues across subsequent lines
`----§` until the same symbol is reached.
`>>---` Described embodied conduct begins before the line's beginning.
`--->>` Described embodied conduct continues until the end of the excerpt.
* Exact position in the utterance in which a video caption was made.

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