

# PSYCH-VERBS AND SUBJECTHOOD IN MODERN HEBREW

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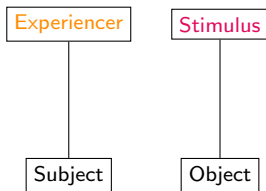
# OUTLINE

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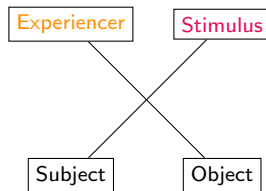
# PSYCH-VERBS

- Psych-verbs are well-known for their variable linking patterns

## *Experiencer-subject*



## *Stimulus-subject*



# SYNTAX–SEMANTICS–PRAGMATICS

- Experiencers are necessarily human (or, at least, sentient) and typically more prominent than the stimuli.
- The experiencer–object mapping often produces a marked syntax–semantics–pragmatics correspondence; the semantically and pragmatically prominent argument is not realized as subject.
- Languages provide different mechanisms for dealing with such misalignments.

# QUASI-SYNONYMOUS VERBS IN ENGLISH

(1) The children fear dogs.

Experiencer-subject

(2) Dogs frighten the children.

Stimulus-subject

# ALTERNATING PREDICATES IN ICELANDIC

(BARÐDAL ET AL., 2014)

- Some psych-verbs can alternate between a dative-experiencer subject and a nominative-stimulus subject:

(3) *Mér* fellur *þessi* *bók* vel í geð  
 me.DAT falls this.NOM book.NOM well in liking  
 'I like this book.'

(4) *þessi* *bók* fellur *mér* vel í geð  
 this.NOM book.NOM falls me.DAT well in liking  
 'This book pleases me.'

- The choice between the two argument structures depends on which argument is foregrounded: the dative experiencer or the nominative stimulus.

# ARGUMENT ALTERNATIONS IN GERMAN


(ENGELBERG, TO APPEAR)

- Some German psych-verbs alternate between experiencer-subject and stimulus-subject
  - (5) a. Seine dumme Bemerkung ärgerte sie  
his stupid remark.NOM angered her.acc  
'His stupid remark made her angry.'
  - b. Sie ärgerte sich über seine dumme Bemerkung  
She.NOM angered REFL over his stupid remark  
'She got angry at his stupid remark.'
  
- Other psych-verbs do not alternate
  - (6) a. Seine dumme Bemerkung überraschte sie  
his stupid remark.NOM surprised her.acc  
'His stupid remark surprised her.'
  - b. \*Sie überraschte sich über seine dumme Bemerkung  
She.NOM surprised REFL over his stupid remark


# ARGUMENT ALTERNATIONS IN GERMAN

(ENGELBERG, TO APPEAR)

- Alternating predicates are rarely passivized

- (7) a. **Sie** ärgerte sich **über seine dumme Bemerkung**  
 She.NOM angered REFL over his stupid remark  
 'She got angry at his stupid remark.'
- b. **Sie** wurde/war (**von/durch etwas**) geärgert  
 She.NOM AUX.pass by something anger.ptcp  
 'She was angered (by something).' 

- Passive is a frequent option for non-alternating stimulus-subject verbs

- (8) a. \***Sie** überraschte sich **über seine dumme Bemerkung**  
 She.NOM surprised REFL over his stupid remark
- b. **Sie** wurde/war (**von/durch etwas**) überrascht  
 She.NOM AUX.pass by something surprise.ptcp  
 'She was surprised (by something).' 



# DATIVE EXPERIENCERS

## A DIACHRONIC PERSPECTIVE

- Dative experiencers are one construction which is especially susceptible to language change in many of the world's languages (Serzant & Kulikov, 2013)
- Cole et al. (1980) identify a 3-stage process:
  - arguments which begin as non-subjects (Stage A)
  - subsequently acquire subject behavior properties (Stage B)
  - ultimately acquire all subject properties, including nominative case (Stage C)
- Dative experiencer subjects in Icelandic reflect Stage B.
- Modern Swedish reflects Stage C; Historically non-nominative experiencers now exhibit nominative case and control verb agreement.

# RESEARCH QUESTION

How does Modern Hebrew reconcile the syntax–semantics–pragmatics misalignment that generally occurs with stimulus-subject verbs?

# MODERN HEBREW (MH)

## BASIC FACTS

- The unmarked word order of main and subordinate clauses is SV(O).
- In general, finite verbs agree with their subjects in number, person, and gender.
- Subjects in Hebrew are marked with nominative case, which is realized overtly only on pronominal forms.
- The accusative case marker *'et* appears before definite object NPs. Indefinite objects do not have overt case marking.

# VERB-INITIAL CONSTRUCTIONS

## EXISTENTIALS & POSSESSIVES

While the unmarked word order of main and subordinate clauses is SV(O) the existentials and possessives appear in a V1 construction.

- (9) a. hayta mesiba be-shabat  
was.3SF party.3SF on-Saturday
- b. \*mesiba hayta be-shabat  
party.3SF was.3SF on-Saturday  
'There was a party on Saturday.'
- (10) a. hayta le-dan mesiba be-shabat  
was.3SF to-Dan party.3SF on-Saturday
- b. \*mesiba hayta le-dan be-shabat  
party.3SF was.3SF to-Dan on-Saturday  
'Dan had a party on Saturday.'

The existential predicate exhibits full agreement with *mesiba* 'party' the THEME/POSSESSEE.

# EXISTENTIALS & POSSESSIVES

(MELNIK, 2006, 2014)

- In colloquial unmonitored speech the existential predicate *haya* ('was') can appear with impersonal 3SM agreement.

(11) ~haya mesiba be-shabat  
 was.3SM party.3SF on-Saturday  
 'There was a party on Saturday.'

- Definite THEMES/POSSESSEES are often marked with ACC case.

(12) ~lo haya li et ha-kelim ha-mat'imim  
 no was.3SM to.me **ACC** the-tools.PM the-appropriate.PM  
 'I didn't have the appropriate tools.'

- THEMES/POSSESSEES which do not trigger agreement (i) do not antecede reflexives, (ii) do not delete under co-reference, and (iii) appear as accusative resumptive pronouns.


## “FREE INVERSION”


“Free inversion” of intransitive verbs and their subjects is licensed by information-structure constraints.

- (13) a. (ha-)mayim        nishpexu  
       (the) water.3PM spilled.3PM
- b. nishpexu        mayim  
       spilled.3PM water.3PM  
       ‘(The) water spilled.’
- (14) a. tlunot                rabot        higi’u        eleinu  
       complaints.FM many.FM arrived.P to.us
- b. higi’u        eleinu tlunot                rabot  
       arrived.P to.us complaints.FM many.FM  
       ‘Many complaints reached us.’


## PSYCH-VERBS IN MH: ALTERNATIONS


- Some predicate in MH alternate by using different verbal templates which share a similar root

(15) a. **ha-yeladim** pa<sub>x</sub>adu **me-ha-kelev**   
 the-children feared from-the-dog  
 'The children feared the dog.'

b. **ha-kelev** hi<sub>f</sub>xid **et ha-yeladim**   
 the-dog cause.fear ACC the-children  
 'The dog frightened the children.'

- Some predicates have an active–passive alternation, which is expressed morphologically

(16) a. **ha-še'elot** hi<sub>v</sub>ixu **et ha-mištatfot**   
 the-questions embarrassed ACC the-participants  
 'The questions embarrassed the participants.'

b. **ha-mištatfot** hu<sub>v</sub>xu **me-ha-še'elot**   
 the-participants embarrassed.pass by-the-questions  
 'The participants were embarrassed by the questions.'

# CONSTRAINTS ON PASSIVIZATION

- There are many verbs which do not have a passive form, although it is morphologically possible
  - E.g., *sime'aḅ* 'make.happy', but \**sumaḅ* 'was.made.happy'
- MH only allows passives with direct objects; obliques cannot passivize.
- Passive in general is disfavored in MH
  - It is relatively rare in written texts (Jisa et al., 2002)
  - and practically non-existent in spoken language (Dekel, 2014)

With such limitations, how does MH reconcile the syntax–semantics–pragmatics misalignment with stimulus-subject verbs?



# METHOD

- Usage-based, bottom-up approach
- Corpus data: *heTenTen 2014*, a 1.1 billion token web-crawled Hebrew corpus (Baroni et al., 2009)
- Ideally - a collocation analysis (Gries & Stefanowitsch, 2004)
- But due to a lack of large high-quality syntactically parsed Hebrew corpora – corpus searches of specific 2-place predicates with NP subjects

# SUBJECT-STIMULUS PSYCH-VERBS


## POTENTIAL CONSTRUCTIONS

- ① SVO
- ② VOS, Agr+
- ③ VOS, Agr−
- ④ VOS, Agr−, ACC
- ⑤ OVS


Agreement can only be determined  
with plural and/or feminine S arguments.

Accusative/nominative case can only be determined  
with definite S arguments.


*hifri'a* 'disturb'

- (17) *ciniyut kazu eina mafri'a la-adam lixyot xayim*  
 cynicism.SF like.this NEG.3SF disturb.SF to.the-person to.live life  
*poriyim*  SVO  
 productive

'This kind of cynicism does not disturb a person's ability to live a productive life.'

- (18) *lo hifri'a li ha-ciniyut ba-tadrix*  VOS, Agr+  
 NEG disturbed.3SF to.me the-cynicism.SF in.the-briefing

'The cynicism in the briefing didn't disturb me.'

- (19) *kmo xen hifri'a li ha-ciniyut šelxa*  VOS, Agr-  
 like so disturbed.3SM to.me the-cynicism.SF your

'Likewise, your cynicism disturbed me.'

# *hifri'a* 'disturb'

## DISTRIBUTION ACROSS CONSTRUCTIONS

Construction	Status
SVO	✓
VOS, Agr+	✓
VOS, Agr−	✓
VOS, ACC	★

*hiṭrid* 'annoy'

## DISTRIBUTION ACROSS CONSTRUCTIONS

- The distribution of *hiṭrid* 'annoy' & (*ha-*)*maḥšava* 'the/a thought'

Construction	Pron. O	Lex. O	Total
SVO	28	60	88
VOS, Agr+	92	4	96
VOS, Agr-	1	0	1
VOS, ACC	0	0	0
OVS	1	0	1

- The experiencer of *hiṭrid* 'annoy' is a direct object.
- The passive form exists (*huṭrad* 'was.annoyed') but is rarely used.

Stimulus	'al yedei 'by'	6
	me 'from'	17

## *hitxašeq* ‘feel like’



- (20) \*‘ugiyot ka’ele mamaš mitxašqot.PF li ‘axšav \*SVO  
 cookies.PF like.these really feel.like.PF to.me now
- (21) mamaš mitxašeq li ‘ugiyot ka’ele ‘axšav VOS, Agr–  
 really feel.like.SM to.me cookies.PF like.these now  
 ‘I really feel like cookies like these now.’
- (22) lo be’emet mitxašqim li ha-reixot ha-mugzamim  
 no really feel.like.PM to.me the-smells.PM the-exaggerated.PM  
 še-yemal’u et ha-bayit VOS, Agr+  
 that-will.fill.3SM ACC the-house  
 ‘I don’t really feel like the overpowering smells that will fill the house.’
- (23) hitxašeq li et ha-firma ha-zot – adidas VOS, ACC  
 felt.like.SM to.me ACC the-firm.SF the-this – Adidas  
 ‘I felt like this brand – Adidas.’

*hitxašeq* 'feel like'

## DISTRIBUTION ACROSS CONSTRUCTIONS

Construction	Status
SVO	*
VOS, Agr+, NOM/ACC	✓ (rare)
VOS, Agr-, ACC	✓ (frequent)

## *ba* ('feel like', LITERALLY 'come')

- (24) a. *ba*      *li*      *et*      *ha-muziqa*      *šelax*   
 come.SM to.me ACC the-music.SF yours  
 'I feel like (hearing) your music.'
- b. \**ba'a*      *li*      *et*      *ha-muziqa*      *šelax*   
 come.SF to.me ACC the-music.SF yours  
 Intended: 'I feel like (hearing) your music.'

Construction	Status
SVO	★
VOS, Agr+	★
VOS, Agr-, ACC	✓



# STIMULUS-SUBJECT PSYCH-VERBS

## DISTRIBUTION ACROSS CONSTRUCTIONS

- Verbs vary with respect to their distribution across constructions
  - ① Only SVO
  - ② SVO & VOS, Agr+ (e.g., *hiṭrid* 'annoy')
  - ③ SVO & VOS, Agr+/- (e.g., *hifri'a* 'disturb')
  - ④ Only VOS, Agr+/-, ACC (e.g., *hiṭxašeq* 'feel like')
  - ⑤ Only VOS, Agr-, ACC (e.g., *ba* 'feel like' literal: 'come')
- Not found:
  - SVO & VOS, ACC
- Hypothesis: Verbs which can (still?) appear in SVO do not mark their S argument with ACC when they appear in VOS.

## STIMULUS-SUBJECT

- The stimulus subject is losing subject properties:
  - Clause-initial position
  - Agreement triggering
  - Nominative case
- When the stimulus argument does not trigger agreement it does not exhibit subject behavior properties:

(25) a. ra'iti simla    še-mamaš hitxəšeq    li    \*(ota)  
 I.saw dress.SF that-really felt.like.SM to.me ACC.SF

'I saw a dress which I really felt like (having).'

b. ha-simla    hayta    me'od yeqara    aval mamaš hitxəšeq  
 the.dress.SF was.3SF very expensive but really felt.like.SM

li    \*(ota)  
 to.me ACC.SF

'The dress was very expensive but I really felt like (having) it.'  
*(Constructed examples)*

## EXPERIENCER-OBJECT

- Experiencer objects are overwhelmingly pronominal
- For *hitxašeq* 'feel like' Almost 90% of the dative experiencers are pronominal (half of them refer to the speaker)
- The OVS construction, with O in subject position, is a marked option.
- O arguments in OVS are even less subject-like than O arguments in VOS; They are focal.

(26) *gam li*      *hifri'a*      *ha-merirut*  
 also to.me disturbed.3SF the-bitterness.SF  
 'The bitterness disturbed me too.'

# CONCLUSIONS

- Similarly to many of the world's languages stimulus-subject predicates in MH are an unstable category due to the the syntax-semantics-pragmatics misalignment.
- The mechanism that speakers employ in order to reconcile this misalignment targets the stimulus argument.
- Instead of promoting the experiencer argument to a canonical subject by way of passivization or to a non-canonical subject as is the case in Icelandic, Hebrew demotes the stimulus.
- The stimulus is stripped of its subject coding and behavior properties.
- The experiencer does not gain syntactic subject properties.
- The VOS structure is gradually becoming subjectless.

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