Complementation and Common Ground: Discursive effects in Biblical Hebrew

Camil Staps¹ Johan Rooryck²

¹Leiden University/Radboud University Nijmegen info@camilstaps.nl mstdn.social/@CamilStaps

²cOAlition S/Leiden University johan.rooryck@gmail.com mstdn.social/@JohanRooryck

SPE12/OASIS3, October 13, 2023

Introduction	Complementation and Common Ground	Accommodation and imposition	Data	Analysis	Summary	Discussion
●000	0000	00	0	000000000000000000000000000000000000000	00	0

(1) a. Complementizer 'And he came into Hagar and she became pregnant, and she saw that she had become pregnant.' (Gen. 16:4)

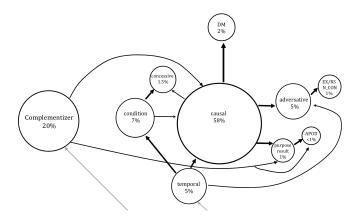
- (1) a. Complementizer 'And he came into Hagar and she became pregnant, and she saw that she had become pregnant.' (Gen. 16:4)
 - b. Causal 'And Isaac prayed to Yahweh on behalf of his wife, because she was barren.' (Gen. 25:21)
 - Adversative 'And they conquered the hills, but could not conquer the people living in the plains' (Jdg. 1:19a)
 - d. Resultative

'How have I sinned [with the result] that you have chased after me?'

(Gen. 31:36)

... and more: conditional, temporal, concessive, standalone, ...

- Generally accepted that kī derives from deictic *ka
- Disagreement over relation of connective functions to deixis
- Disagreement over number of distinct functions, synchronically



(Developmental paths of $k\bar{i}$ according to Locatell (2017: 280); DM = discourse marker; EX = exceptive; RS = restrictive 'only'; N CON = negative condition 'unless'; APOD = apodosis.)

Christian S. Locatell. 2017. Grammatical polysemy in the Hebrew Bible: A cognitive linguistic approach to בי. University of Stellenbosch dissertation

Outline & Claims

- 1. Complementizers are often sensitive to information status
- 2. Biblical Hebrew kī is marked for use of Common Ground
- 3. The various syntactic/semantic functions are pragmatically inferred
- 4. The reference to Common Ground derives from a persistent [+distal] feature

Outline & Claims

- 1. Complementizers are often sensitive to information status
- 2. Biblical Hebrew kī is marked for use of Common Ground
- 3. The various syntactic/semantic functions are pragmatically inferred
- 4. The reference to Common Ground derives from a persistent [+distal] feature

The persistence of space

Formalizing the polysemy of spatial relations in functional elements

Exclusive preview: tinyurl.com/PersistenceOfSpace

- (2) Liz has left, since her coat is not on the rack.
 - \Rightarrow Liz has left
 - \Rightarrow Liz's coat is not on the rack
 - \Rightarrow the absence of Liz's coat indicates that she left

[at-issue] [not-at-issue] [not-at-issue] (Charnavel 2017: 45)

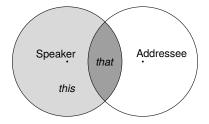
(3) An automatic timer would soon turn [the light] off, for we [Ladover Jews] do not tamper with electricity on Shabbos. (Chaim Potok, 1990, The gift of Asher Lev)

Isabelle Charnavel. 2017. Non-at-issueness of since-clauses. Semantics and Linguistic Theory 27. 43-58. https://doi.org/10.3765/salt.v27i0.4127

(4)	a.	Bio industry is still allowed.	
	b.	That bio industry is still allowed!	(Staps & Rooryck 2023: 1204)
(5)	a.	I always believed (that) the jury was bribed.	
	b.	*(That) the jury was bribed, I always believed.	(Staps & Rooryck 2023: 1209)
(6)	a.	l thought you might need some help.	
	b.	I thought that you might need some help.	(Bolinger 1972: 58)

Dwight Bolinger. 1972. That's that. (Janua Linguarum 155). The Hague: Mouton Camil Staps & Johan Rooryck. 2023. The interpretation of [+distal] in demonstratives and complementizers. Linguistics 61. 1195-1231. https://doi.org/10.1515/ling-2022-0178

Introduction	Complementation and Common Ground	Accommodation and imposition	Data	Analysis	Summary	Discussion
0000	0000	00	0	000000000000000000000000000000000000000	00	0



(Staps & Rooryck 2023; cf. Colasanti & Wiltschko 2019)

Valentina Colasanti & Martina Wiltschko. 2019. Spatial and discourse deixis and the speech act structure of nominals. In *Proceedings of the 2019 annual conference of the Canadian Linguistics Association*, 1–14. http://hdl.handle.net/2262/100137 (28 August, 2023)

Camil Staps & Johan Rooryck. 2023. The interpretation of [+distal] in demonstratives and complementizers. Linguistics 61. 1195–1231. https://doi.org/10.1515/ling-2022-0178

Semitic *ka is [+distal], too!

	[-distal]	[+distal]
M.SG	₫ənā	<u>d</u> enā <mark>k</mark>
F.SG	₫ā(t)	<u>d</u> ā <mark>k</mark>
M.PL	°illēn	°illē <mark>k</mark>
F.PL	men	°illē <mark>k</mark> i

(Aramaic demonstrative paradigm [excerpt], Lipiński 2001: §36.37-44)

Semitic *ka is [+distal], too!

	[-distal]	[+distal]
M.SG	₫ənā	<u>d</u> enā <mark>k</mark>
F.SG	₫ā(t)	<u>d</u> ā <mark>k</mark>
M.PL	°illēn	°illē <mark>k</mark>
F.PL	men	°illē <mark>k</mark> i

(Aramaic demonstrative paradigm [excerpt], Lipiński 2001: §36.37-44)

(7) English [+distal] demonstrative that

 \rightarrow complementizer *that* marking Common Ground (Staps & Rooryck 2023)

Semitic [+distal] particle *ka

 \rightarrow Hebrew complementizer $k\bar{i}$ marking Common Ground

Edward Lipiński. 2001. Semitic languages: Outline of a comparative grammar. 2nd edn. (Orientalia Lovaniensia Analecta 80). Leuven: Peeters Camil Straes & Johan Boouvek. 2023. The interpretation of Ludictal in domanetratives and complementizors.

Camil Staps & Johan Rooryck. 2023. The interpretation of [+distal] in demonstratives and complementizers. Linguistics 61. 1195–1231. https://doi.org/10.1515/ling-2022-0178

In many cases, kī indeed introduces discourse-old information content:

(1a) 'And he came into Hagar and she became pregnant, and she saw that she had become pregnant.' (Gen. 16:4)

In many cases, kī indeed introduces discourse-old information content:

- (1a) 'And he came into Hagar and she became pregnant, and she saw that she had become pregnant.' (Gen. 16:4)
- ... but new information can be accommodated by the Addressee:
- (8) 'And when Isaac was old ..., he called Esau, his son.' (Gen. 27:1)

In many cases, kī indeed introduces discourse-old information content:

- (1a) 'And he came into Hagar and she became pregnant, and she saw that she had become pregnant.' (Gen. 16:4)
- ... but new information can be accommodated by the Addressee:
- (8) 'And when Isaac was old ..., he called Esau, his son.' (Gen. 27:1)
- ... and can also be imposed on the Common Ground by the Speaker:
- (9) 'And Achish said to David: "You should know ... that you will go out with me in battle." (1 Sam. 28:1)

We see these three types all as reference to the [+distal] area between Speaker and Addressee (Staps & Rooryck 2023)

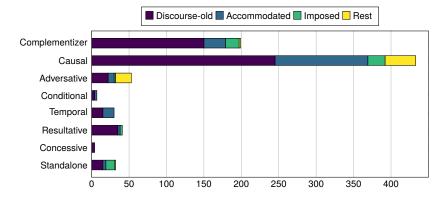
- Discourse-old: refers to element in [+distal] area
- Discourse-new:
 - Typically: request to move from [-distal] to [+distal]
 - Accommodated: presented as [+distal] to mark assumption
 - Imposed: presented as [+distal] to mark imposition



Camil Staps & Johan Rooryck. 2023. The interpretation of [+distal] in demonstratives and complementizers. Linguistics 61. 1195–1231. https://doi.org/10.1515/ling-2022-0178

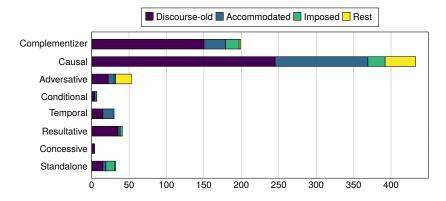
Introduction	Complementation and Common Ground	Accommodation and imposition	Data	Analysis	Summary	Discussion
0000	0000	00	•	000000000000000000000000000000000000000	00	0

Data

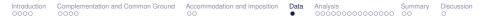


Introduction	Complementation and Common Ground	Accommodation and imposition	Data	Analysis	Summary	Discussion
0000	0000	00	•	000000000000000000000000000000000000000	00	0

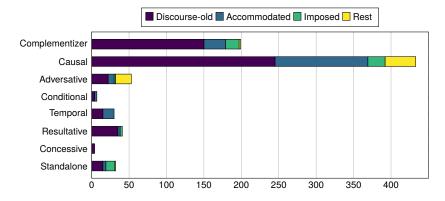
Data



Almost all exceptions fall in one of two interrelated categories



Data

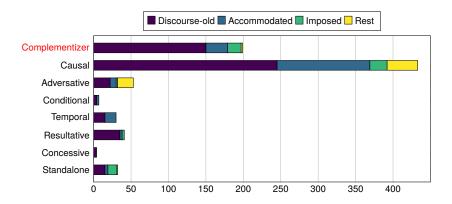


Almost all exceptions fall in one of two interrelated categories

But this is not enough: maybe all complementizers (causal adverbs, ...) have such distributions?

Introduction	Complementation and Common Ground	Accommodation and imposition	Data	Analysis	Summary	Discussion
0000	0000	00	0	•000000000000000	00	0

Complementizer kī



Introduction	Complementation and Common Ground	Accommodation and imposition	Data	Analysis	Summary	Discussion
0000	0000	00	0	000000000000000000000000000000000000000	00	0

Complementizer kī

Mostly with factive predicates: 'see', 'know', 'inform' (rather than 'say'), 'witness', ...

(1a) and.PRET-3M-come-sg to Hagar and.PRET-F-conceive-3sg and.PRET-F-see-3sg Kī conceive\PFV-3F.sg

'And he came into Hagar and she became pregnant, and she saw that she had become pregnant.' (Gen. 16:4)

Complementizer kī

Mostly with factive predicates: 'see', 'know', 'inform' (rather than 'say'), 'witness', ...

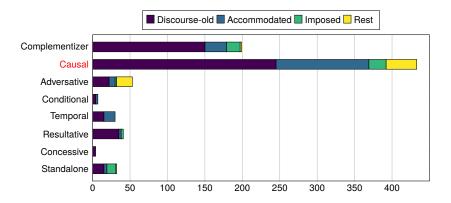
(1a) and.PRET-3M-come-sg to Hagar and.PRET-F-conceive-3sg and.PRET-F-see-3sg Ki conceive\PFV-3F.sg

'And he came into Hagar and she became pregnant, and she saw that she had become pregnant.' (Gen. 16:4)

Can compare with other complementation strategies, which are not marked for CG:

- (10) and.PRET-3M-lift-sg Abraham OBJ eye-DU.his and.PRET-3M-see-Sg and=see.IMP-M.sg ram behind hold\MID.PFV-3M.sg in=the=bush in=horn-PL.its
 'As Abraham looked up, he saw—and behold!—a ram behind [him] had been caught with its horns in a bush.'
- (11) and.PRET-3M-See-SG woman bathe\PTCP-F.SG from=on the=roof
 ... and he saw a woman bathing (NP+PTCP) from upon the roof.' (2 Sam. 11:2)

Introduction	Complementation and Common Ground	Accommodation and imposition	Data	Analysis	Summary	Discussion
0000	0000	00	0	000000000000000000000000000000000000000	00	0



Introduction	Complementation and Common Ground	Accommodation and imposition	Data	Analysis	Summary	Discussion
0000	0000	00	0	000000000000000000000000000000000000000	00	0

Many cases of accommodation, similar to English for/since, e.g.:

(12) not 1PL-be_able\IPFV ... Ki disgrace it for-us

'We cannot (do this, giving our sister to a man who is uncircumcised), for it is a disgrace to us.' (Gen. 34:14)

Introduction	Complementation and Common Ground	Accommodation and imposition	Data	Analysis	Summary	Discussion
0000	0000	00	0	000000000000000000000000000000000000000	00	0

Many cases of accommodation, similar to English for/since, e.g.:

(12) not 1PL-be_able\IPFV ... Ki disgrace it for-us

'We cannot (do this, giving our sister to a man who is uncircumcised), for it is a disgrace to us.' (Gen. 34:14)

When the causal clause also includes new information, it is marked by particles like 'and behold':

(13) stand_up\imP-M.sg and=1PL-go_up\iPFV to-them Ki see\PFV-1PL oBJ the=land(F) and=see.IMP-M.sg good-F.sg verv

'(And the Danites returned to their brothers ... and said:) "Come on, let's go up against them, for we saw their land, and look: it's very good!"' (Jdg. 18:9)

Introduction	Complementation and Common Ground	Accommodation and imposition	Data	Analysis	Summary	Discussion
0000	0000	00	0	000000000000000000000000000000000000000	00	0

But there are relatively many exceptions, e.g.:

(1b) and.PRET-3M-pray-sg Isaac to=Yahweh on_behalf_of wife-his κī barren-F.sg she 'And Isaac prayed to Yahweh on behalf of his wife, because she was barren (, and God heard his prayer and Rebekah his wife conceived.)' (Gen. 25:21)

Introduction	Complementation and Common Ground	Accommodation and imposition	Data	Analysis	Summary	Discussion
0000	0000	00	0	000000000000000000000000000000000000000	00	0

But there are relatively many exceptions, e.g.:

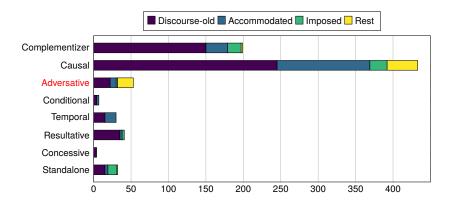
(1b) and.PRET-3M-pray-sg Isaac to=Yahweh on_behalf_of wife-his kī barren-F.sg she 'And Isaac prayed to Yahweh on behalf of his wife, because she was barren (, and God heard his prayer and Rebekah his wife conceived.)' (Gen. 25:21)

So we must assume that the causal function is lexicalized

- Based on high frequency
- Also note that the causal clause is still backgrounded and in that sense [+distal]

Introduction 0000	Complementation and Common Ground	Accommodation and imposition	Data O	Analysis 00000000000000000000000000000000000		Discussion O
----------------------	-----------------------------------	------------------------------	-----------	---	--	-----------------

Adversative kī



Adversative kī

Adversative easily develops from causal:

(14) not X, because Y > not X, but Y

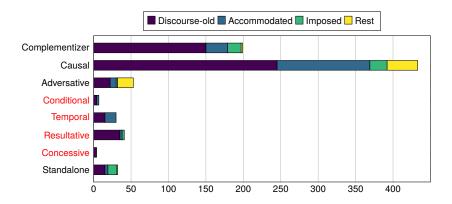
This accounts for the high number of exceptions, e.g.:

(1c) and.PRET-3M-conquer-SG OBJ the=hill Kī not to=conquer\INF OBJ inhabit\PTCP-M.PL.of the=plain

'And they conquered the hill country, but they could not conquer the people living in the plains' (Jdg. 1:19)

Introduction	Complementation and Common Ground	Accommodation and imposition	Data	Analysis	Summary	Discussion
0000	0000	00	0	00000000000000000	00	0

Conditional/temporal kī



Conditional/temporal kī

More 'when' than 'if', so kī introduces a proposition that can be easily accommodated:

(15) and.PRET-3M-command-SG OBJ the=first to=say\INF KI 3M-meet\IPFV-SG-you.OBJ Esau 'He (Jacob) commanded the first [servant], saying, "#If/When Esau meets you" (Gen. 32:18)

(16) man kī 3M-present\IPFV-sG from-you offering to=Yahweh from the=animals from the=herd or=from the=flock 2-present\IPFV-M.PL OBJ offering-yours if burnt_offering offering-his from the=herd male perfect 3M-present\IPFV-sG-it.OBJ 'If/When a man amongst you brings a sacrifice to Yahweh, you must bring your offer from the animals of the herd or the flock. If/*When it is a burnt offering from the herd, he shall offer a male without blemish.' (Lev. 1:2-3)

Resultative kī

Kī refers to a result that has already been introduced:

(17) who I ... KI 1sg-be\IPFV son_in_law to=the=king

'(Saul said to David: "Here is my oldest daughter Merab; I want to give her to you in marriage ..." But David said to Saul:) "Who am I ... that I should be the king's son-in-law?" (1 Sam. 18:18)

Resultative kī

Kī refers to a result that has already been introduced:

(17) who I ... KI 1sg-be\IPFV son_in_law to=the=king

'(Saul said to David: "Here is my oldest daughter Merab; I want to give her to you in marriage ..." But David said to Saul:) "Who am I ... that I should be the king's son-in-law?" (1 Sam. 18:18)

- ... in contrast to other resultative markers, e.g.:
- (18) and.PRET-3M-say-sg to-them Reuben ... in_order_to rescue\INF OBJ-him from=hand-theirs

'But Reuben said to them, ("Don't shed blood; throw him into this pit ... but do not stretch out your hand against them,") in order to rescue him out of their hand'

(Gen. 37:22)

Introduction	Complementation and Common Ground	Accommodation and imposition	Data	Analysis	Summary	Discussion
0000	0000	00	0	000000000000000000000000000000000000000	00	0

Concessive kī

Concessive clauses typically contain discourse-old information content:

(19) Though France did not win the World Championship, they did bring home a silver medal.

Concessive kī

Concessive clauses typically contain discourse-old information content:

(19) Though France did not win the World Championship, they did bring home a silver medal.

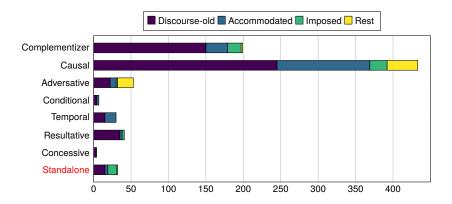
It's the same with kī, but we cannot compare with other concessive adverbs:

(20) KĪ you do\PFV-2M.SG in=the=secret and=l 1SG-do\IPFV OBJ the=thing the=this before all.of Israel

'Though you have acted in secret, I will do this before all of Israel.' (2 Sam. 12:12)

Introduction	Complementation and Common Ground	Accommodation and imposition	Data			Discussion
0000	0000	00	0	000000000000000000000000000000000000000	00	0

Standalone kī



Introduction	Complementation and Common Ground	Accommodation and imposition	Data	Analysis	Summary	Discussion
0000	0000	00	0	00000000000000000	00	0

Standalone $k\bar{i}$, type 1: exclamatives

 (21) outcry(F)-of Sodom and=Gomorrah kī be_great\PFV-3F.SG and=sin(F)-theirs kī be_heavy\PFV-3F.SG very
 'That the outcry of/concerning Sodom and Gomorrah is so great! And that their sin is so heavy!' (Gen. 18:20)

Introduction	Complementation and Common Ground	Accommodation and imposition	Data	Analysis	Summary	Discussion
0000	0000	00	0	000000000000000000000000000000000000000	00	0

Standalone $k\bar{i}$, type 1: exclamatives

 (21) outcry(F)-of Sodom and=Gomorrah κī be_great\PFV-3F.SG and=sin(F)-theirs κī be_heavy\PFV-3F.SG very
 'That the outcry of/concerning Sodom and Gomorrah is so great! And that their sin is so heavy!' (Gen. 18:20)

In many other languages a [+distal] complementizer marks exclamatives, e.g.:

(4b) That bio industry is still allowed!

(Staps & Rooryck 2023: 1204)

Standalone $k\bar{i}$, type 1: exclamatives

 (21) outcry(F)-of Sodom and=Gomorrah kī be_great\PFV-3F.SG and=sin(F)-theirs kī be_heavy\PFV-3F.SG very
 'That the outcry of/concerning Sodom and Gomorrah is so great! And that their sin is so heavy!' (Gen. 18:20)

In many other languages a [+distal] complementizer marks exclamatives, e.g.:

(4b) That bio industry is still allowed!

(Staps & Rooryck 2023: 1204)

Exclamatives presuppose their propositional content (Zanuttini & Portner 2003), so the Speaker refers to the CG

Camil Staps & Johan Rooryck. 2023. The interpretation of [+distal] in demonstratives and complementizers. *Linguistics* 61. 1195–1231. https://doi.org/10.1515/ling-2022-0178 Raffaella Zanuttini & Paul Portner. 2003. Exclamative clauses: At the syntax-semantics interface. *Language* 79(1). 39–81. https://doi.org/10.1353/lan.2003.0105

Standalone $k\bar{i}$, type 2: oaths

Oaths impose their content on the CG; the Speaker makes a strong assertion:

(22) life.of Yahweh ki son.of death the=man the=do\ptcp-M.sg this
 'By the life of Yahweh, (that) the man who does this is a dead man!' (2 Sam. 12:5)

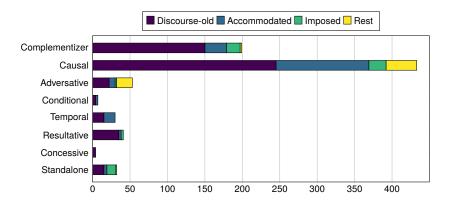
Standalone kī, type 3: conducive/rhetorical questions

These speech acts also carry an implicit assertion, which may be accommodated or imposed:

(23) Q=KI call\PFV-3M.SG name(M)-his Jacob and PRET-3M-deceive-SG-me this time-DU 'Isn't his name Jacob? He has deceived me these two times!' (Gen. 27:36)

Introduction	Complementation and Common Ground	Accommodation and imposition	Data	Analysis	Summary	Discussion
0000	0000	00	0	000000000000000000000000000000000000000	•0	0

Biblical Hebrew kī: summary & conclusions



Biblical Hebrew kī: summary & conclusions

The function of $k\bar{i}$ can be described as:

- 1. Referring to Common Ground
 - a) As a complementizer introducing subject and object clauses
 - b) When connecting two clauses: introducing adverbials (causal, adversative, conditional, temporal, resultative, concessive)
 - c) When standalone: marking exclamatives, oaths, and conducive/rhetorical questions
- 2. Lexicalized causal meaning (generalization of causal function referring to CG)
- 3. Lexicalized adversative meaning (developed from causal function)

Biblical Hebrew $k\bar{i}$: summary & conclusions

The function of $k\bar{i}$ can be described as:

- 1. Referring to Common Ground
 - a) As a complementizer introducing subject and object clauses
 - b) When connecting two clauses: introducing adverbials (causal, adversative, conditional, temporal, resultative, concessive)
 - c) When standalone: marking exclamatives, oaths, and conducive/rhetorical questions
- 2. Lexicalized causal meaning (generalization of causal function referring to CG)
- 3. Lexicalized adversative meaning (developed from causal function)

The function in context can easily be deduced based on syntactic and pragmatic clues

Introduction	Complementation and Common Ground	Accommodation and imposition	Data	Analysis	Summary	Discussion
0000	0000	00	0	000000000000000000000000000000000000000	00	•

Discussion

- Apparent high degree of polysemy can be reduced to Common Ground (incl. accommodation and imposition)
- These are general notions that can also be used to describe Germanic and Romance complementizers (Staps & Rooryck 2023), but here we extended them to adverbial functions
- Common Ground can be linked to a [+distal] feature because the Addressee is "far" from the Speaker



Camil Staps & Johan Rooryck. 2023. The interpretation of [+distal] in demonstratives and complementizers. Linguistics 61. 1195–1231. https://doi.org/10.1515/ling-2022-0178