

## From temporal to concessive meanings: a semantic analysis of ‘still’

**Main contribution:** We develop a novel analysis of the historical connection between the durative and concessive readings of English *still* and Hebrew *ʕadain*. In contrast to previous literature, our proposal places the temporal-to-concessive development squarely in the semantics.

**Background:** English *still* (1) and Hebrew *adain* (10) both have a durative and a concessive interpretation, d-still and c-still. D-still combines with stative predicates like *is living with her parents* (1a) but not with eventive predicates, which force a concessive reading (1c). (Negated eventive predicates, which are stativized, are possible with d-still (1b), cf. Mittwoch 1991).

- (1) a. Kim is **still**<sub>durative</sub> living with her parents.  
 b. She **still**<sub>durative</sub> has\*(n’t) found an apartment.  
 c. Kim **still**<sub>concessive</sub> found an apartment.

**Semantic analysis of d-still:** With many others we assume that d-still comes with a temporal presupposition (König 1988; Löbner 1989; Michaelis 1993; Mittwoch 1993; Krifka 2000; Ippolito 2007; Greenberg 2009; Beck 2020, a.o.). In particular, we assume the denotation in (3), where the temporal presupposition  $\mathcal{T}$  (2b) requires that the very eventuality  $s$  that holds at  $t$  started prior to  $t$  (cf. Ippolito 2007). This captures the restriction to stativ(ized) predications seen in (1) and (10).

- (2) a. Assertion: There is an eventuality  $s$  such that  $P$  is true of  $s$  at time  $t$  in  $w$ .  
 b. Presupposition:  $P$  was true of  $s$  at an earlier time  $t'$  in  $w$ . [= $\mathcal{T}$ ]
- (3)  $[[\textit{still}/\textit{ʕadain}_d]]^w = \lambda P \lambda t \exists s \subseteq w: \exists t' < t \ \& \ P(s)(t')(w). \ P(s)(t)(w)$ .

As argued by Greenberg (2009), under the common assumption that stative predicates are not instantaneous but rather are true at an interval, this presupposition for ‘still’ is informative only when  $t$  is anaphorically specified (by a temporal adverbial, the present tense, or implicitly supplied in context).

**Bridging contexts for change:** Across languages, d-still predates c-still (König 1988). This is also true in Hebrew (Tsirkin-Sadan 2019), though as we show through a corpus study, c-still emerges several decades earlier than previously claimed and apparently without English influence. We observe that unequivocal concessive uses of ‘still’ are preceded by bridging examples like (4), similar to what is seen in the English (5). Bridging examples allow for both a durative and a concessive interpretation. Strikingly, they contain an explicit marker (boxed in (4) and (5)) introducing a description of an adversative factor.

- (4) *kol ha-xizayon ha-histori ha-ze, [lamrot] hamon ha-pitronim še-kvar*  
 all DEF-event DEF-historical DEF-this, despite lots DEF-explanations that-already  
*himci’u l-o, ʕadain siman ha-še’ela melave-hu.*  
 invented for-it, still mark DEF-question accompanies-it  
 ‘Despite all the explanations that have been offered for it, this historical event still has a question mark attached to it.’ (Ahad Ha-‘am, *Al štey ha-se ‘ipim*, 1910)
- (5) For e’en though vanquished, he could argue still. (O. Goldsmith, *Deserted Village*, 1770)

**Analysis:** We take these findings to call for a semantic analysis of the emergence of c-still. We first give an analysis of overt concessives, which we then apply to bridging examples with ‘still’. In a second step, we show how ‘still’ itself becomes “infected” with concessiveness.

In the bridging examples, an overt concessive marker (‘even though’/‘despite’) contributes a concessive interpretation, which we analyze in modal terms. As shown in (6), ‘even though’ involves a presupposition or not-at-issue component  $\mathcal{M}$ .  $\mathcal{M}$  requires that the information contributed by the main clause contrast with what was circumstantially to be expected given the situation  $s'$  described by the concessive adjunct:

- (6)  $[[\textit{Even though } Q, P]]^w = \lambda t \exists s \subseteq w \exists s' \subseteq w:$   
 $SHOULDV_{s'}(\neg P)(t).$  [= $\mathcal{M}$ ]  
 $Q(s')(t)(w) \& P(s)(t)(w).$
- (7)  $[[SHOULDV_{s'}(Q)(t)]] = 1$  iff in all worlds  $w''$  that are the best circumstantially accessible worlds from  $s'$ , there exists a contextually salient situation  $s''$  such that  $Q(s'')(t)(w'')$ .

The ‘should-have’ part of (6), spelled out in (7), makes accessible from  $s'$ , the adversative situation described by the concessive adjunct, certain alternative worlds  $w''$  in which  $P$  does *not* hold at  $t$ .

The logical form for (5) now features the contribution of both d-still, which contributes  $\mathcal{T}$ , and the concessive  $\mathcal{M}$  contributed by *e'en though*:

- (8)  $\lambda t \exists s \subseteq w \exists s' \subseteq w:$   
 $SHOULDV_{s'}(\neg \textit{Argue})(t) \& \exists t' < t \& \textit{Argue}(s)(t')(w).$   
 $\textit{Vanquished}(s')(t)(w) \& \textit{Argue}(s)(t)(w).$

We hypothesize that from parses such as these a new meaning for ‘still’ can emerge. In particular, we propose that ‘still’ can be parsed as part of the concessive construction – marking the main clause – and as such two things happen: (i) ‘still’ is associated with the concessive meaning, namely the presupposition  $\mathcal{M}$ , and (ii) it is anaphoric to a situation ( $s'$ ) and not to a time ( $t'$ ). Building on Greenberg’s (2009) insight, we argue that the temporal presupposition  $\mathcal{T}$  ends up trivialized once there is no temporal anaphora. As a result ‘still’ loses  $\mathcal{T}$  and c-still emerges (9). Because  $\mathcal{T}$  is not part of its meaning, c-still is not restricted to stative predicates.

- (9)  $[[\textit{still}/\textit{yadain}_c]]^w = \lambda P \lambda t \exists s \subseteq w \exists s' \subseteq w : SHOULDV_{s'}(\neg P)(t).P(s)(t)(w).$

**Discussion:** Our proposal about the emergence of c-still is consistent with the idea that meaning shifts are the result of a compositional re-distribution of meanings (Eckardt 2006), and, moreover, that only entailed meanings are part of the process (Beck & Gergel 2015), to the exclusion of pragmatic inferences. The temporal to concessive development that ‘still’ exemplifies has previously been interpreted as a conventionalization of a generalized conversational implicature (König & Traugott 1982; König 1988; Tsirkin-Sadan 2019 on Hebrew): that from the continuation of one eventuality given another one, we infer that the two “normally do not go together” (König & Traugott 1982: 182). But exactly why this inference should be drawn, and not a causal one, is unclear (a point acknowledged by König and Traugott). On the empirical side, if pragmatics were the driving force of the change we would also not expect to see a stage with bridging examples in which concessive meaning is semantically entailed independently of ‘still’.

**Conclusion:** We have proposed an analysis of durative and concessive ‘still’ that is faithful to their development in specific bridging contexts. Our proposal offers an example of a semantically informed analysis of historical change and supports the diachronic semantic approach to language change (Beck & Gergel 2015, Condoravdi & Deo 2014, Deo 2015).

## Additional examples and references

- (10) a. *hi Ṣadain gara im ha-horim.*  
she ADAIN lives with the-parents  
'She is still<sub>durative</sub> living with her parents.'
- b. *hi Ṣadain lo mac'a dira.*  
she ADAIN NEG found apartment  
'She still<sub>durative</sub> hasn't found an apartment.'
- c. *hi Ṣadain mac'a dira.*  
she ADAIN found apartment  
'She still<sub>concessive</sub> found an apartment.'

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