

## The Presuppositions of *still* — Michela Ippolito, UCSC

The particle *still* has different uses: the temporal uses in (1-a) and (1-b), the concessive use in (1-c), and the marginality use in (1-d). As emphasized in König (1977), Löbner (1989) and Krifka (2000), among others, one challenge is to account for the different readings that *still* triggers: e.g., the “continuity” reading of (1-a), and the “not yet” reading of (1-b).

My proposal is that the core meaning of the particle is to locate the denotation of the phrase it associates with **before** some point on a given ordering. This ordering can be the set of ordered times, a set of ordered degrees, or any ordering construed by means of a monotonic mapping between a particular set of entities and the ordered set of times. In the “not-yet” reading, *still* is interpreted as a predicate (type  $\langle \alpha, t \rangle$ ), where  $\alpha$  stands for a simple type; in the “continuity” reading, it is interpreted as an operator (type  $\langle \langle \alpha, t \rangle, t \rangle$ ). The goal of this paper is to provide a compositional analysis of the presuppositions of this particle that reduces all of its uses in (1-a)-(1-d) to one of these two types. Here I will only consider the temporal uses of *still* in (1-a) and (1-b), and the marginality use in (1-d).

Temporal *still* in (1-a) associates with the aspectual phrase *AspP*, whose meaning is computed by applying the meaning of the imperfective aspect (*-ing*) to the meaning of the VP *John cook*, which I take to be a property of eventualities construed as in Kratzer (1998). The contribution of *still* is twofold. First, *still* affects the assertion itself by requiring that the event variable in the predicate *to cook* be interpreted as an indexed variable  $e_1$  ranging over events of John’s cooking whose value is determined contextually by means of an assignment function  $g$  (therefore,  $e_1$  is free). Second, *still* contributes a presupposition associated with  $e_1$ : the time of  $e_1$  overlaps a time *before* the reference time (i.e. the time of the higher tense). Since the argument of *still* is a property of times ( $\langle it \rangle$ ), *still* is interpreted as an operator ( $\langle \langle it \rangle, t \rangle$ ), i.e. a past operator. The meaning of *still* and the composition of the presupposition are spelled out in (2). So, (1-a) asserts that the running time of the contextually salient eventuality of John’s cooking overlaps the speech time and presupposes that its running time overlaps a past time.

My contention is that *still* imposes a *familiarity* condition on  $e_1$  in the same way in which the pronoun  $he_1$  does on the variable  $x_1$  it introduces in (4-a): neither variable is bound and both obtain their values from an assignment function  $g$ . In both cases,  $g(1)$  is only defined if a presupposition is met by the context: in the case of  $he_1$ ,  $g(1)$  must be a singular male individual; in the case of *still*,  $g(1)$  must overlap some past time. The familiarity condition explains the anaphoricity of *still*, in particular why (1-a) is only felicitous in a discourse where a past eventuality of John’s cooking is salient, and why we make the pragmatically odd inference in (3) that a single cooking stretches over an interval including some time two days ago and the speech time. Since the non-stative predicate *to cook* does not have the subinterval property (Dowty (1979)), the imperfective morphology (*-ing*) is required.

Now, the parallel between reference to eventualities and reference to individuals can be strengthened. While *still* and  $he_1$  introduce a familiarity condition on  $e_1$  and  $x_1$ , respectively, *again* and *another* introduce a novelty condition on the event and the individual variable, respectively. Both *again* and *another* carry an anaphoric presupposition in that the entity they introduce must be different from an already salient entity of some kind. Finally, observe that the obligatoriness of *still* and *again* in (5-a) and (5-b) parallels the obligatoriness of  $he_1$  and *another* in (4-a) and (4-b). To conclude, sentences can refer to eventualities; there is a structural analogy between reference to individuals and reference to eventualities; and as

(4) and (5) show, the same pragmatic constraints apply to both cases.

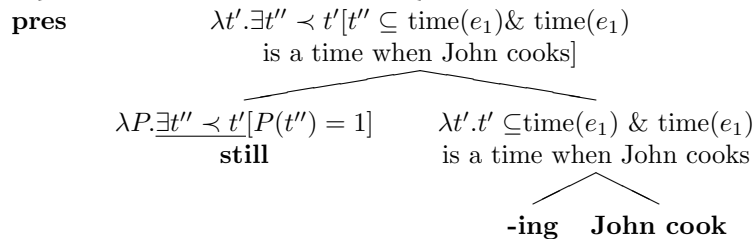
Now consider (1-b), an instance of the “not-yet” reading of *still*. (1-b) triggers the inference that it is *earlier* than expected. I propose that here *still* associates with the phrase *3 o'clock*: the sentence asserts that it is 3 o'clock, and presupposes that 3 o'clock lies *before* some other contextually salient time on the ordering of times. Here *still* is interpreted as the predicate  $\lambda t.t \prec t_{cs}$  (type  $\langle i, t \rangle$ ), where  $t_{cs}$  is a contextually salient point on the temporal ordering (i.e. a contextually salient time). Since 3 o'clock is asserted to be now, the salient time must be future, thus explaining why (1-b) is felicitous only if there is a future time salient in the discourse (“the expected time”).

As for the marginality use of *still*, I propose that it is a degree modifier: it combines with a gradable predicate  $G$  and, therefore, is of type  $\langle \langle d, t \rangle, t \rangle$ . Thus, the marginality use of *still* is an instance of the “continuity” reading: the difference between (1-b) and (1-d) is that in the latter the relevant ordering is not the set of times but a (totally) ordered set of degrees (a scale). More formally, *still* is here interpreted as  $\lambda G.\exists d \prec d_{cs}[G(d)(x) = 1]$ . In our example,  $G$  is *expensive* and  $x$  is *Japanese cars*. Therefore, (1-d) asserts that Japanese cars are fairly expensive and presupposes that the degree to which they are expensive is smaller than some contextually salient degree on the expensiveness scale. Thus, this analysis explains why (1-d) is felicitous only in a context where we made salient cars whose degree of expensiveness is greater than the degree to which Japanese cars are expensive.

I will show that this proposal accounts for the concessive use of *still* and other cases as well. For example, the sentence *John still has to practice piano* can mean either that now John has an obligation to practice piano and he did in the past too, or simply that he hasn't practiced piano yet. Finally, I will discuss the consequences of this proposal for *still*'s negative polarity counterpart *any longer/more* and for its dual *already*.

## Examples

- (1) a. John is still cooking. (“continuity” reading) (Pres still [ $_{AspP}$  John be cooking] $_F$ )  
 b. It is still five o'clock. (“not-yet” reading) (Pres still [ $_{DP}$  five o'clock] $_F$ )  
 c. Even if he apologizes to all of his colleagues, John will still have to resign.  
 d. (German cars are expensive.) Japanese cars are still fairly expensive.
- (2) PRESUPPOSITION:  $\exists t'' \prec t_c[t'' \subseteq \text{time}(e_1) \& \text{time}(e_1)$  is a time when John cooks]



- (3) When I called him yesterday, John was cooking. He's still cooking.
- (4) a. A man<sub>1</sub> ordered a coffee. He<sub>1</sub>/<sup>\*</sup>A man paid the check.  
 b. A man ordered a coffee. Another man/<sup>\*</sup>A man paid the check.
- (5) a. John was cooking yesterday morning. He is <sup>\*</sup>(still) cooking.  
 b. John cooked yesterday morning. He is cooking <sup>\*</sup>(again).