like/type, say, and C

Overview. I investigate a special use of a morpheme expressing similarity in Japanese, suggesting that there is a hidden verb *say* in its syntax. I extend the analysis cross-linguistically to multifunctional items which can work as speech verbs, complementizers/quote introducers, and words meaning similarity. **Japanese** *-teki*. The morpheme *teki* 'like' can be attached to nominal complements to form adjectives (1-2). Furthermore, in colloquial speech, it can also be attached to sentential complements as if it were a complementizer. *Teki* appears in the (pure) complex noun in (3a) and the relative clause in (3b).

(1) a. zyosee b. zyosee-teki (2) a. seizi b. seizi-teki woman woman-TEKI politics politics-TEKI 'woman' 'womanly' 'politics' 'political'

(3) a. John-ga kur-u-teki-na uwasa John-Nom come-Pres-TEKI-Cop rumor 'a rumor like, "John is coming" b. Mary-ga tuku-ru-teki-na karee Mary-Nom cook-Pres-TEKI-Cop curry 'curry like the one Mary cookes'

'a rumor like, "John is coming" 'curry like the one Mary cookes' The relative clause with *teki* in (3b) (henceforth *teki* relative, but the discussion extends to (3a)) behaves differently from unmarked relatives. First, while time and place (quasi adjuncts) can be relativized, as in (4a), reason and manner (true adjuncts) cannot be, as shown in (4b). This is an independently observed contrast; Murasugi (1991) notes that quasi adjuncts, but not true adjuncts, can be relativized long-distance, as in (5). So, the relativization from *teki* relatives behaves as if it is long distance relativization. Note that, as in (6), any type of adjuncts can be short-distance relativized in unmarked relatives (unlike *teki* relatives).

(4) a. siken-o uker-u-teki-na zikan/basyo exam-Acc take-Pres-TEKI-Cop time/place

'a time/place like the one when/where pro takes an exam'

b.*siken-o uker-u-teki-na riyuu/hoohoo exam-Acc take-Pres-TEKI-Cop reason/way 'a reason/way like the one why/how *pro* takes an exam'

(5) a. John-ga [[Mary-ga e₁ siken-o uke-ta] to] i-u hi₁/basyo₁ John-Nom Mary-Nom exam-Acc take-Past C say-Pres day/place 'the day₁/place₁ when/where John says that Mary took the exam e₁'

b.*John-ga [[Mary-ga e₁ siken-o uke-ta] to] i-u riyuu₁/hoohoo₁ John-Nom Mary-Nom exam-Acc take-Past C say-Pres reason/way

'the reason₁/way₁ John says that Mary took the exam e₁

(6) John-ga siken-o uke-ta zikan/basyo/riyuu/hoohoo John-Nom exam-Acc take-Past time/place/reason/way 'the time/place/reason/way John took the exam'

Second, the imperative, volitional, politeness markers, which are typically considered root phenomena, can appear in *teki* relatives, but not in unmarked relative clauses, as illustrated in (7) and (8).

(7) a. * asita a-{e/oo} hito b. *asita ai-mas-u hito tomorrow meet-{Imp/Vol}person tomorrow meet-Pol-Pres person 'the person {you should/I will} meet tomorrow' 'the person I will meet tomorrow'

(8) a. asita a-{e/oo}-teki-na hito tomorrow meet-{Imp/Vol-TEKI-Cop} person 'a person like the one {you should/I will} meet tomorrow'

b. asita ai-mas-u-teki-na hito tomorrow meet-Pol-Pres-TEKI-Cop person 'a person like the one I will meet tomorrow'

For the politeness marker, Miyagawa (2012) notes that it can appear under a class of verbs represented by *say*, which selects a CP headed by *to* (Class A verbs in Hooper & Thompson 1973); this also holds for imperative and volitional markers. *Teki* relatives, unlike unmarked relatives, allow embedding of the imperative/volitional/politeness markers as if they are *to* CPs selected by verbs like *say*.

Hidden say. To account for the properties of *teki* relatives, I suggest that there is a verb like say with *teki*: I propose the structure in (9a) and the vocabulary insertion rule in (9b), where $\sqrt{SAY(A)}$ is an abstract root for speech and thought, which can select a CP headed by -to. ($\sqrt{SAY(A)}$ does not have to be identical to the root $\sqrt{SAY(A)}$)

(9) a. $[a_P [v_P pro(PRO_{arb}) [CP \sqrt{SAY(A)}] v] a]$ b. $[\sqrt{SAY(A)}, v, a] \leftrightarrow teki$

Under this analysis, teki relative is in fact the clausal complement of a speech verb ($\sqrt{\text{SAY(A)}}$). Hence, we expect it to behave in exactly the same way regarding the embedding of the imperative/volitional/politeness markers, and the true vs. quasi adjunct asymmetry. This analysis is confirmed by nominative-genitive conversion (NGC). NGC is allowed in unmarked relatives, but not in CPs headed by to, which is selected by the speech verb iw 'say', as in (10a-b). NGC is crucially impossible in the teki relative, as in (10c). This is expected under the proposed analysis, where teki relatives should behave in the same way as the clausal complement of speech/thought verbs.

(10)a. itumo Mary-ga/no tuku-ru karee always Mary-Nom/Gen cook-Pres curry 'the curry Mary always cooks'

b. John-wa [Mary-ga/*no karee-o tuku-ru to] i-tta

John-Top Mary-Nom/Gen curry-Acc cook-Pres C say-Past

'John said that Mary cooks curry.

c. itumo Mary-ga/*no tuku-ru-teki-na karee cook-Pres-TEKI-Cop always Mary-Nom/Gen curry

'curry like the one Mary always cooks'

The presence of the adjectivizer in (9a) is justified given the morphological, syntactic, and semantic behavior of teki relatives. In terms of inflection, the infection of teki (or the copula on teki, cf. Nishiyama 1999) is exactly the same as adjectives (more precisely, nominal adjectives); it inflects as -na in prenominal positions, -da in predicative positions, and -ni in adverbial positions. Also, it is possible to intensify the degree of *teki* (=likeliness, similarity), as in (11), and even to form comparatives. I will argue that the adjectival head is responsible for these aspects of *teki*.

(11) mettya John-ga tuku-tta-teki-na karee John-Nom cook-Past-TEKI-Cop curry very

'curry really like the one John cooked'

A link between say, like, and C. Japanese so-called complementizer toiu, as in (12), is morphologically related to the verb iw 'say' (Lord 1976). (In fact, toiu is a homonym with 'C+say-Pres'. See (5).)

(12) John-ga aisutii-o nom-u toiu uwasa John-Nomiced.tea-Acc drink-Pres TOIU rumor

'the rumor that John drinks iced tea'

For toiu, Saito (2016) suggests the same structure as (9a) (but without the adjectivizer); (12) can then be analyzed as the rumor which says that John drinks iced tea. Here, we observe a link between a speech verb and a complementizer; in fact, this connection is robust cross-linguistically (Lord 1976 a.o.). We have already observed that teki works as both a word expressing similarity and a complementizer-like item, as shown in (1) and (3). Given this, we have a link among a speech verb, a complementizer (or (direct) quote introducer), and a word expressing similarities. This link is not a peculiar property of Japanese. In English, *like* has the same multifunctionality; a word expressing similarities (e.g. a student like John), a quote introducer (I was like, "that's enough!"), and a complementizer (This book seems like it is popular, Fujii 2005). In colloquial speech in Spanish, Italian, and Brazilian Portuguese, the noun tipo 'type', which is a noun expressing similarities, can be used as if it is a complementizer, as in (13a), and can appear in relative clauses like *teki* in Japanese, as in (13b).

(13) a. Yo dije tipo olvida-lo said TIPO forget-it b. la pasta tipo [?](la) que Juain the pasta TIPO the that John cocina cooks 'the pasta like the one John cooks' 'I said "forget it!" (Spanish)

Lefebvre and Loranger (2015) observes the same link in African languages; one word can work as a word expressing similarities, a complementizer (and/or direct quote introducer), and a speech verb, e.g. $t\acute{a}a$ in Saramaccan and $d\grave{a}$ in Fongbe underwent grammaticalization so that they have multiple functions as in in Table 1.

(14) Table 1	'similarity'	complementizer and/or quote introducer	(morphologically) related to speech verb
táa (Saramaccan)	+	+	+
$d\hat{\sigma}$ (Fongbe)	+	+	+
teki (Japanese)	+	+	-
toiu (Japanese)	+	+	+
like (English)	+	+	-
tipo (e.g. Spanish)	+	+	

They suggest that this type of multifunctionality is an areal feature of African languages. However, if

the observation in this talk is right, this link is much more robust cross-linguistically. *Say* and the mysterious link. The proposed analysis can account for this link/grammaticalization. At the first stage of the grammaticalization, lexical items morphologically related to speech verbs (e.g. táa, $d\hat{\beta}$, toiu) become multifunctional due to the presence of the speech verb; typical speech/thought verbs can take a true embedding CP and/or direct quotation, so the items at this stage can also work as a complementizer and/or a quote introducer, as in (15a). As for the meaning of similarities, it can be derived if we assume that the subject of the hidden say is pro or PRO_{arb}, as in (15b) (cf. (9a)); people (or some relevant person) may say/think that a proposition is true, so the proposition is true-ish.

(15) a. Complementizer/quote introducer: the rumor which says... (cf. toiu in Japanese above)

b. 'Similarity': (the) curry pro/PRO_{arb} (would/may) says/thinks that John cooks \checkmark (the) curry like the one John cooks

In the next step, the hidden say becomes available (with other category determining heads in some languages, like the adjectivizer in teki); even though there is no clear morphological link to speech verbs, there is actually a hidden say, as I have suggested for teki in Japanese (the shaded part in Table 1). Since the covert verb say is present in the syntax of these items, their apparent multifunctionality is expected for the same reasons in (15a-b). Cases like (13a) are between these two stages; the overt speech verb and the other categorial head (arguably a nominalizer) are both phonologically present.

Selected references. Lord, C. (1976). Evidence for syntactic reanalysis: From verb to complementizer in Kwa. Papers from the Parasession on Diachronic Syntax.