Reconstructing functional relatives...or not

The goal of our study is to present empirical limits to traditional generalizations on distributive readings of relative clauses (be it pair-list or functional), and to argue for a more adequate formalization based on the following statements:

• a multiple individual reading of a relative clause follows from syntactic reconstruction of its antecedent via presence of a copy;

• a copy can be interpreted as definite (see Fox (2003)), hence giving rise to an individual or functional reading, with presupposition accomodation constraints (property of the definite);

• a copy can also be interpreted as indefinite, and more precisely a skolemized choice function (see Kratzer (1998) and Aguero-Bautista (2001)), hence giving rise to a pair-list reading.

Pair-list *vs* functional reading   Sharvit (1999) argues that multiple individual reading of a relative clause in a predicative sentence, as in (1a) (mapping 'every man' to 'a *different* woman', hence allowing for a covariant interpretation of the pronoun *lo* 'him'), is based on pair-list interpretation of that relative. Arguments for this come from the unavailability of such reading with negative quantifiers or resumptive pronouns, independently known to block the pair-list reading (see (1b) and (1c) respectively).

Definite *vs* indefinite relatives   Alexopoulou and Heycock (2002) argue that the distributive reading of a relative clause is crucially based on the presence of the definite determiner, as the indefinite relative in (2b) does not allow for the distributive reading of *patient* with respect to *every doctor*.

Paradoxes   However, data in (3) and (4) clearly cast doubt on these two generalizations. Indeed, according to Sharvit (1999), presence of resumption in (3a) and a negative quantifier in (3b) should block the distributive reading, contrary to fact. Similarly, the availability of the distributive reading in (4) is also unexpected under Alexopoulou and Heycock (2002)'s generalization as the indefinite relative should block this reading.

Our account   To account for these paradoxes, we argue for the statements sketched above as they provide an answer to the following questions:

• Why is the distributive reading so limited with resumption? Resumption forces a definite interpretation of the copy; the individual reading prevails over the functional one as it is easier to accomodate the presupposition linked to the former.

• Why is the distributive reading so limited with negative quantifiers? skolemized choice function's analysis of indefinites (for pair-list reading) must independently be restricted or banned under negative quantifiers, so as to exclude readings such as the one in (5); presupposition accomodation linked to a definite copy will then favour the individual reading.

• Why is the distributive reading so limited with indefinite relatives? indefinite relatives also force a definite interpretation of the copy, as the ungrammaticality of (6) shows.

• Why is the distributive reading suddenly available in (3) and (4)? The copy has to be definite (due to resumption, the negative quantifier or the indefinite relative), but *binding reconstruction* occurs via the presence of a syntactic copy of the antecedent in the relativized site. Presence of a bound variable within the definite copy excludes the individual reading, and hence straightforwardly accounts for the functional reading.

Further issues   We will finally compare such analysis with an account based on Variable-Free Semantics (VFS) inspired from Jacobson (1999) and Heim and Jacobson (2005). Very interestingly, such account gets rid of literal reconstruction, by making use of combinatorial rules like $\mathbf{z}$ or $\mathbf{m}$ to implement binding. We will thus confront both analyses not only to the data discussed above but also to distributive readings in equative sentences. And we will show that the VFS account, provided that constraints on presuppositions could be added to it, proves to be very attractive, as it may capture the same generalization that presence of a pronoun in the antecedent favors functional readings.

(1)   Relative clauses in Hebrew:

    (a) *ha-iSa$_2$*   *Se   kol   gever$_1$ hizmin   _$_2$ hodeta   lo$_1$.*
       the-woman   *Op* every man   invited   thanked him
       'The woman every man$_1$ invited thanked him$_1$.'

    (b) *??/*ha-iSa$_2$* *Se   kol   gever$_1$ hizmin ***ota***$_2$ hodeta   lo$_1$.*
       the-woman   *Op* every man   invited her   thanked him
       ??/*'The woman every man$_1$ invited (her) thanked him$_1$.'

    (c) **ha-iSa$_2$*   *Se   af gever$_1$ lo   hizmin _$_2$ higia   bil'ad-av$_1$.*
       the-woman *Op* no man   *neg* invited   arrived without-him
       *'The woman no man$_1$ invited arrived without him$_1$.'

(2)   (a) *We contacted the patient each doctor was assigned.*

    (b) *We contacted a patient each doctor was assigned.*

(3)   (a) *The picture$_2$ of himself$_1$ which no candidate$_1$ liked _$_2$ ruined his$_1$ career.*

    (b) Jordanian Arabic:

       S-Surah$_2$ *tabaʕat ʔibin-ha$_1$ illi   kul   mważaf$_1$ ʒab-ha$_2$*
       the-picture of   son-his   that every employee bring.*past.3s.*-it
       riʒʕat   *l-uh$_1$.*
       give-back.*passive* to-him.
       'The picture of his son that every employee brought (it) was given back to him.'

(4)   (a) *Some picture of himself$_1$ which every man$_1$ bought was expensive.*

    (b) *Marie a vu une photo de lui$_1$ que chaque homme$_1$ avait apportée.*
       'Mary saw a picture of himself$_1$ that each man$_1$ had brought.'

(5)   *No man kissed a woman.*
    $\#\exists f.\neg\exists x.[man'(x) \rightarrow kiss'(x, f(woman')(x))]$

(6)   (a) **Une erreur qu'il y a dans cette copie m'a beaucoup surpris.*
       *'A mistake that there is in this paper is really surprising to me.'

    (b) **Mary praised a headway that John made.*

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