

Do sharing constructions underlie ellipsis? Typological and experimental issues

Nicolas GUILLIOT – U. Bordeaux Montaigne – CLLE-ERSSàB (UMR5263)

The goal of this study is to contribute to the literature on sharing constructions across languages, often called elliptical coordinations. Examples from (1) to (5) illustrate these constructions in French and German, with rightward sharing (*r-sharing*) in (1), (3), and (5)a (right node raising), leftward sharing (*l-sharing*) in (4) and (5)b (conjunction reduction), and central sharing (*c-sharing*) in (2) and (5)c (gapping in its literal meaning). One very interesting property of these constructions is that they do not have to comply with general constraints that reveal syntactic and semantic dependencies and relative ordering between such dependencies, i.e. structural hierarchy (such as subj-verb asymmetry) and constituency.

1. A theoretical issue: multidominance, ellipsis, or else?

The major debate with respect to sharing constructions relates to the underlying mechanism that could explain their syntactic “awkwardness”: ellipsis (see Abeillé & Mouret (2010) a.o.), or multidominance through which one syntactic unit can be associated to two syntactic dependencies simultaneously (see Tesnière (1959) in Dependency Grammar, or Wilder (1999) in Generative Grammar), or even constructional analyses based on non-canonical constituents (see Mouret (2006) a.o.)? The first aim of our study is to minimize that debate by showing that various analyses are welcome, as they provide formal ways to capture at least two distinct cognitive strategies.

On the one hand, the major empirical argument in favor of ellipsis is the potential lack of morphosyntactic identity between the two syntactic positions that the shared unit relates to, as the one found in (1): *r-sharing* of [*de flexion casuelle*] is possible although [*de+N*] is licensed by presence of negation in the second conjunct only. One first concern with this empirical argument is that the range of morphosyntactic mismatches in sharing constructions is not clear and quite variable (see Shiraishi (2018) a.o.). The other problem is that the lack of identity is not strictly incompatible with multidominance, as long as syntax does not combine words, but only lexical roots and features which are then spelled out in accordance to morphosyntactic constraints (see Halle & Marantz (1993)’s Distributed Morphology framework, which argues for post-syntactic lexical insertion). Under this view, (1) could have a syntactic structure with an underspecified shared node, leaving the competition between various forms of the determiner (*une/de flexion casuelle*) to linear and directional issues, rather than structure.

On the other hand, one major argument for multidominance relates to cases of cumulative agreement of the shared fragment, as shown by the availability of the plural forms of the verb in (3) and (4), *pourront* and *devront*). However, as (3) and (4) show, the non-cumulative (singular) agreement also seems to be an option in these constructions (see Mouret (2007) for other examples). We argue that this optionality precisely reveals the two cognitive strategies that underlie sharing structures, a one-step process *versus* a two-step process of the shared unit.

2. A typological study: peripheral sharing *versus* central sharing (*c-sharing*)

One empirical argument in favor of this competition between multidominance and ellipsis comes from a restriction on the former. Multidominance should not be available for *c-sharing* (i.e. sharing of V in an SVO language), as the resulting structure could simply not be linearized: it could not preserve the relative order within parallel contents. Such restriction makes a natural prediction: no cumulative agreement should occur with *c-sharing* across languages. Building on previous studies (Sanders (1977) and Haspelmath (2007) a.o.), we conducted a typological survey of sharing structures. So far, the prediction seems to be borne out: any language that allows for cumulative agreement on the verb ends up being a VSO or SOV language, or a language that independently allows for a non-medial position of the verb. German nicely illustrates this observation, as it allows for various word orders, but only peripheral sharing of the verb (*l-sharing* or *r-sharing*) can give rise to cumulative agreement (see examples in (5)).

3. An experimental study: beyond syntax, or syntax in a broader sense

We further argue that sharing constructions do not always comply with general syntactic hierarchy because they are not only constrained by syntax, but also by prosodic and information structures (on a par with Culicover & Jackendoff (2005)). In such broader perspective on syntax and grammar, one first question that arises is how much syntactic “discord” can be tolerated in these constructions. We thus conducted three on-line acceptability judgment tasks (1 to 7 scale), following regular experimental methods (see Schütze (1996) a.o.), one for each type of sharing (1-share, 29 subj.; r-share, 22 subj.; c-share, 13 subj.). Table 1 provides a sample of minimal contrasts with respect to the degree of syntactic congruence (*concord*, *discord1*, and *discord2*). These exploratory experiments revealed the following results: (i) the rather non-significant effect of the degree of syntactic discord; (ii) the crucial role of directionality (filler-gap ordering in *l*- and *c*-sharing versus gap-filler ordering in *r*-sharing); (iii) the potential role of prosody and information structure, as acceptability judgments seem more compatible with prosodic and information structures (phrasing and contrast) than syntactic structure (constituency). We argue that such results call for a more comprehensive and dynamic conception of grammar that incrementally builds syntactic, semantic, and phonological structures in tandem.

- (1) *Certaines langues ont et d'autres n'ont pas | de flexion casuelle.* (Abeillé & Mouret (2010))
 “Some languages have and others don’t have any case morphology.”
- (2) *Hippolyte | a lu un livre | de C. Ponti et Gustave de S. Blake.*
 “Hippolyte read a book by C. Ponti and Gustave by S. Blake.”
- (3) *Hippolyte aujourd’hui et Gustave demain | pourra_[SG]/pourront_[PL] aller à la piscine.*
 “Hippolyte today and Gustave tomorrow will be allowed to go to the swimming pool.”
- (4) *Dans mon bureau devra_[SG]/devront_[PL] se présenter | Laurence à 9h et Pauline à 10h.*
 (lit.) “In my office will have to come Laurence at 9a.m. and Pauline at 10a.m.”
- (5) a. *Ich glaube daß Peter Kartoffeln und(/bzw.) Maria Brod | gegessen hat/haben.*
 I think that Peter potatoes and Maria bread eaten has/have
 b. *Liebt/Lieben (beide) | Julia Romeo und(/bzw.) Kleopatra Cäsar?*
 loves/love both Juliette Romeo and Cleopatra Caesar
 c. *Julia | liebt/*lieben | Romeo und Kleopatra Cäsar.*
 Juliette loves/love Romeo and Cleopatra Caesar

Sample of items for each type of sharing	Condition	Means
<i>L’Espagne et l’Italie ont accueilli la première vague des migrants</i>	r-concord	6.80
<i>L’Espagne a accueilli et l’Italie a repoussé la première vague des migrants</i>	r-discord1	4.63
<i>L’Espagne a accueilli la première et l’Italie a repoussé la deuxième vague des migrants</i>	r-discord2	4.48
(lit.) ‘Spain has welcomed the first and Italy has repelled the second wave of migrants.’		
<i>La NASA a lancé des sondes européennes vers Mars, et envoyé des satellites américains autour de la Terre</i>	l-concord	6.27
<i>La NASA a lancé des sondes européennes vers Mars, et des satellites américains autour de la Terre</i>	l-discord1	6.51
<i>La NASA a lancé des sondes européennes vers Mars, et américaines vers Jupiter</i>	l-discord2	4.57
(lit.) ‘The NASA has launched probes european towards Mars, and american towards Jupiter’		
<i>L’Espagne a envoyé des renforts humains à la France, et l’Italie à l’Allemagne</i>	c-concord	5.32
<i>L’Espagne a envoyé des renforts humains à la France, et l’Italie une aide financière à l’Allemagne</i>	c-discord1	6.09
<i>L’Espagne a envoyé une aide logistique à la France, et l’Italie financière à l’Allemagne</i>	c-discord2	3.83
(lit.) ‘Spain has sent some help logistical to France, and Italy financial to Germany’		

Table 1. Acceptability judgments wrt. type of sharing and degree of syntactic congruence

References: ♦Abeillé A. & Mouret F. (2010) Quelques contraintes sémantiques et discursives sur les coordinations elliptiques, *Revue de sémantique et de pragmatique*, 24:177-206. ♦Culicover P.W. & Jackendoff R. (2005) *Simpler Syntax*, OUP. ♦Halle M. & Marantz A. (1993) Distributed morphology and the pieces of inflection, *The View from Building 20*, MIT Press. ♦Haspelmath M. (2007) Coordination, *Language typology and syntactic description*, MIT Press. ♦Mouret, F. (2006) A Phrase Structure Approach to Argument Cluster Coordination, *Proceedings of the 13th HPSG conference*, 247–267, CSLI Publications. ♦Mouret, F. (2007) *Grammaire des constructions coordonnées : coordinations simples et coordinations à redoublement en français contemporain*, PhD thesis, U. Paris 7. ♦Sanders G.A. (1977) A functional typology of elliptical coordinations, *Current Themes in Linguistics*. Washington: Hemisphere. ♦Schütze C.T. (1996) *The empirical base of linguistics: grammaticality judgments and linguistic methodology*, U. Chicago Press. ♦Shiraishi A. (2018) *Discordances dans l’ellipse périphérique en français*, PhD thesis, U. Paris Diderot. ♦Tesnière L. (1959) *Éléments de syntaxe structurale*, Paris: Klincksieck. ♦Wilder C. (1999) RNR & the LCA, *Proceedings of WCCFL 18*, Cascadilla Press.