Generative syntax over the years. On some changes and on some non-changes

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Reflections: Foundations And Developments Of Generative Grammar

February 10, 2024

Has the rhetoric of the field emphasized novelty over continuity/solidity?

French Syntax. The Transformational Cycle was published in 1975, as an expansion of my 1969 M.I.T. dissertation. The book itself was written mainly in 1972-1973, during my first years of teaching at Paris VIII. Which were themselves more or less directly due to a stroke of great luck that I had in 1967-1968, as I began working on my diss., following the completion of my first and last substantial phonology paper ("Against a Cyclic Analysis of Russian Segmental Phonology"), directed by Morris Halle.
    The stroke of luck: Nicolas Ruwet, a prominent French-speaking syntactican, originally from Belgium, but by then in Paris, chose to visit at M.I.T that year. In 1968, he got a position at the newly formed Université de Paris VIII, which had a real department of linguistics, which he asked me to join in 1969. There I sat in on his syntax courses, as well as on those of Maurice Gross. Nicolas Ruwet's syntax papers were, I think, all written in (and about) French, John Goldsmith did the field a real service in editing a book's worth of them in English that appeared in 1991 as *Syntax and Human Experience,* published by The University of Chicago Press.

    Back to novelty vs. continuity. A student of mine told me at some point in the early 90s that they found *French Syntax* very hard to read. Although the student might have been criticizing my writing, it is more likely that they were commenting on the changes undergone by syntactic theory in the intervening 20 years. Which were very real. But shouldn't have made work of 20 years earlier so hard to read. Or should they have?

    As an example, let me take the transformation *L-Tous* that played a fairly large role in *FS*. It was stated as:
  (1) X V Q Y —> X Q V Y
The left side of the arrow was the SD (structural description); the right side of the arrow indicated the SC (structural change). In (1), X and Y are variables, and V is verb.
    Q is a set of related quantificational elements consisting of *tout, tous, tous les deux, rien* and *chacun* (also *ni l'un ni l'autre). Tout* corresponds pretty well to English *all*, as in the no longer very productive:
  (2) All is well.
or as in:
  (3) We spent all day working.
Tous (and its feminine gender counterpart *toutes*) is the plural form of *tout* and can readily be thought of as corresponding to the *all* of:
  (4) You've read all those books.

(5) You've all read that book.
(6) I've read them all.
  Tous les deux/trois... ('all the two/three...') are phrases that readily float in French, in the way that some English allows (necessarily without the definite article):[1]
(7) The students have all five done well on the exam.
We can note in passing that *tous les deux* is common in French, as opposed to:
(8) *The students have all two done well on the exam.
(9) All three/*two students have done well on the exam.
with the exception of:
(10) John's bringing his friends. Yeah, all two of 'em!
  Rien corresponds well to English *nothing* (though *rien* is not visibly bimorphemic). *Chacun* is close to *each* (though literally it's 'each-one'). In what follows, I will concentrate on *tout* and *rien*.

  When the verb is finite, one doesn't readily see any effect of (1):
(11) Marie lit tout. ('M reads everything')
(12) Jean ne comprend rien. ('J neg understands nothing')
since in these it looks as if *tout* and *rien* have not moved from the canonical post-V position of objects in French. One does, on the other hand, see the effect of (1) with non-finite V, e.g.:
(13) Marie a tout lu. ('M has everything read')
(14) Jean n'a rien compris. ('J neg has nothing understood')
In these examples, the pre-participial position of *tout* and *rien* is attributable to the application of *L-Tous* as given in (1), which cannot apply to lexical objects, even if similarly quantified:
(15) *Marie a tout le livre lu. ('M has all the book read')
(16) *Jean n'a aucun des livres compris. ('J neg has none of-the books understood')

  The fact that (1) cannot in French (as opposed to some Scandinavian, especially Icelandic[2]) apply to objects containing a lexical noun was noted in *FS*. Why it cannot, in French, is a continuing question.
  As is the question why, in standard French, it cannot apply to *personne* ('nobody'):[3]
(17) Nous n'avons vu personne. ('we neg have seen nobody')
(18) *Nous n'avons personne vu'
(Relevant here is Déprez's work on the DP-internal syntax of negation in French.[4])

  After the early 70s, Move Alpha began to come into syntactic theory, with the result that characterizations of transformations as in (1) are no longer used. At the same time, the movement operation expressed by (1) continues to be part of (our characterization of) French.
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[1]Cf. Kayne (to appear).
[2]Cf. Christensen (1986), Christensen and Taraldsen's (1989), and Svenonius (2000).
[3]Possible in some Eastern dialects - cf. Bürgi (1988).
[4]Cf. Déprez (2001).

And we still have the question: What exactly does the class picked out by *L-Tous* have in common? How do we now, in the current state of syntactic theory, limit this kind of movement to the elements picked out by Q in the earlier formulation?

Returning to the facts of (11)-(14), we see an early example of what we can call 'masked movement'. In (11) and (12), we fail to see the effect of the movement of *tout* and *rien* only because that movement has been 'masked' by subsequent movement of the finite verb (on which cf. Pollock (1989) and others).

From another angle, (12) and (14), for example, are a pair of French VO sentences in which VO order is derived differently in each (recalling Pearson's (2000) work). This is part of a more general point, to the effect that linear order does not determine hierarchical structure (examples (12) and (14) have quite different structures). (As opposed to the fact that hierarchical structure does determine linear order, if antisymmetry is correct.)

Both *tout* and *rien* can readily move past two verbs, as in:
   (19) Jean aurait tout voulu comprendre. ('J would-have everything wanted to-understand')
   (20) Vous n'avez rien voulu faire. ('you neg have nothing wanted to-do')
In these examples movement has taken place out of an infinitival embedded clause. (Whether this is to be interpreted in terms of a single long(ish) movement, or in terms of two shorter ones, remains to be nailed down.)

Comparable movement out of a finite clause is not possible with present or past tense indicatives, but for some subset of speakers is easily possible out of (certain) subjunctives:
   (21) Je ne veux rien que tu lui dises. ('I neg want nothing that you him/her tell' = 'I don't want you to tell him/her anything')
   (22) Il faut tout que je leur enlève. ('it is-necessary everything that I them take-off' = 'I have to take everything off them (mother and children)'

In *FS*, I called such 'out-of-finite-clause' examples 'peripheral', which is fine if by 'peripheral' we understand 'not uniformly accepted', and as long as we don't make the mistake of thinking that 'not uniformly accepted' means 'of little theoretical interest' (think 'parasitic gaps'). (In fact the non-uniform acceptance of (21) and (22) arguably has a counterpart with wh-movement within German (North vs. South) and within Slavic.)

To be noted is that (21) and (22) don't, strictly speaking, fall under (1), since the movement in (21) and (22) crosses more than just V or a sequence of Vs. (It crosses the embedded subject and the embedded C.)

Of further note is that examples like (21) and (22) were my first introduction to sharp dialect differences within French (so sharp that in classes in Paris, speakers would almost come to blows (well, not quite) in arguing about their acceptability. (It may be that (21) and (22) are accepted only in the southern half of France, as an initial approximation.)

Another instance of the raising of *tout* that wasn't covered by the formulation in (1) had to do with sentences like:
   (23) Jean a tout très mal compris. ('J has everything very badly understood')

in which the adverbial phrase *très mal* intervenes between Q and V in a way not anticipated by (1). The suggestion made in *FS* was that the pre-V placement of such adverbial phrases might be accomplished by "a rule ordered after L-Tous moving them to the left across the verb".

Rule ordering, in particular what was called extrinsic rule ordering, whereby one rule/transformation was prohibited from applying before another, was a relatively common feature of syntactic work back then, despite adding what was arguably excessive descriptive power. (One finds memories of such extrinsic rule ordering in some current work that allows for multiple features on a given head to have the property that one must probe before another.)

The relative order of *tout* and *très mal* in (23) is still a live topic that fits into what is now called cartographic work, even if we don't fully understand why the position of *tout* must precede that of *très mal*.

Summing up, we can say that although a lot has changed in how we phrase questions and problems concerning the movement of *tout* and *rien*, a lot has not changed quite as much as it might have appeared.

(The unaccusative hypothesis[5] and the 'subject within VP' hypothesis[6] came in after the early 70s and were clearly steps in the right direction, as were steps taken by various authors away from rightward movements, in particular by Larson (1988; 1990) on Heavy-NP-Shift, in his VP-shell work. Additional improvements in syntactic theory between the 70s and the 90s can be discerned through a comparison of my 1978 paper with Pollock on French Stylistic Inversion and our later, much improved 2001 version.)

An important property of *L-Tous* as formulated in (1) is that it explicitly represents linear order, much as phrase structure rules did in the early years of the field. Put another way, (1) took linear order to be a core part of syntax.

The idea that linear order might not be part of core syntax can be traced back to Chomsky's (1970) "Remarks...", i.e. to the advent of X-bar theory, which is essentially a theory of hierarchical structure alone. (That paper of Chomsky's also introduced the important new proposal that passive should be decomposed into various independent subparts.)

Chomsky's (2019; 2020) recent work has developed much further, in terms of what he calls 'externalization', the idea that linear order (properly understood as temporal order) is not part of core syntax. The question whether linear/temporal order is or is not part of core syntax also bears in the long run on questions about the evolution of the language faculty, as Chomsky has noted.

One piece of evidence that goes against Chomsky's recent position comes from the syntax of pronouns and their non-c-commanding antecedents, as in:

  (24) The fact that John is here means that he's well again.

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[5]Cf. Perlmutter (1978; 1989) and Burzio (1986).
[6]Cf. Koopman and Sportiche (1991).

(25) The fact that he's here means that John is well again.
English readily allows both of these.

However, English is not fully representative, insofar as many languages allow sentences like (25) less readily than English, or not at all. For example, Michel DeGraff (p.c.) has told me that in Haitian Creole "backward pronominalization"[7] of the sort seen in (25) is systematically impossible. In addition, Huang (1998, sect. 5.5.2) indicates that Chinese has much less backward pronominalization than English. And Craig (1977, 150) in her grammar of Jacaltec says that Jacaltec has no backward pronominalization at all. Strikingly (since Danish is a Germanic language like English), Allan et al.'s (1995, 473) grammar of Danish says that Danish has either none or at least much less backward pronominalization than English (cf. Thráinsson et al. (2004, 331) on Faroese, another Germanic language).[8] Finally, Jayaseelan (1991, 76) says about Malayalam that some speakers of Malayalam allow no backward pronominalization at all.

In contrast to these sometimes severe limitations on backward pronominalization, I don't know of any language that in a systematic way completely or even partially prohibits forward pronominalization of the sort seen in (24). There thus seems to be a precedence-based asymmetry concerning antecedent-pronoun relations in contexts of non-c-command, of a sort that makes it difficult to see how precedence/linear order could not be part of core syntax, if antecedent-pronoun relations are.[9]

In asymmetric c-commanding contexts, hierarchical structure and precedence match, so it is only in cases of non-c-command that one would, given antisymmetry, expect to be able to see the effect of precedence itself. Whether the effect of precedence is found elsewhere than with backwards vs. forwards pronominalization needs to be looked into.

A more indirect argument in favor of linear order being part of core syntax is closely related to the question of antisymmetry. Antisymmetry has linear order dependent on structure; for every projection, the mapping to linear/temporal order must invariably yield Spec-Head-Complement order. There is no optionality of the head-parameter sort.

Antisymmetry as in Kayne (1994) also required that there be only one Spec per projection, in a way that has fed into cartography work, as exemplified by Rizzi (1997) and Cinque (1999). My impression is that from Chomsky's externalization perspective one could, if one agrees that S-H-C is basically correct, in fact incorporate antisymmetry into the mapping from core syntax to PF.

Why, though, would antisymmetry hold to begin with? (In 1994 terms, why is the LCA part of UG?). In Kayne (2011), I suggested that (the beginning of) an answer to this question is available, but that it requires taking linear order to be part of core syntax (via a certain use of an alternative to standard Merge that was mentioned but not

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[7]This term goes back to the 1960s; cf. Langacker (1969).
[8]Cf. also Antonyuk and Bailyn (2008) on Russian.
[9]A proposal to account for this asymmetry was made in Kayne (2002). Cf. Bruening (2014). Kayne (2002, section 7) explicitly took discourse to be a subtype of coordination (cf. Hoekstra (1999)), in order to integrate cases like:
  i) John is famous. He's smart, too.

pursued in Chomsky (2008)),[10] namely that Merge should always be taken to form the ordered pair <X,Y>, rather than the set {X,Y}, with that ordering necessarily to be understood as temporal ordering.

Chomsky (2020) takes the opposite view, i.e. he takes the view that linear/temporal order is not at all part of core syntax.[11] In part he does so on the basis of the point that differences in linear order do not feed differences in semantic interpretation, which depends only on structure (and on lexical items and features).

But the force of this point rests on the assumption, denied by antisymmetry, that linear order can vary independently of structure (as it could in the head parameter tradition). If, on the other hand, linear order is fully determined by hierarchical structure, then there is no reason to expect it to be able to make its own independent contribution to semantic interpretation (though note the discussion of (25) above). If so, then linear order can, as far as interpretation is concerned, well be part of core syntax.

Another reason why Chomsky has taken linear order not to be part of core syntax has to do with examples that show that internal merge (movement) cannot take the linearly closest auxiliary in English subject-aux inversion.[12] Thus starting from:

(26) Somebody who is in Paris is on the phone.
one cannot conceivably derive:

(27) *Is somebody who in Paris is on the phone?
The question arises, though, as to whether this strong prohibition might (or might not) derive from independent structural factors, e.g. from the general impossibility of extraction from within a subject phrase, or from within a relative clause. Relevant, needless to say, is the fact that extraction from within a subject phrase or from within a relative clause does not always yield a violation as strong as that of (27). For example, to my ear the following instance of extraction from within a subject is less sharply deviant than is (27):

(28) ??He's somebody who close friends of generally like linguistics a lot.
The difference in degree of acceptability, as compared with (27), is stronger with parasitic gaps:

(29) ?He's somebody who close friends of generally admire.
Importantly, one can, on the other hand, reach a violation as sharp as that in (27) if, instead of extracting an argument from within a subject, as in (28) and (29), one tries to extract a non-argument such as an adverb. Thus, starting from:

(30) Somebody who was speaking loudly left very suddenly.
it is sharply impossible to derive:

(31) *How loudly did somebody who was speaking leave very suddenly?
and similarly even for parasitic gaps (where the notion of 'linearly closest' is not obviously relevant). For example, starting from:
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[10]Cf. Chomsky (2020) on Pair-Merge, though his use of it is different from mine, as is Saito and Fukui's (1998), which retains a head parameter orientation.
[11]Cf. Chomsky (1995, 340).
[12]Indirectly relevant here is the question whether Internal Merge is triggered; for Chomsky (2019, 268) it is not.

(32) Somebody who was behaving badly was near somebody else who was behaving badly.
one cannot reach:[13]
(33) *How badly was somebody who was behaving near somebody else who was behaving?
Similarly, a parasitic gap counterpart of (27) remains very strongly deviant:[14]
(34) *Is somebody who in Paris on the phone?
  The same set of points can be made with regard to extraction from within a relative clause. As Chung and McCloskey (1983, 708) noted, English does allow such extraction in some cases, e.g.:[15]
(35) That's one trick that I've known a lot of people who've been taken in by.
However, this example, and all the others they cite (as being "either well formed or much more acceptable than one would expect"), are instances of the extraction of an argument.
  Examples similar to any of theirs, but involving the extraction of an adverb, are invariably sharply deviant, as far as I can see. For example, alongside:
(36) We've known a lot of people who word their messages carefully.
there is no:
(37) *How carefully have you known a lot of people who word their messages.
  The strong deviance of (31), (33), (34) and (37) is independent of any notion of linear closeness. Consequently, the strong deviance of (27), if assimilable to that of (31), (33), (34) and (37) in terms of structural constraints on the extraction of non-arguments, can be understood in a way that is fully compatible with linear order being part of core syntax.

  Chomsky (2020) also mentions work by Moro et al. (2003) showing that Broca's area activation does not take place when subjects are presented with an 'unreal' language in which, for example, negation would systematically be the third word in a sentence. This is a telling point, but I don't think it bears directly on the question whether linear order is part of core syntax. Rather, what it shows, I think, is that the language faculty doesn't count numerically. Clearly the language faculty doesn't count words in linear order.
  But it also doesn't numerically count structural notions such as depth of embedding. As far as I know, no syntactic operation takes, or could possibly take, as its goal a phrase that would be exactly three nodes down from the (node immediately dominating the) probe. Nor could any syntactic operation search for a phrase that is the third closest, structurally speaking.

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[13]The same holds of Chomsky's (2020; 2022, 352) example:
  i) Carefully the guy who fixed the car packed his tools.
The adverb *carefully* cannot originate within/be extracted from the relative clause embedded within the subject, whether there is in addition a parasitic gap or not.
[14]Cf. the fact, discussed by Källgren and Prince (1989, 55), that finite V-movement out of a relative clause island in Yiddish is impossible, even though it leaves a copy.
[15]Cf. Taraldsen (1981) on Norwegian, as well as Bolinger (1972).

Differential verb-raising of the sort studied by Pollock (1989) and others appears (as Chomsky (2020) has noted) to have no differential effect on interpretation, either cross-linguistically (e.g. French vs. English), or within one language (e.g. finite verbs vs. infinitives, in French). A certain generalization of Chomsky's (1995, 151) Full Interpretation principle (whose interaction with idioms needs in any case to be clarified) might lead one to think that such 'meaningless movements'[16] should not be available within core syntax and might lead one to want to relocate them post-syntactically.[17] (This would be akin to banning linear order from core syntax on the (incorrect - cf. backwards pronominalization) grounds that it's never relevant to interpretation.)

However, that kind of generalization of Full Interpretation has in effect been argued against, e.g. in Matushansky's (2006, Appendix) arguments "against analyzing head movement as a phonological phenomenon". In a similar vein is Arano's (2022, sect. 4.2) recent argument that scrambling in Japanese must take place in narrow syntax (cf. Saito and Fukui (1998, 445) on heavy-NP-shift (and scrambling)). (Collins and Kayne (2023) take a general stand against post-syntactic operations.)

For the specific case of verb-raising, there is another consideration. I argued in Kayne (1991) that Romance infinitival verb raising has an effect on whether or not PRO is admissible as the subject of a Romance infinitival *if*-clause. In some Romance languages it is, and in others it is not, and this correlates with whether or not the Romance language in question moves its infinitives past the landing site of its object clitics.[18] If so, then Romance infinitival verb raising must, since it bears on the admissibility of controlled PRO, be part of core syntax, despite (apparently) being semantically neutral. In effect, a given operation can be diagnosed as being part of core syntax indirectly, through its interaction with other core syntactic operations.

Consider in this spirit relative clause extraposition, which feels semantically neutral in pairs like:
(38) Somebody who I used to know in high school just walked in.
(39) Somebody just walked in who I used to know in high school.
Yet there is a restriction that comes to light in the following pair:
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[16]Cf. Cinque (2023, 102).
[17]If semantic interpretation ignores some aspects of core syntax, that will have something in common with phonetic interpretation not requiring that all aspects of phonological structure have a phonetic counterpart, e.g. deleted/silent phonological segments, with one example being abbreviated words, as in *abs* (for *abdominal (muscle)s*), whose lax vowel (in my English) plausibly reflects the presence of silent DOMINAL at the relevant point in the derivation, contrasting thereby with *tabs.*
[18]This correlation fits in with Kato et al.'s (2023, 309) observation that European Portuguese prohibits clitic-infinitive order with its counterpart of 'if'+infinitive:
  i) Não sabemos se {*lhe dizer /dizer-lhe} a verdade hoje ou amanhã. ('neg we-know if him to-tell/to-tell him the truth today or tomorrow')
despite allowing clitic-infinitive order elsewhere. Whether the proposal in Kayne (1991) can extend to comparable facts found in EP with certain prepositions remains to be worked out.

(40) The only person who I liked in high school just walked in.
(41) *The only person just walked in who I liked in high school.
presumably due to a property of the scope of *only* that must surely be (keyed to) part of core syntax. Put another way, relative clause extraposition is not available in (41) for syntactic/semantic reasons that cannot possibly be part of PF, even if relative clause extraposition itself is in some sense interpretively neutral.

This point concerning relative clause extraposition harks back to Holmberg's (1986, sect. 6.2) argument that Scandinavian Object Shift is syntactic, i.e. part of core syntax, in current terms. This is so in particular, he argues,[19] because Object Shift feeds topicalization, itself obviously part of core syntax.

In a partially similar way, take clitic movement of the Romance type, which in simple cases seems to have no semantic effect. Yet we have contrasts in French of the following sort:[20]
(42) Combien (*en) ont lu ton livre? ('how-many (of-them) have read your book')
(43) Combien tu *(en) a lus? ('how-many you (of-them) have read' = 'how many of them have you read')
When one fails to pronounce the noun that goes with *combien* ('how many'), the clitic *en* ('of them') is obligatorily present in the object case (43),[21] yet impossible in the subject case (42). The obligatoriness in (43) tracks the obligatoriness of *en* in:
(44) Tu *(en) a lu beacoup. ('you (of-them) have read many')
suggesting strongly that the movement of clitic *en* in (43) must be taking place prior to wh-movement. If so, then, since wh-movement is part of core syntax, so must be clitic movement (at least in this case), despite its semantic neutrality.

That clitic movement is part of core syntax is also suggested by its interaction with raising to subject position, in cases in French such as:[22]
(45) Le premier chapitre semble en être intéressant. ('the first chapter seems of-it to-be interesting')
The clitic *en* ('of it') originates within the DP containing *le premier chapitre* ('the first chapter'). It clearly must, in (45), move to clitic position within the embedded infinitival phrase prior to the raising to matrix subject position of *le premier chapitre*. Since that raising is part of core syntax, so must the movement of *en* be, again despite its (apparent) semantic neutrality.[23]

The conclusion, then, is that core syntax is open to much that is not of any obvious semantic importance, both to semantically neutral movement operations, and, in line with the early years of generative grammar, to linear/temporal order itself.

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[19]Cf. also Holmberg and Platzack (1995, chapter 6) and Holmberg (2005).
[20]Cf. Kayne (1975, sects. 2.19, 4.3), Rizzi (1982, 148ff.) and Pollock (1998).
[21]In a resumptive pronoun-like fashion - cf. Kayne (2022).
[22]Originally discussed by Ruwet (1972).
[23]Relevant here is Uriagereka (2000) on the semantics of clitic doubling; also Déprez (1998) and Obenauer (1992) on semantic effects of past participle agreement in French; as well as Ikawa (2022) on how Agree feeds interpretation with Japanese honorifics.

References.

Allan, R., P. Holmes and T. Lundskaer-Nielsen (1995) *Danish. A Comprehensive Grammar*, Routledge, London.

Antonyuk, S. and J.F. Bailyn (2008) "Backward Pronominalization in Russian: A Syntactic Account," ms., Stony Brook University.

Arano, A. (2022) "Reconsidering multiple scrambling in Japanese", *Journal of East Asian Linguistics*, 31, 265-303.

Bolinger, D. (1972) "What Did John Keep the Car That was In?," *Linguistic Inquiry*, 3, 109-114.

Bruening, B. (2014) "Precede-and-Command Revisited," *Language*, 90, 342-388.

Bürgi, A. (1998) *Le pronom* ça *en français vaudois, description et analyse*, Mémoire de Maîtrise, University of Sherbrooke.

Burzio, L. (1986) *Italian Syntax. A Government-Binding Approach*, Reidel, Dordrecht.

Chomsky, N. (1970) "Remarks on Nominalization," in R.A. Jacobs and P.S. Rosenbaum, eds., *Readings in English Transformational Grammar,* Ginn, Waltham, Massachusetts, 184-221.

Chomsky, N. (1995) *The Minimalist Program*, The MIT Press, Cambridge, Mass.

Chomsky, N. (2008) "On Phases," in R. Freidin, C.P. Otero and M.L. Zubizarreta (eds.) *Foundational Issues in Linguistic Theory*. *Essays in Honor of Jean-Roger Vergnaud*, MIT Press, Cambridge, Mass., 291-321.

Chomsky, N. (2019) "Some Puzzling Foundational Issues: The Reading Program," *Catalan Journal of Linguistics. Special Issue*, 263-285.

Chomsky, N. (2020) "The UCLA Lectures", lingbuzz/005485.

Chomsky, N. (2022) "Genuine Explanation and the Strong Minimalist Thesis," *Cognitive Semantics*, 8, 347-365.

Chung, S. and J. McCloskey (1983) "On the Interpretation of Certain Island Facts in GPSG," *Linguistic Inquiry*, 14, 704-713.

Christensen, K.K. (1986) "Norwegian *ingen*: a case of post-syntactic lexicalization," in O. Dahl and A. Holmberg (eds.) *Scandinavian Syntax*, Institute of Linguistics, University of Stockholm, 21-35.

Christensen, K.K. & Taraldsen, K.T. (1989) "Expletive chain foration and past participle agreement in Scandinavian dialects," in P. Benincà (ed.) *Dialect variation and the theory of grammar*, Foris, Dordrecht, 53-83.

Cinque, G. (1999) *Adverbs and Functional Heads. A Cross-Linguistic Perspective*, Oxford University Press, New York.

Cinque, G. (2023) *On Linearization. Toward a Restrictive Theory*, The MIT Press, Cambridge, Mass.

Collins, C. and R.S. Kayne (2023) "Towards a Theory of Morphology as Syntax," *Studies in Chinese Linguistics*, 44, 1-32.

Craig, C.G. (1977) *The Structure of Jacaltec*, University of Texas Press, Austin.

Déprez, V. (1998) "Semantic Effects of Agreement: The Case of French Past Participle Agreement," *Probus*, 10, 1-65.

Déprez, V. (2001) "The Roots Of Negative Concord In French And French Based Creoles," in M. DeGraff (ed.) *Language Creation and Language Change. Creolization*, *Diachrony*, *and Development*, The MIT Press, Cambridge, Mass.

Hoekstra, E. (1999) "On D-pronouns and the Movement of Topic Features," in W. Abraham (ed.) *Characteristic Properties of Spoken Vernaculars* (*Folia Linguistica* 33, 59-74).

Holmberg, A. (1986) *Word order and syntactic features in the Scandinavian languages and English*, Doctoral dissertation, University of Stockholm.

Holmberg, A. (2005) "Linearization in two ways," *Theoretical Linguistics*, 31, 147-157.

Holmberg, A. and C. Platzack (1995) *The Role of Inflection in Scandinavian Syntax*, Oxford University Press, New York.

Huang, C.T.J. (1998) *Logical Relations in Chinese and the Theory of Grammar*, Garland, New York.

Ikawa, S. (2022) "Agree feeds interpretation: Evidence from Japanese object honorifics," *Syntax*, 1-37.

Jayaseelan, K.A. (1991) "The Pronominal System of Malayalam," *CIEFL Occasional Papers in Linguistics*, 3, 68-107.

Källgren, G. & E.F. Prince (1989) "Swedish VP-Topicalization and Yiddish Verb-Topicalization," *Nordic Journal of Linguistics* 12, 47-58.

Kato, M.A., A.M. Martins and J. Nunes (2023) *The Syntax of Portuguese*, Cambridge University Press, Cambridge, UK.

Kayne, R.S. (1975) *French Syntax. The Transformational Cycle*, The MIT Press, Cambridge, Mass.

Kayne, R.S. (1991) "Romance Clitics, Verb Movement and PRO," *Linguistic Inquiry*, 22, 647-686.

Kayne, R.S. (1994) *The Antisymmetry of Syntax*, The MIT Press, Cambridge, Mass.

Kayne, R.S. (2002) "Pronouns and Their Antecedents" in S. Epstein and D. Seely (eds.), *Derivation and Explanation in the Minimalist Program*, Blackwell, Malden, Mass., 133-166 (reprinted in Kayne (2005)).

Kayne, R.S. (2005) *Movement and Silence*, Oxford University Press, New York.

Kayne, R.S. (2011) "Why Are There No Directionality Parameters?" in M. Byram Washburn, K. McKinney-Bock, E. Varis, A. Sawyer and B. Tomaszewicz (eds.) *Proceedings of the 28th West Coast Conference on Formal Linguistics*, Cascadilla Proceedings Project, Somerville, MA, 1-23 (reprinted in Kayne (2019)).

Kayne, R.S. (2019) *Questions of Syntax*, Oxford University Press, New York.

Kayne, R.S. (2022) "On the Why of NP-Deletion", *The Linguistic Review*, 39, 687-698.

Kayne, R.S. (to appear) "Notes on *half, all, both, each* and *of*", in a festschrift.

Kayne, R.S. and J.-Y. Pollock (1978) "Stylistic Inversion, Successive Cyclicity, and Move NP in French," *Linguistic Inquiry* 9, 595-621.

Kayne, R.S. and J.-Y. Pollock (2001) "New Thoughts on Stylistic Inversion" in A. Hulk and J.-Y. Pollock (eds.), *Inversion in Romance,* Oxford University Press, New York, 107-162 (reprinted in Kayne (2005)).

Koopman, H. and D. Sportiche (1991) "The Position of Subjects," *Lingua*, 85, 211-258.

Langacker, R. (1969) "On Pronominalization and the Chain of Command" in S.A. Schane and D.A. Reibel (eds.), *Modern Studies in English*, Prentice-Hall, Englewood Cliffs, NJ, 160-186.

Larson, R.K. (1988) "On the Double Object Construction," *Linguistic Inquiry*, 19, 335-391.

Larson, R.K. (1990) "Double objects revisited: Reply to Jackendoff," *Linguistic Inquiry*, 21, 589-632.

Matushansky, O. (2006) "Head Movement in Linguistic Theory," *Linguistic Inquiry*, 37, 69-109.

Moro, A. et al. (2003) "Broca's area and the language instinct," *Nature Neuroscience*,

Obenauer, Hans-Georg (1992). L'interpretation des structures *wh* et l'accord du participe passe", in H.G. Obenauer and A. Zribi Hertz (eds.) *Structures de la phrase et theorie du Liage, Presses Universitaires de Vincennes.*

Pearson, M. (2000) "Two types of VO languages," in P. Svenonius (ed.) *The Derivation of VO and OV*, John Benjamins, Amsterdam, 327-363.

Perlmutter, D.M. (1978) "Impersonal Passives and the Unaccusative Hypothesis," *Proceedings of the Fourth Annual Meeting of the Berkeley Linguistics Society*, UCLA.

Perlmutter, D.M. (1989) "Multiattachment and the Unaccusative Hypothesis: The Perfect Auxiliary in Italian," *Probus*, 1, 63-119.

Pollock, J.-Y. (1989) "Verb Movement, Universal Grammar, and the Structure of IP," *Linguistic Inquiry*, 20, 365-424.

Pollock, J.-Y. (1998) "On the Syntax of Subnominal Clitics: Cliticization and Ellipsis," *Syntax*, 1, 300-330.

Rizzi, L. (1982) *Issues in Italian Syntax*, Foris, Dordrecht.

Rizzi, L. (1997) "The fine structure of the left periphery," in L. Haegeman (ed.) *Elements of Grammar. Handbook of Generative Syntax*, Kluwer, Dordrecht, 281-337.

Ruwet, N. (1972) *Théorie syntaxique et syntaxe du français*, Editions du Seuil, Paris (edited and translated by J.A. Goldsmith, as *Syntax and Human Experience,* The University of Chicago Press, 1991).

Saito, M. and N. Fukui (1998) "Order in Phrase Structure and Movement," *Linguistic Inquiry* 29, 439-474.

Svenonius, P. (2000) "Quantifier Movement in Icelandic," in P. Svenonius (ed.) *The Derivation of VO and OV*, John Benjamins, Amsterdam, 255-292.

Taraldsen, K.T. (1981) "The Theoretical Interpretation of a Class of 'Marked' Extractions," in A. Belletti, L. Brandi and L. Rizzi (eds.) *Theory of Markedness in Generative Grammar. Proceedings of the 1979 GLOW Conference*, Scuola Normale Superiore, Pisa, 475-516.

Thráinsson, H., H.P. Petersen, J.íL. Jacobsen and Z.S. Hansen (2004) *Faroese. An Overview and Reference Grammar*, Foroya Frodskaparfelag.

Uriagereka, J. (2000) "Doubling and Possession," in B. Gerlach and J. Grijzenhout (eds.) *Clitics in Phonology, Morphology and Syntax*, John Benjamins, Amsterdam, 405-431.

Appendix. Some 'rules' from *FS* that are still with us, even if not in the same form.

A-deletion after Cl-Pl , *Se*-Pl
A-insertion in *faire* causative construction
A-insertion with prepositionless datives
Aux Deletion
Cleft sentence formation
Cl-Pl (Clitic placement)
Contrastive preposing
De-deletion
Des-deletion
En-extraposition
Equi-NP Deletion

Etre-deletion
Extraposition with comparatives
Extraposition of relative clauses and of *de*-Adjective
Gapping
Leftward adverb (*mal*) movement
L-Tous (Leftward *tous* movement)
Passive
Pronoun deletion with quantifiers
Se-Placement
Stylistic inversion
Subject clitic inversion
Subject deletion with *voir* and present participles
Subject raising
Tough-movement
Wh-Movement