

Comparative Syntax

Richard S. Kayne
New York University

50 years of Linguistics at MIT
December 9, 2011

1.

In the course of the past fifty or sixty years, our knowledge and understanding of human language syntax has become qualitatively better. Part of that qualitative improvement has come from advances in the subfield of syntax called comparative syntax.

It is useful to think in terms of the notions of observational, descriptive and explanatory adequacy.¹ Observational adequacy can be said to be achieved when one has gotten the facts right concerning acceptability judgments and judgments of interpretation.

‘The facts’ are the facts that one is concerned with, and not, of course, ‘all the facts’ of syntax or comparative syntax, whose order of magnitude lies, as in other sciences, far beyond our reach. This is true even for a single language.²

Syntacticians take as a primary object of study the set of possible human languages. The entire set is again far beyond our reach. To one degree or another, we have access to those languages currently spoken and to an exceedingly small percentage of those previously spoken. To those not currently spoken but that might be spoken in the future, we have at present no access. Again, such limitations are, within the sciences, not specific to linguistics.

These limitations aside, the amount of data that is available to syntacticians is enormous. Much of it is crystal clear. Huge numbers of sentences are fully acceptable (or fully unacceptable) to all speakers of the language in question, without hesitation and without disagreement across speakers. This is true in principle for all languages (even if there are extra practical challenges that face the study of languages for which no native-speaking syntactician exists).

There are also sentences in one language or another whose status is unclear. Sometimes it turns out that an initial lack of clarity is due to a real dialect difference that had not been suspected. When that dialect difference is properly taken into account, one sees that the sentence in question is in fact in a clear way either fully acceptable or fully unacceptable, depending on the choice of dialect.

Sometimes, though, data is unclear in a more recalcitrant way, as can be the case, for example, with sentences involving inverse quantifier scope. In some such cases, the best strategy at a given time may be to temporarily set such sentences aside completely.

The stability and clarity of acceptability judgments in enormous numbers of cases is not affected by the existence of some, or even many, instances of unclear judgments. Recent, general discussion of this point can be found in Sprouse (2011).³

Another, more specific, way to appreciate the solidity of acceptability judgments is to look at the grammars of Italian, Spanish, Catalan, Basque and English edited recently by Renzi et al. (1998-1995),

¹ Cf. Chomsky’s (1965) on the latter two.

² For example, Gross (1975, 18) estimated that the number of French sentences to be evaluated, even restricting oneself to sentences of 20 words or less, is on the order of 10^{86} .

³ Cf. also Phillips (2009), Phillips and Lasnik (2003) and Bader and Häussler (2010).

Bosque and Demonte (1999), Solà et al. (2002), Hualde and Ortiz de Urbina (2003) and Huddleston and Pullum (2002), respectively. These grammars are all informed by work done in generative syntax, broadly interpreted. They are primarily descriptive, rather than theoretical. Each contains contributions by many authors. The Huddleston and Pullum grammar, for example, is almost 2000 pages long, with large format pages, densely printed and densely written. It contains a very considerable amount of information about English (morpho)syntax. The editors and most of the contributors are not speakers of American English. Yet I (who am a speaker of American English), in reading many and various subparts of it in the years since it was published, have consistently found myself in clear agreement with the judgments given (which will sometimes make explicit reference to dialect differences within English). In other words, the Huddleston and Pullum grammar, and, I would guess, the other four mentioned, and others like them, contain a huge amount of extremely solid syntactic data that straightforwardly meets the criterion of observational adequacy.

Descriptive adequacy can be said to be achieved when correct generalizations are discovered about such data. Whether or not it is always easy to draw the line between observational and descriptive adequacy, the five grammars mentioned certainly reach descriptive adequacy in a large number of cases.

Explanatory adequacy can be said to be achieved when such generalizations can be shown to follow from general properties that hold of the human language faculty. Work of this sort is to be found in the syntactic research literature.⁴

2.

Notions of observational, descriptive and explanatory adequacy can be transposed to comparative syntax.

Observational adequacy in the context of comparative syntax can be said to be achieved when one has gotten the facts of comparative syntax right. Facts in comparative syntax necessarily involve more than one language or dialect. (I will use the term ‘language’ to cover dialects, too.) They typically have the form ‘Language A differs syntactically from Language B in the following way’ or ‘Language A and Language B are identical in the following respect’. A well-known example of the first sort would be ‘French and English differ in that unstressed object pronouns precede the verb in French (apart from positive imperatives), but follow it in English’. A banal example of the second sort would be ‘French and English are alike in that definite articles precede the associated nouns in both languages’. In a very large number of cases, such observations are completely straightforward, in particular when the languages in question are both well-studied.

I have here used examples involving just two languages, but comparative syntax sets no limit in principle on the number of languages to be compared. In practice, one limit is set by the number of languages/dialects currently spoken (plus those that are extinct yet to some extent accessible). A smaller limit than that is set in practice by our ability to discover and to manipulate data in very large quantities.

The two French-English examples above may give the impression that achieving observational adequacy in comparative syntax is easy. It is and it is not. In the case of French and English syntax, there are innumerable solid facts that have been accumulated over the years and decades, reaching back to pre-generative syntax work.⁵ What is specific to comparative syntax is the collating of those facts and observations. In the case of gross word order differences and similarities such as those just mentioned

⁴ Chomsky (2004) aims to go ‘beyond explanatory adequacy’ and to ultimately show that properties of the language faculty can follow from principles with even broader coverage.

⁵ For example to Jespersen (1970-1974) for English or to Martinon (1927) and Grevisse (1993) for French.

for French and English, the observational task does seem easy. But other facts are less well-known. For example, French has no exact counterpart of English *John has written three papers but Mary has written four* (French needs to add a pronominal clitic to the second half). Less well-known still, French has no exact counterpart of English *At the age of seven, Mary could speak three languages* (French needs to express *years* overtly).

Even to a syntactician bilingual in French and English (or in whatever pair of languages is at issue), observational adequacy would not be automatic. Consider what is in practice usually the most interesting starting point for comparative syntax work, namely the observation of differences, often of differences that are ‘surprising’ (against the background of what is known about syntax in general). The (somewhat) difficult part of the observational task is simply to notice those differences in the first place. But we can make the reasonable assumption that with sufficient hard work done by a sufficient number of syntacticians over a sufficient period of time a very substantial set of syntactic differences between Languages A and B will be unearthed, for a large number of choices of A and B.

Descriptive adequacy in the case of comparative syntax involves discovering generalizations over the comparative observations that have been made. Assume that Languages A and B differ with respect to properties P and Q, such that A has both P and Q and B has neither. Assume further that in examining Languages C, D, and E, one discovers that each one either has both P and Q or has neither P nor Q. Then there appears to be a generalization to the effect that a language will have P if and only if it has Q.

Put another way, in thus studying Languages A through E we will have discovered a (bidirectional) correlation across those languages between properties P and Q. There may also (in practice, more frequently) be partial (unidirectional) correlations, in the sense that we may find cases in which having P implies without exception having Q, but in which Q does not imply P.

As an example of a unidirectional comparative syntax correlation, let us take P to be the property of having a transitive verb corresponding to English *need* and Q to be the property of having a transitive verb corresponding to English *have*. Harves and Kayne (2012) discovered that P appears to imply Q. If a language has transitive *need*, then it necessarily has transitive *have* (though not the other way around).

This generalization was established by looking at a considerable number of languages. It is formulated in such a way as to be readily testable as work on additional languages comes into play.

This comparative syntax generalization about *need* and *have*, although finer-grained, is similar to some of Greenberg’s (1966) universals. More specifically, it is similar to those that he put forth as being exceptionless. Just as the one about *need* and *have* can be tested in the future, so have Greenberg’s proposals for exceptionless generalizations been tested to some extent.⁶

The cross-linguistic generalization about *need* and *have* is not, however, comparable to those of Greenberg’s ‘universals’ that he put forth as ‘(overwhelming or strong) tendencies’. As Hawkins (1983) in effect noted, the correct way to interpret these ‘tendencies’ is to take them to be examples of possible cross-linguistic generalizations that have, however, sharp counterexamples. As in Hawkins’s work, one can try to reformulate one or another of these ‘tendencies’ in such a way that the counterexamples disappear. Alternatively, the ‘tendency’ in question was, in one or another case, simply a mistaken proposal.

This point is overlooked by Dunn et al. (2011), who in addition misinterpret the proposed universals of generative syntax as ‘tendencies’. Dunn et al. also underestimate the number of syntactically distinguishable human languages by orders of magnitude - see Kayne (1996).

Our descriptive generalization about *need* and *have* was formulated as a hypothesis about all human languages. Testing it on a given language is often straightforward. Sometimes it is not, insofar as in

⁶ Especially by Dryer (1992) and in other work of his.

some languages it may not be immediately clear what the counterparts of *need* and *have* are. For example, in some languages, it is difficult to separate the counterpart of *need* from that of *want*.⁷ This is part of a more general point, namely that the testing of comparative syntax hypotheses requires being able to individuate counterparts in the next language of elements from the first language. That is sometimes relatively easy, sometimes not.

Haspelmath (2007) has expressed scepticism as to the cross-linguistic validity of notions like adjective, affix, clitic, passive, pronoun, word and others. Although he fails to distinguish with sufficient clarity between ‘pre-established’ and ‘universal’, his scepticism is to some extent congenial to work in the generative syntax tradition that has/had already questioned the primitive status of such notions. Cross-linguistically valid primitive syntactic notions will almost certainly turn out to be much finer-grained than any that Haspelmath had in mind.⁸

For example, that ‘affix’ is a primitive syntactic notion was in effect called into question by Greenberg’s (1966) Universal 27 claim that exclusively suffixing languages are postpositional and exclusively prefixing languages prepositional; cf. Kayne’s (1994) treating sub-word structure as falling under the LCA.

Although it is not always easy to pin down the word-for-word counterpart in Language B of some sentence in Language A, the problem is not equally widely found for all pairs of languages A and B. On the whole, the ‘counterpart’ problem is likely to be more acute the more distant or different A and B are from one another.

The varying difficulty of the question of ‘counterparts’ of words (or morphemes) across languages is related to the more general fact that it is easier to search for comparative syntax correlations across a set of more closely related languages than across a set of less closely related languages. If the languages being compared are more closely related, it is almost certain that there will be fewer variables that one has to control for,⁹ and there is therefore a greater likelihood of success in pinning down valid correlations.

These considerations have led to a surge in what has been called ‘micro-comparative syntax’ work, in which the languages being compared are particularly close to one another. In what follows, there will be a number of examples of micro-comparative syntax, as opposed to a more ‘macro-comparative’ syntax, involving a set of languages that are less similar to one another.

One might speculate, very informally, that the amount and type of syntactic variation found just in North Italian dialects, for example, fractally resembles the more familiar macro-syntactic variation, if one abstracts away from the right details.

It might also be that all ‘large’ language differences, e.g. polysynthetic vs. non-polysynthetic (cf. Baker (1996)), are ultimately understandable as particular arrays built up of small differences of the sort that distinguish one language from another very similar one; in other words it might turn out that all parameters are micro-parameters.¹⁰

⁷ For relevant discussion, see Harves (2008) and Brillman (2011), bearing indirectly on Cinque’s (1999) question as to whether all languages realize the same set of functional elements.

⁸ For work questioning the primitive status of ‘passive’, see Chomsky (1970); for ‘word’, Koopman and Szabolcsi (2000) and Julien (2002); for ‘clitic’, Cardinaletti and Starke (1999); for ‘pronoun’, Déchaine and Wiltschko (2002) and Rooryck (2003); for ‘adjective’, Amritavalli and Jayaseelan (2003).

⁹ Cf. Kayne (1991, note 69).

¹⁰ For recent, general discussion of parameters, see Biberauer (2008, introduction) and Longobardi and Guardiano (2009).

In comparative syntax, as in syntax in general, one can and must also aim at explanatory adequacy, above and beyond observational and descriptive adequacy. In the case of comparative syntax, we can try to understand, in general UG terms, why a given cross-linguistic correlation should hold in the first place. For example, Harves and Kayne (2012) propose that the reason that transitive *need* depends on transitive *have* is that the **only** way in which the language faculty allows transitive *need* at all is via incorporation of nominal *need* to a silent counterpart of an otherwise existing transitive *have*.¹¹

It is to be noted that both for comparative syntax and for syntax in general there is no suggestion in any of the preceding discussion that descriptive adequacy must be met in a fully prior way to explanatory adequacy or that descriptive adequacy must fully wait until observational adequacy is met. In practice one must aim at all three simultaneously, and work simultaneously on developing more and more observations, generalizations and explanations.

This is so despite the fact that the rhetoric of the field sometimes puts disproportionate emphasis on the explanatory frontiers at the expense of the observational/descriptive.

Nor is there any suggestion in what precedes that comparative syntax is solely interested in delineating the parameters that underlie cross-linguistic syntactic differences. If anything, the primary importance of comparative syntax lies in the fact that it provides us with new kinds of evidence bearing on questions concerning the general character of the language faculty. Figuring out what cross-linguistic generalizations hold and why exactly they hold will invariably help us to narrow down the set of hypotheses and principles that we entertain about the language faculty; it will always help us, whether our work is thought of as minimalist or not, to counteract the disadvantage that we have of being so smart that we can all too readily invent new mechanisms to accommodate new data or new problems.

3.

Let me now turn to more detailed questions of comparative syntax. Probably the best-known body of comparative syntax work in a generative syntax framework has to do with what is called ‘pro-drop’, i.e. with the property that some languages have of generally not pronouncing their unstressed pronominal subjects. In this sense, Italian is a pro-drop language and French and English are not. Let us keep to the Romance languages, in the spirit of keeping the number of variables that need to be controlled for relatively low.

We can speak of a pro-drop parameter that appears to regulate more than just the ability of a (Romance) language to allow silent pronominal subjects in a very general way. Thus Italian also differs from French in the degree to which it allows wh-extraction of an embedded subject, in the degree to which it allows post-verbal subjects, and in the fact that it disallows short wh-movement of the subject, all as discussed in Rizzi (1982). If Kayne (1989) is right, there is a further correlation between pro-drop and clitic-climbing, in the sense that French allows clitic-climbing out of an embedded infinitival to a lesser extent than other Romance languages, precisely because it allows null subjects (of finite sentences) to a lesser extent than other Romance languages.

Subsequent to Rizzi’s work, it became clear that within the set of Romance languages there is more than just a binary distinction of the sort suggested by Italian vs. French.¹² Northern Italian dialects show fine, yet discrete, gradations in the extent to which they allow null subjects, in a way that is sensitive to the person and number of the subject, among other things. The conclusion is that in this area of syntax there cannot be only one parameter.

¹¹ In the manner of Hale and Keyser (1993: 2002). As always, there are further questions, e.g., why does the language faculty not have *need* among the set of atomic light verbs?

¹² See, for example, Renzi and Vanelli (1983) and Poletto (2000).

We should of course keep in mind that as we discover finer- and finer-grained syntactic differences (in part by examining more and more languages and dialects) the number of parameters that we need to attribute to the language faculty will rise, though much more slowly than the number of differences discovered, insofar as n independent binary-valued parameters can cover a space of 2^n languages/dialects.

4.

Romance clitic climbing is also of interest to imperatives. When an Italian object clitic is within an infinitive phrase, it will always follow the infinitive:

(1) *Farlo sarebbe una buona idea.* ('to-do it would-be a good idea')

(2) **Lo fare sarebbe una buona idea.*

with the single exception of negative second person singular familiar imperatives, which in Italian are formed with the infinitive:¹³

(3) *Non farlo!* ('neg to-do it')

(4) *Non lo fare!*

Here, either position for the object clitic is possible. If one looks further at Italian dialects, the following descriptive generalization comes to the fore:

(5) *Non lo fare*, with the clitic preceding the infinitive, is more prevalent in the Center and South of Italy than in the North, which prefers *Non farlo*, with the clitic post-infinitival.

This in turn correlates with the fact that clitic climbing itself is more robust in the Center and South of Italy than in the North.¹⁴

The explanation for this correlation proposed in Kayne (1992) is that (4) is in fact itself an instance of clitic climbing across a silent auxiliary whose overt counterpart (specific to negative imperatives) can be seen in various Northern dialects. Without the comparative dialect data, this analysis, which supports the idea that the language faculty allows for silent auxiliaries (and indirectly for silent elements more generally),¹⁵ might have seemed less plausible than it now does.

The positioning of object clitics with respect to infinitives constitutes, in addition, an important probe into the syntax of control. Many Romance languages are like Italian in (1)/(2). Many others are like French, which has its object clitics preceding its infinitives:

(6) *Le faire serait une bonne idée.* ('it to-do would-be a good idea')

(7) **Faire-le serait une bonne idée.*

This observation feeds into a more surprising one concerning a particular subcase of control that involves the Romance counterparts of English *if*, which (as opposed to *whether*) disallows control:

(8) They don't know whether to leave.

(9) *They don't know if to leave.

Romance languages typically lack a direct counterpart of *whether*. The surprising facts have to do with their counterparts of *if*. French is like English, and disallows control with its *if*:

(10) **Ils ne savent pas si partir.* ('they neg know not if to-leave')

Italian differs, and allows:

(11) *Non sanno se partire.* ('neg they-know if to-leave')

¹³ For relevant discussion, see Zanuttini (1997).

¹⁴ For fine-grained observations on one North Italian dialect (spoken in Switzerland), see Cattaneo (2009).

¹⁵ The type of silent auxiliary in question recalls Culicover's (1971) proposal for a silent modal in (American) English subjunctives.

The observation that Romance languages differ here does not lead one to expect the following to hold, but it does:

(12) If a Romance language allows control with *if*, as in (11), then it allows object clitics to follow infinitives, as in (1).

The account of (12) proposed in Kayne (1991) contained the idea that infinitive-clitic order involves infinitive movement (in part as in Pollock (1989)) to a position from which the infinitive can ‘protect’ controlled PRO from being otherwise ‘disqualified’ by *if*. That account was, unsurprisingly, formulated in a GB framework and took PRO to be in a high position between *if* and the landing site of the moved infinitive.

In a more contemporary, non-GB framework, an alternative would take PRO to be post-infinitival in sentences like (11).¹⁶ Then one would say that (11) is in fact possible only in languages that allow such postverbal PRO, the idea being that those would be only the Romance languages that robustly allow postverbal subjects in finite sentences, as Italian does and French does not.¹⁷ French would be limited to preverbal PRO. The necessary relation between PRO and the controller *ils* in (10) would in French (and English) be excluded in an ECP-like fashion, suitably updated. In Italian, ECP (or something akin to it) would not come into play since PRO, at least in (11) would be postverbal. The reasoning would be similar to that of Rizzi (1982) on *wh*-movement, and the implication would likely be that PRO, at least with *if*,¹⁸ must be related to its antecedent by movement, as in O’Neil (1995; 1997) and Hornstein (1999; 2001) in terms of pure movement, or in Kayne (2002) in terms of movement from within a doubling DP structure.

The comparative generalization given in (12), whether accounted for as in Kayne (1991) or along the lines sketched in the previous paragraph, allows us to detect the presence of PRO in (11) in a novel way.

6.

The English sentence:

(13) You are to leave before midnight.

has no exact counterpart in any other Germanic language or in any Romance language. If (13) were to exist in French, for example, it would look like:

(14) *Tu es (de/à) partir avant minuit. (‘you are (of/to) to-leave before midnight’)

which is not possible. This comparative observation leads to the question what (13) vs. (14) might correlate with.

Only English, within these two families, has a prepositional complementizer *for* that licenses a lexical subject of an accompanying infinitive in cases like:

(15) For John to have acted that way surprised us.

(16) *John to have acted that way surprised us.

as well as:

(17) We would like very much for John to be elected.

(18) *We would like very much John to be elected.

¹⁶ Cf. in part Baltin (1995).

¹⁷ French allows postverbal subjects in a limited way; see Kayne and Pollock (1978; 2001). (The increase in depth of analysis between those two papers bears witness to a qualitative improvement in the field.)

The notion alluded to of ‘robustly allowing postverbal subjects’ would need to be made more precise.

¹⁸ The fact that French (like English) allows control with embedded infinitival interrogatives introduced by a *wh*-word might involve a link to multiple interrogation.

Thus we have the descriptive generalization:

(19) A Romance or Germanic language has *is to* as in (13) only if it has a complementizer *for* as in (15)-(18).

(19) itself suggests that (13) necessarily contains *for*, or, more exactly, a silent counterpart of it. This leads to taking (13) to be as in:

(20) you are...FOR...to leave

In response to an earlier (2008) presentation at UMass of my proposals concerning *is to*, Angelika Kratzer (p.c.) suggested that postulating this silent FOR, as I did, might in fact suffice. In addition to FOR, though, I had postulated the presence in (13)/(20) of a silent counterpart of the passive past participle of *expect*. Her idea was that the interpretive properties of (13) that do not follow solely from what is visible can be entirely attributed to the presence of silent FOR. Whether or not her suggestion turns out to be correct, we have a comparative syntax result of a familiar type, as stated in (19), and we can further conclude, on the basis of (19), that the language faculty does not allow the interpretation of (13) to be calculated solely on the basis of its visible parts.

7.

Comparative syntax considerations bear on the understanding of anticausatives of the *melt, sink, break* sort. The relevant facts involve both auxiliary selection and periphrastic causatives.

The background to what follows is the fact that French and Italian resemble each other to a substantial extent when it comes to the well-known *have/be* alternation found in auxiliary + past participle sentences.¹⁹ Both languages use *be* consistently in the (immediate) presence of a reflexive clitic. Otherwise, both use *have* consistently with transitives, as well as with unergatives. Both use *be* with (their counterparts of) unaccusatives like *arrive, leave, go out, die, be born, enter, go down*.

However, French and Italian diverge sharply when it comes to anticausatives like *melt, sink, break, get old, grow, increase, diminish, freeze, etc.*

In French, these anticausatives take auxiliary *have*, whereas in Italian they take *be*, e.g.:²⁰

(21) Jean a vieilli. (Fr: 'J has gotten-older')

(22) Gianni è invecchiato. (It: 'J is gotten-older')

Against the background of all the similarities between the two languages in the area of auxiliary selection, this difference comes as a bit of a surprise. If we wonder, as we must, what this difference might be related to elsewhere in French and Italian, we find:

(23) A Romance language allows auxiliary *be* with anticausative verbs as in (22) only if it allows past participle agreement in periphrastic causatives.

Italian has past participle agreement in such causatives:

(24) (Questa tavola) Gianni l'ha fatta/*fatto ridipingere. ('this table G it(fem.) has made(fem.)/*made(masc.) repaint' = 'this table, G has had it repainted')

while French does not:

(25) Jean l'a fait/*faite repeindre. ('J it(fem.) has made(masc.)/*made(fem.) repaint')

The next question is why (23) should hold, i.e. why should there be a linkage between auxiliary selection with what look like simple anticausatives and past participle agreement with complex periphrastic causatives? Part of the answer must simply be that anticausative sentences like (21) and

¹⁹ Cf. Perlmutter (1989), Burzio (1986) and Kayne (1993).

²⁰ Cf. Kayne (2009) and references cited there.

(22) are, despite appearances, biclausal,²¹ and contain a silent counterpart of the overt matrix verb *fare/faire* ('make/do') seen in (24) and (25).

Generalizing beyond French and Italian, this amounts to saying that sentences like:

(26) The boat sunk.

have more in common with:

(27) Something made the boat sink.

than might have appeared to be the case, with new evidence provided by the comparative syntax generalization given in (23).

8.

A further comparative syntax generalization of interest lies in the area of Romance definite articles. We can approach it via English sentences such as:

(28) Which do you prefer?

(29) Which book do you prefer?

that contain an interrogative *which* whose accompanying noun is silent in (28) and overt in (29). Apart from *do*-support, French matches (29) quite well:

(30) Quel livre préfères-tu?

with French *quel* matching English *which*. But there's a twist in (28), whose French counterpart obligatorily contains a definite article *le* not found in English:

(31) *Quel préfères-tu?

(32) Lequel préfères-tu? ('the which prefer you')

Italian differs from French (and is more like English) in not having a comparable definite article in such interrogatives:

(33) Quale preferisci?

(34) *Il quale preferisci?

Surprising, perhaps, is the following cross-Romance comparative syntax generalization:

(35) If a Romance language has an obligatory overt definite article preceding bare interrogative *quel*, as French does, then it does not allow bare plurals/bare mass nouns any more than French does.

This correlation brings the (*le*)*quel* interrogative question into contact with the well-known French/Italian difference:

(36) *Jean achetait livres. (Fr. 'J bought (was buying) books')

(37) Gianni comprava libri. (Ital. - same)

Italian allows bare plurals as in (37), as English does, while French by and large does not (and similarly for bare mass nouns).

Why, though, should there be any linkage at all (within Romance) between *which*-type interrogatives and the question of bare plurals (or bare mass nouns)? Part of the answer given in Kayne (2008b) is that (35) has to do with whether or not a definite article is pronounced in a given context. To see how this might be true, we need to consider how French expresses (37), which it does as in:

(38) Jean achetait des livres. ('J bought of-the books')

This French partitive, as it is usually called, has the noun preceded by a complex determiner consisting of *de* ('of') + the definite article. In the plural the *l-* of the definite article drops after *de* (as it does in the masculine singular). The definite article of this French partitive has its full form in the feminine singular:

²¹ Cf. Chomsky (1965, 189), Pesetsky (1995, 67ff.), and Alexiadou et al. (2006).

(39) Jean achetait de la bière. ('J bought of the beer' = 'J bought/was buying beer')

Despite the presence of a definite article in (38) and (39), those French examples are interpreted much as (37) in Italian or as the following, in English:

(40) John was buying books/beer.

The definite article in (38) and (39) must have more in common with generic definite articles than with 'ordinary' definite articles.²² Putting this together with (35), we see that that comparative syntax generalization in question is telling us that Italian bare plurals as in (37) (and the same for Italian bare mass nouns) contain an unpronounced definite article of the sort that is pronounced in French in (38) and (39).²³

I note in passing that the same must then almost certainly be true of Spanish bare plurals, despite Spanish having no overt partitives at all of the French (38)/(39) sort. Yet there is some indication that Spanish actually has the definite article of those French partitives, too. To see this, consider the fact that French partitives of this sort never induce a definiteness effect, presumably because the definite article in (38)/(39) is too deeply embedded to do so. Now Spanish existentials display an apparent definiteness effect violation in:

(41) Los hay. ('them there-are')

Rodríguez-Mondoñedo (2007) shows that this is not akin to a 'list'-type violation of the English sort:

(42) Well, there's us.

Rather, it seems that the *los* of (41) is the same definite article as that of (38)/(39), with more pieces of the structure unpronounced than in (38)/(39) (and with extra movement), so that the apparent violation in (41) is again to be attributed to the definite article, in this case *los*, being too deeply embedded for the definiteness effect to come into play.

The more general conclusion suggested by (35) is that bare plurals and bare mass nouns in all languages must be associated with a definite article of the sort seen overtly in French.

10.

Comparative syntax work and single language work can, needless to say, perfectly well complement each other. Let us take an example mentioned earlier:

(43) At the age of seven,...

(44) A l'âge de sept *(ans),...

French does not allow *ans* ('years') to be left silent, contrary to English. Kayne (2003) suggested a link to French/English differences concerning DP-internal number agreement, in a way that supported attributing to English *at the age of seven* a silent counterpart of *year(s)*.

²² As suggested by Gross (1968, 30).

²³ More will need to be said about the difference between these French partitives and their overt Italian counterparts, as in:

i) della birra ('of-the beer')

ii) dei libri ('of-the books')

and about the role of the preposition. For some proposals, see Kayne (2008b).

The text conclusion shares with Longobardi (1994, 618) and Chierchia (1998, 386) the idea that Italian bare plurals/mass nouns contain an unpronounced determiner of some kind.

Chomsky (2000, 139) argues against bare plurals having a semantically null D; if so, then the unpronounced definite D proposed here (like the one visible in French partitives) must, plausibly, not be semantically null (cf. the mentioned link to generics).

The presence of this silent element is supported, internal to English, by certain aspects of its distribution, in particular by its being subject to a left-branch restriction of a familiar sort:

(45) She is seven.

(46) She is seven *(years) old.

(47) They have a seven *(year-) old child.

Similar facts hold for the following baseball examples:

(48) They won the game with two home runs in the seventh (inning).

(49) They won the game with two seventh *(inning) home runs.

Although relevant, the notion 'left branch' is not sufficient, as shown by:

(50) ?They won the game with two top-of-the-seventh home runs.

Rather, this probe into the architecture of the language faculty tells us, I think, that silent elements must move to designated positions, as in Kayne (2006), and that the phrase *top-of-the seventh* provides a designated position not provided by the smaller *seventh* (much as in Kayne's (2002) proposed account for the existence of Condition B effects).

11.

Most of the preceding has had to do with comparative syntax that is more micro-comparative than macro-comparative, insofar as the languages discussed have been primarily Romance and Germanic languages.²⁴ Macro-comparative syntax has the same general properties as micro-comparative syntax, even if it may be more difficult to make progress on. (The observational vs. descriptive vs. explanatory adequacy distinction will be convenient for (a more) macro-comparative syntax, too.²⁵) Comparative syntax in all its range provides us with a window on the language faculty that is just beginning to bear fruit.

References:

Aldridge, E. (2009) "Minimalist questions for the nominalist analysis of Tagalog syntax," *Theoretical Linguistics* 35, 51–62.

Alexiadou, A., E. Anagnostopoulou and F. Schäfer (2006) "The Properties of Anticausatives Crosslinguistically," in M. Frascarelli (ed.) *Phases of Interpretation*, Mouton de Gruyter, Berlin, 187-211.

Amritavalli, R. & K.A. Jayaseelan (2003) "The genesis of syntactic categories and parametric variation," in H.-J. Yoon (ed.) *Generative Grammar in a Broader Perspective: Proceedings of the 4th GLOW in Asia 2003*, Hankook, Seoul.

Bader, M. and J. Häussler (2010) "Toward a model of grammaticality judgments," *Journal of Linguistics*, 46, 273-330.

Baker, M.C. (1996) *The Polysynthesis Parameter*, Oxford University Press, New York.

Baltin, M. (1995) "Floating Quantifiers, PRO, and Predication," *Linguistic Inquiry*, 26, 199-248.

Biberauer, T. (ed.) (2008) *The Limits of Syntactic Variation*, John Benjamins, Amsterdam.

²⁴ For micro-comparative work on other families, including outside Indo-European, see various papers in Cinque and Kayne (2005).

²⁵ My own work on antisymmetry can be interpreted as an attempt to reach explanatory adequacy with respect to a range of macro-comparative questions - cf. Kayne (1994; 2003; 2011) - also Kayne (2008a) on deriving the existence of the verb-noun distinction - on which, cf. Aldridge (2009) and Koch and Matthewson (2009).

- Bosque, I. and V. Demonte (1999) *Gramática descriptiva de la lengua española* (3 volumes), Espasa, Madrid.
- Brillman, R. (2011) "Overt Obligations and Covert Desires," ms., New York University.
- Burzio, L. (1986) *Italian Syntax. A Government-Binding Approach*, Reidel, Dordrecht.
- Cardinaletti, A. and M. Starke (1999) "The Typology of Structural Deficiency: A Case Study of the Three Classes of Pronouns," in H. van Riemsdijk (ed.) *Clitics in the Languages of Europe*, Mouton de Gruyter, Berlin, 145-233.
- Cattaneo, A. (2009) *It Is All About Clitics: The Case of a Northern Italian Dialect Like Bellinzonese*, Doctoral dissertation, New York University.
- Chierchia, G. (1998) "Reference to Kinds across Languages," *Natural Language Semantics*, 6, 339-405.
- Chomsky, N. (1957) *Syntactic Structures*, Mouton, The Hague.
- Chomsky, N. (1965) *Aspects of the Theory of Syntax*, The MIT Press, Cambridge, Mass.
- Chomsky, N. (1970) "Remarks on Nominalization," in R.A. Jacobs and P.S. Rosenbaum (eds.) *Readings in English Transformational Grammar*, Ginn, Waltham, 184-221.
- Chomsky, N. (2000) "Minimalist Inquiries: The Framework," in R. Martin, D. Michaels and J. Uriagereka (eds.) *Step by Step: Essays in Minimalist Syntax in Honor of Howard Lasnik*, The MIT Press, Cambridge, Mass., 89-155.
- Chomsky, N. (2004) "Beyond Explanatory Adequacy," in A. Belletti (ed.) *Structures and Beyond – The Cartography of Syntactic Structure*, Vol 3, Oxford University Press.
- Cinque, G. (1999) *Adverbs and Functional Heads. A Cross-Linguistic Perspective*, Oxford University Press, New York.
- Cinque, G. and R.S. Kayne (eds.) (2005) *The Oxford Handbook of Comparative Syntax*, Oxford University Press, New York.
- Culicover, P. (1971) *Syntactic and Semantic Investigations*, Doctoral diss., M.I.T., Cambridge, Mass.
- Déchaine, R.-M. and M. Wiltschko (2002) "Decomposing Pronouns," *Linguistic Inquiry*, 33, 409-442.
- Dryer, M. (1992) "The Greenbergian Word Order Correlations," *Language* 68, 81-138.
- Dunn, M., S.J. Greenhill, S.C. Levinson and R.D. Gray (2011) "Evolved structure of language shows lineage-specific trends in word-order universals," *Nature*,
- Greenberg, J.H. (1966) "Some Universals of Grammar with Particular Reference to the Order of Meaningful Elements," in J.H. Greenberg (ed.) *Universals of Language*, second edition, The MIT Press, Cambridge, Mass., 73-113.
- Grevisse, M. (1993) *Le bon usage* (thirteenth edition, by André Goosse), Duculot, Paris.
- Gross, M. (1968) *Grammaire transformationnelle du français. Syntaxe du verbe*, Larousse, Paris.
- Gross, M. (1975) *Méthodes en syntaxe*, Hermann, Paris.
- Hale, K. and S.J. Keyser (1993) "On Argument Structure and the Lexical Expression of Syntactic Relations," in K. Hale and S.J. Keyser (eds.) *The View from Building 20. Essays in Linguistics in Honor of Sylvain Bromberger*, The MIT Press, Cambridge, Mass., 53-109.
- Hale, K. and S.J. Keyser (2002) *Prolegomenon to a Theory of Argument Structure*, The MIT Press, Cambridge, Mass.
- Harves, S. (2008) "Intensional transitives and silent HAVE: Distinguishing between *Want* and *Need*," in N. Abner and J. Bishop (eds.) *Proceedings of the 27th West Coast Conference on Formal Linguistics*, Cascadilla Press, Somerville, MA, 211-219.
- Harves, S. and R.S. Kayne (2012) "Having *Need* and Needing *Have*", *Linguistic Inquiry*,
- Haspelmath, M. (2007) "Pre-established categories don't exist —consequences for language description and typology," *Linguistic Typology*, 11,
- Hawkins, J.A. (1983) *Word Order Universals*, Academic Press, San Diego.

- Hornstein, N. (1999) "Movement and Control," *Linguistic Inquiry*, 30, 69-96.
- Hornstein, N. (2001) *Move! A Minimalist Theory of Construal*, Blackwell, Malden, Mass. and Oxford.
- Hualde, J.I. and J. Ortiz de Urbina (2003) *A Grammar of Basque*, Mouton de Gruyter, Berlin.
- Huddleston, R. and G.K. Pullum (eds.) (2002) *The Cambridge Grammar of the English Language*, Cambridge University Press, Cambridge, United Kingdom.
- Jespersen, O. (1970-1974) *A Modern English Grammar on Historical Principles*, George Allen & Unwin, London and Ejnar Munksgaard, Copenhagen.
- Julien, M. (2002) *Syntactic Heads and Word Formation*, Oxford University Press, New York.
- Kayne, R.S. (1989) "Null Subjects and Clitic Climbing", in O. Jaeggli and K. Safir (1989), 239-261 (reprinted in Kayne 2000).
- Kayne, R.S. (1991) "Romance Clitics, Verb Movement and PRO," *Linguistic Inquiry*, 22, 647-686 (reprinted in Kayne 2000).
- Kayne, R.S. (1992) "Italian Negative Infinitival Imperatives and Clitic Climbing", in L. Tasmowski and A. Zribi-Hertz (eds.) *Hommages à Nicolas Ruwet*, Communication & Cognition, Ghent, 300-312 (reprinted in Kayne 2000).
- Kayne, R.S. (1993) "Toward a Modular Theory of Auxiliary Selection," *Studia Linguistica*, 47:3-31 (reprinted in Kayne 2000).
- Kayne, R.S. (1994) *The Antisymmetry of Syntax*, The MIT Press, Cambridge, Mass.
- Kayne, R.S. (1996) "Microparametric Syntax. Some Introductory Remarks" in J.R. Black and V. Motapanyane, eds., *Microparametric Syntax and Dialect Variation*, Benjamins, Amsterdam, ix-xviii (reprinted in Kayne 2000).
- Kayne, R.S. (2000) *Parameters and Universals*, Oxford University Press, New York.
- 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. (2003) "Silent Years, Silent Hours", in L.-O. Delsing et al. (eds.) *Grammar in Focus. Festschrift for Christer Platzack. Volume 2*, Wallin and Dalholm, Lund, 209-226 (reprinted in Kayne 2005).
- Kayne, R.S. (2003) "Antisymmetry and Japanese", *English Linguistics*, 20, 1-40 (reprinted in Kayne 2005).
- Kayne, R.S. (2005) *Movement and Silence*, Oxford University Press, New York.
- Kayne, R.S. (2006) "On Parameters and on Principles of Pronunciation", in H. Broekhuis, N. Corver, R. Huybregts, U. Kleinhenz and J. Koster (eds.) *Organizing Grammar. Linguistic Studies in Honor of Henk van Riemsdijk*, Mouton de Gruyter, Berlin, 289-299 (reprinted in Kayne 2010).
- Kayne, R.S. (2008a) "Antisymmetry and the Lexicon," *Linguistic Variation Yearbook*, 8, 1-31 (also in A.M. di Sciullo and C. Boeckx (eds.) *The Biolinguistic Enterprise: New Perspectives on the Evolution and Nature of the Human Language Faculty*, Oxford University Press, London, 329-353 (2011)) (reprinted in Kayne 2010).
- Kayne, R.S. (2008b) "Some Preliminary Comparative Remarks on French and Italian Definite Articles", 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 (reprinted in Kayne 2010).
- Kayne, R.S. (2009) "A Note on Auxiliary Alternations and Silent Causation", in L. Baronian and F. Martineau (eds.) *Le français d'un continent à l'autre. Mélanges offerts à Yves Charles Morin*, Presses de l'Université Laval, Québec, 211-235 (reprinted in Kayne 2010).
- Kayne, R.S. (2010) *Comparisons and Contrasts*, 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.
- 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 *Inversion in Romance*, A. Hulk and J.-Y. Pollock (eds.), Oxford University Press, New York, 107-162 (reprinted in Kayne (2005)).
- Koch, K. and L. Matthewson (2009) "The lexical category debate in Salish and its relevance for Tagalog," *Theoretical Linguistics* 35, 125-137.
- Koopman, H. and A. Szabolcsi (2000) *Verbal Complexes*, The MIT Press, Cambridge, Mass.
- Longobardi, G. (1994) "Reference and proper names," *Linguistic Inquiry* 25, 609-665.
- Longobardi, G. and C. Guardiano (2009) "Evidence for Syntax as a Signal of Historical Relatedness," *Lingua*, 119, 11, 1679-1706.
- Martinon, P. (1927) *Comment on parle en français*, Larousse, Paris.
- O'Neil, J. (1995) "Out of Control," in J.N. Beckman (ed.) *Proceedings of NELS 25*, GLSA, University of Massachusetts, Amherst, 361-371.
- O'Neil, J. (1997) *Means of Control: Deriving the Properties of PRO in the Minimalist Program*, Ph.D dissertation, Harvard University.
- Perlmutter, D.M. (1989) "Multiattachment and the Unaccusative Hypothesis: The Perfect Auxiliary in Italian," *Probus*, 1, 63-119.
- Pesetsky, D. (1995) *Zero Syntax. Experiencers and Cascades*, The MIT Press, Cambridge, Mass.
- Phillips, C. (2009) "Should we impeach armchair linguists?," in S. Iwasaki (ed.), *Japanese/Korean Linguistics 17*. CSLI Publications. (Special section of papers from a workshop on 'Progress in Generative Grammar')
- Phillips, C. and H. Lasnik (2003) "Linguistics and Empirical Evidence. Reply to Edelman and Christensen," *Trends in Cognitive Sciences*, 7, 61-62.
- Poletto, C. (2000) *The Higher Functional Field in the Northern Italian Dialects*, Oxford University Press, New York.
- Pollock, J.-Y. (1989) "Verb Movement, Universal Grammar, and the Structure of IP," *Linguistic Inquiry*, 20, 365-424.
- Renzi, L. (G. Salvi (and A. Cardinaletti)) (1988-1995) *Grande grammatica italiana di consultazione* (3 volumes), Il Mulino, Bologna.
- Renzi, L. and L. Vanelli (1983) "I pronomi soggetto in alcune varietà romanze," in *Scritti linguistici in onore di Giovan Battista Pellegrini*, Pacini, Pisa, 121-145.
- Rizzi, L. (1982) *Issues in Italian syntax*, Foris, Dordrecht.
- Rodríguez-Mondoñedo, M. (2007) *The Syntax of Objects: Agree and Differential Object Marking*, Doctoral dissertation, University of Connecticut, Storrs, Ct.
- Rooryck, J. (2003) "The morphosyntactic structure of articles and pronouns in Dutch," in J. Koster and H. van Riemsdijk (eds.) *Germania et alia. A linguistic webschrift for Hans den Besten*, <http://odur.let.rug.nl/~koster/DenBesten/contents.htm>.
- Solà, J., M.-R. Lloret, J. Mascaró and M.P. Saldanya (2002) *Gramàtica del català contemporani*, Empúries, Barcelona.
- Sprouse, J. (2011) "A Test of the Cognitive Assumptions of Magnitude Estimation: Commutativity does not Hold for Acceptability Judgments," *Language*, 87, 274-288.
- Zanuttini, R. (1997) *Negation and Clausal Structure. A Comparative Study of Romance Languages*, Oxford University Press, New York.