

Microparametric syntax

Some introductory remarks

Richard S. Kayne

 <https://doi.org/10.1075/cilt.139.01kay>

Pages ix–xviii of

Microparametric Syntax and Dialect Variation

Edited by James R. Black and Virginia Motapanyane

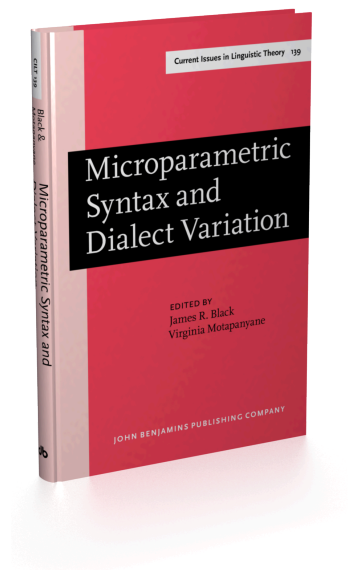
[*Current Issues in Linguistic Theory*, 139]

1996. xviii, 269 pp.

© John Benjamins Publishing Company

This electronic file may not be altered in any way. For any reuse of this material written permission should be obtained from the publishers or through the Copyright Clearance Center (for USA: www.copyright.com).

For further information, please contact rights@benjamins.nl or consult our website at benjamins.com/rights



MICROPARAMETRIC SYNTAX: SOME INTRODUCTORY REMARKS

RICHARD S. KAYNE

Graduate Center, City University of New York

Comparative syntax can be thought of as that facet of syntactic theory directly concerned with the question of how best to characterize the properties of human languages that are not universal. Put another way, comparative syntax directly addresses the question of how best to understand the notion of parameter taken to underlie syntactic variation.

The study of differences among languages must obviously proceed in tandem with the study of what they have in common, i.e., with the study of the principles of Universal Grammar (UG) that interact with language specific parameters to yield observed variation. Similarly, there is every reason to believe that the search for universal syntactic principles cannot proceed without close attention being paid to syntactic variation.

At its most successful, comparative syntax simultaneously achieves two primary kinds of results: it accounts for observed clusterings of syntactic properties by showing that the several properties in question can all be traced back to a single relatively more abstract parameter setting. And it shows that that optimal parametric account depends on particular assumptions about the proper formulation or understanding of the principles of universal grammar. In the latter way, comparative syntax provides evidence bearing on questions which are not themselves comparative in nature.

My own work in comparative syntax was at first limited to problems arising from a comparison of French and English. I argued, for example, that the absence in French of the so-called Exceptional Case Marking (ECM) construction (*John considers Bill to have been mistaken*) need not, as Chomsky had thought, be seen as an irreducible difference between the two languages.¹ Rather, that French-English difference should be related to others involving prepositions and

¹Cf. Chomsky (1980, 1981) and Kayne (1981).

prepositional complementizers,² and ultimately be derived from an abstract difference in the governing properties of prepositions in the two languages.

If correct or largely correct, this clustering of properties (involving ECM constructions, *for* + lexical subject, preposition stranding and double object constructions) provides evidence in favor of a certain approach to ECM constructions (with an essential role played by an abstract prepositional head) and against various others (e.g., the S-bar deletion approach), and thereby tells us something about how UG is put together that we might not have discovered without doing this kind of comparative work.

In the early to mid-eighties, it became apparent to me that a direct comparison of French and English raised difficult problems to a greater extent than direct comparison of French and Italian. In essence, in searching for clusters of properties, one must make decisions about what syntactic differences can plausibly be linked to what other syntactic differences. To a certain extent one is guided by one's knowledge of syntax in general and by the theory within the framework of which one is working. Such general considerations do place limits on the set of hypotheses one takes seriously, but typically the set of plausible linkings remains larger than one would like. The size of that set will of course be affected by the number of syntactic differences there are between the two languages in question. The more there are to begin with, the harder it will be, all other things being equal, to figure out the correct linkings.

A related point can be made by considering the question of how one goes about testing one's comparative syntax hypotheses. Any proposal of the form 'These two (or three...) differences between the languages in question are related to one another' can in principle be tested indirectly by examining the theoretical consequences of the hypotheses about parameters and about universal principles that flow from the original claim concerning the related differences. But there is in addition a more direct way of testing such a claim, and that is to examine other languages to see if the particular properties in question actually do systematically cluster together. In pursuing this kind of examination, one finds that hypotheses concerning French vs. English lead very directly to questions concerning both other Romance languages and other Germanic languages. (Languages further afield can sometimes be relevant, but they can also be too different—for example, a hypothesis concerning past participles cannot be tested in any direct manner in a language that has no past participles.) Hypotheses concerning French vs. Italian often do not immediately lead beyond the Romance

²A related proposal concerning double object constructions is given in Kayne (1983). The absence of double object constructions in French and Italian is not expected from the perspective of Collins & Thráinsson (1993), whose analysis lacks the crucial abstract preposition.

languages: in this sense, the hypothesis testing task generated by French-Italian comparison may be more manageable than the one generated by French-English comparison.

This advantage of French-Italian over French-English comparative work led me to concentrate on the former pair. I attempted, for example, to relate certain differences between French and Italian past participle agreement to other aspects of their syntax, in particular to a difference between them concerning passives of causatives, and to another concerning inversion and null subjects.³

Although French and Italian are relatively similar syntactically, they still show a rather large number of syntactic differences, so that the task of deciding which pairs or sets of differences are significantly related to one another, and therefore to be thought of as being traceable back to a single parametric difference between the two languages is, even if somewhat easier than in the case of French-English, still a difficult one.

It is consequently natural to take into comparative account languages that are syntactically closer to French or Italian (or to each other) than French is to Italian. And comparative syntax hypotheses, including those originating with work on French and Italian, do turn out to be testable with great profit on the less well-known dialects of France and Italy,⁴ the study of which permits the discovery of clusterings of syntactic properties that otherwise would in all likelihood go unnoticed.

There is, for example, a strong correlation across these languages between the possibility of having (some) null subjects and the possibility of having clitic climbing out of an infinitival clause into the matrix (non-causative) clause; related to this is movement of a clitic across a pre-infinitival adverbial.⁵ If correct to a significant degree, this correlation supports decomposing clitic climbing into several steps, in the spirit of successive cyclicity. A decompositional approach receives additional support from the existence of 'clitic splitting', where two clitics originating as complements of the same infinitive can surface in two different positions. Clitic splitting in non-causatives had been thought not to exist in Romance, but it turns out that there are a number of little known Romance languages that do have it. It appears, however, to be limited to those Romance languages with clitic-infinitive order.⁶

³Cf. Kayne (1985).

⁴Also, Belgium, Quebec and Switzerland.

⁵Cf. Kayne (1989a).

⁶At least one variety of Milanese seems to allow split clitics despite being an infinitive-clitic language. This (yet to be understood) exception is probably correlated to the property of allowing a copy of the 'climbed' clitic to follow the embedded infinitive.

There is another correlation in Romance that involves the order between clitic and infinitive: a Romance language/dialect will allow the counterpart of English **John doesn't know if to go to the movies tonight* (with controlled PRO in the presence of *if*), if and only if it has the order infinitive-clitic.⁷ This correlation, particularly striking if one looks at little studied (from a syntactic point of view) null subject languages that have clitic-infinitive order (Sardinian, Occitan, Gardenese), appears to favor over other approaches an approach to PRO based on a modified version of Chomsky's (1986) analysis, and to support (a certain revision of) principles A and B of his binding theory.

Italian, although it almost invariably shows infinitive-clitic order, has an apparently anomalous pre-infinitival clitic in infinitival imperatives. This anomaly can be made sense of by taking advantage of a correlation that holds quite strongly across the dialects of Italy between pre-infinitival clitics in these imperatives and clitic climbing of the familiar sort. The analysis called for involves an abstract auxiliary to which to clitics can raise in the manner of clitic climbing.⁸

The study of Italian dialects also radically changes one's perception of Romance auxiliary selection. The picture and theory of auxiliary selection that one arrives at by studying the most widely spoken Romance languages must be considerably modified and enriched if one is to account for the remarkable diversity found in the dialects.⁹

Comparative work on the syntax of a large number of closely related languages can be thought of as a new research tool, one that is capable of providing results of an unusually fine-grained and particularly solid character.¹⁰ If it were possible to experiment on languages, a syntactician would construct an experiment of the following type: take a language, alter a single one of its observable syntactic properties, examine the result to see what, if any, other property has changed as a consequence of the original manipulation. If one has, interpret that result as indicating that it and the original property that was altered are linked to one another by some abstract parameter.

Although such experiments cannot be performed, I think that by examining pairs (and larger sets) of ever more closely related languages, one can begin to

⁷Cf. Kayne (1991).

⁸Cf. Kayne (1992).

⁹Cf. Kayne (1993).

¹⁰As illustrated in particular by the various articles in this volume, most of which treat Romance or Germanic languages. Johns' article on Inuttut and Cheng, Huang & Tang's article on Chinese demonstrate the importance of microparametric syntax for other language families. I make no attempt in these introductory remarks at a systematic survey of microparametric work.

approximate the results of such an experiment. To the extent that one can find languages that are syntactically extremely similar to one another, yet clearly distinguishable and readily examinable, one can hope to reach a point such that the number of observable differences is so small that one can virtually see one property covarying with another.¹¹

In addition to facilitating the accurate individuation of parameters and of the principles of Universal Grammar required to interact with them, the technique of examining a large number of very closely related languages promises to provide a broad understanding of parameters at their finest-grained (microparameters), i.e., to provide a handle on the question: what are the minimal units of syntactic variation?

Consider, for example, the phenomenon of past participle agreement. Study of the better known Romance languages shows past participle agreement with the subject in SPEC-IP in passives to be general, perhaps exceptionless. In active sentences, on the other hand, past participle agreement is found in French and Italian, and to some extent in Catalan, but not in Spanish or Portuguese. On the basis of these, one might postulate a parameter one setting of which allows past participle agreement in actives.

Yet consideration of lesser known Romance languages indicates that there must be parameters with finer-grained effects, to account for facts such as the following: some of these languages allow past participle agreement in both WH- and clitic constructions, some only in the latter. No Romance language/dialect, as far as I can see, has past participle agreement with WH-phrases but not with object clitics.¹²

Some allow past participle agreement with all direct object clitics, but some, while having it with third person clitics, prohibit it with first and second person clitics. Some allow past participle agreement with the partitive clitic, others do not. Of those that allow clitics to follow past participles in the auxiliary-past participle construction, some allow past participle agreement only when the clitic has moved up to the auxiliary, while others are freer. As far as I know, all Romance languages with past participle agreement in actives allow such agreement in at least some reflexive clitic constructions when the auxiliary is the equivalent of *be*. When there is a reflexive clitic in addition to an accusative clitic, some require agreement with the accusative, others do not. When the auxiliary is *have*, some prohibit agreement with the reflexive clitic (or its antecedent) completely, while others do not.

¹¹In the extreme case, one may find an isolated property distinguishing two very close dialects—cf. Henry's article in this volume.

¹²Cf. Kayne (1989b).

Our understanding of all of the above points will benefit from a closer look at even more of these languages/dialects. In many of these cases, it is not clear yet what the exact form of the relevant parameters will be, nor whether they will concern agreement *per se*, or whether they will more centrally involve properties of the pronouns/clitics, or of the auxiliaries, or of the participles, or some combination of these.

It seems reasonable to expect work in microparametric syntax to play a privileged role in the future in answering the more general question concerning the form that syntactic parameters may take.¹³ Chomsky's recent work, for example, suggests the possibility that all syntactic variation might be expressible in terms of strong/weak features on various functional heads;¹⁴ microparametric work will enable us to test this kind of hypothesis in a particularly interesting way.

In the preceding discussion, I have assumed that the enormous amount of syntactic variation that can be observed even within the set of Romance languages/dialects lends itself to insightful characterization in terms of the notion 'parameter' as it has developed over the past fifteen or twenty years. Alternatively put, we can take the study of microparametric variation to provide an ideal testing ground for the very hypothesis that syntactic variation can be reduced to a finite set of parameters (interacting with a set of universal principles).

Related to this is the question of how many irreducible syntactic parameters there really are. Again, work in microparametric syntax should be invaluable, and should begin to give us some sense of a lower bound for the number of parameters (which in turn will bear on questions of learnability/acquisition). It is also clear that the study of minimal syntactic variation is bound to provide crucial evidence bearing on questions of diachronic syntax (which involves the study of the minimally different stages in the evolution of the syntax of a language).

The question of the number of syntactic parameters leads in turn to the question of the number of syntactically distinct languages/dialects. To begin with, I take it for granted that there is no syntactically significant distinction to be drawn between 'language' and 'dialect' and no justification for neglecting the latter. Now it is often estimated that the number of languages presently in existence is 4000-5000.¹⁵ Such estimates must evaluate the contribution of Italy as one.

Yet Renzi and Vanelli (1983) showed that in Northern Italy alone one can

¹³The term 'micro-comparative' was used by Hellan & Christensen (1986). For discussion of (microparameters vs.) macroparameters, cf. Baker (1996).

¹⁴Cf. Chomsky (1995). In a general way, this seems compatible with the implications of the approach of Kayne (1994) to word order variation.

¹⁵For some discussion, cf. Comrie (1987:2-5) and Crystal (1987:284-285).

individuate at least 25 syntactically distinct languages/dialects solely by studying the syntax of subject clitics. More recently, I have had the privilege of participating in a Padua-based syntactic atlas/ (micro)comparative syntax project with Paola Benincà,¹⁶ Cecilia Poletto, and Laura Vanelli, on the basis of which it is evident that one can easily individuate at least 100 syntactically distinct languages/dialects in Northern Italy.¹⁷ A very conservative estimate would be that present-day Italy has at least 500 syntactically distinct languages/dialects. 500,000 would in consequence, I think, then be a very conservative extrapolation to the number of syntactically distinct languages/dialects in the world at present.

It is possible to arrive at a much more radical reevaluation based on the following question: can anyone think of another person with whom they agree 100% of the time on syntactic judgments (even counting only sharp disagreements)? Or, more precisely, are there any two people who have exactly the same syntactic judgments without exception?

By the nature of the question, it is not possible to give a positive answer, since one could never be sure that two people who seemed to agree with each other consistently would not disagree (sharply) on some judgment at some subsequent time. On the other hand, it is easy to think of many pairs of English speakers, for example, who do differ sharply on some set of judgments. For such pairs, the seemingly innocuous conclusion is that they do not speak exactly the same variety of English.

Now we know that there are distinct varieties of English—many syntactic differences have been discussed that distinguish American from British English.¹⁸ And various regional syntactic differences within the United States or within the United Kingdom are well known.¹⁹ But what if it turned out that for every single pair of English speakers (and similarly for other languages) one could find at least one clear syntactic difference?

My own experience in observing the syntax of English speakers, both linguists and non-linguists, makes me think that it is entirely likely that no two speakers of English have exactly the same syntactic judgments. In which case there must be many more varieties of English than is usually assumed. In fact, if it is true that no two English speakers have the same (syntactic) grammar,²⁰ then

¹⁶Cf. Benincà (1994).

¹⁷Cf. Poletto (1995).

¹⁸Cf., for example, Zandvoort (1965:343), Merat (1974), Johansson (1979) and Trudgill & Hannah (1994:56-82).

¹⁹Cf., for example, Klima (1964), Trudgill & Chambers (1991); also Henry (1995).

²⁰Here and elsewhere, I gloss over the distinction between language/dialect and grammar. For relevant discussion, cf. Chomsky (1995) on E-language vs. I-language.

the number of varieties of English/ distinct grammars of English must be at least as great as the number of native speakers of English. Extrapolating to the world at large, one would reach the conclusion that the number of syntactically distinct languages/dialects is at least as great as the number of individuals presently alive (i.e., more than 5 billion).

Adding in those languages/dialects which have existed but no longer exist, and those which will exist but do not yet exist, it becomes clear that the number of syntactically distinct (potential) human languages is substantially greater than 5 billion.

One might object at this point that many of these languages will be distinct from one another only to an insignificant degree. For example, two English speakers might have identical judgments everywhere except in particle constructions, and even there, the differences might readily lend themselves to being called 'tiny', especially if they had no effect on mutual comprehension. Yet such tiny differences may (or may not) be of substantial theoretical importance.²¹

What if it is really true that the commonly cited number of 4000-5000 should, for the purposes of our attempt to understand the human language faculty, be replaced by some number substantially greater than 5 billion?

It would of course be true that an exhaustive study of the syntax of the world's languages would be rather more arduous than is sometimes thought. (Nor will those linguists be comforted who admit that linguistic theorizing is important but who think that it should wait until all languages have been studied.) But if we set aside the unjustified and now entirely unrealistic idea that such an exhaustive study (which would of course be arbitrarily limited to those languages that happen to be spoken now and to a tiny number of extinct languages) is a necessary component of the linguistic enterprise, we can focus instead on a more important question: what is the significance of the number of possible human languages for the acquisition of syntax?

Under the assumption that acquisition proceeds by parameter setting, the child does not pick its language whole out of a set consisting of all possible languages. Rather, it sets individual (syntactic) parameters, the end result of which is (the syntactic component of) a grammar. If the number of possible languages were so large that the number of parameters the child had to set was unmanageable (i.e., not learnable in the amount of time available), there would indeed be a problem.

However, the number of independent binary-valued syntactic parameters needed to allow for 5 billion syntactically distinct grammars is only 33 (2 raised

²¹For an example of theoretically important variation within English particle constructions, cf. Emonds (1976:83-86); for recent discussion, cf. den Dikken (1995).

to the 33rd power is about 8.5 billion). Although we do not yet have a clear idea of the number of irreducible syntactic parameters, it seems likely that the number will turn out to be greater than 33. At the same time, although again there is a lot yet to be understood, it seems plausible that the child is capable of setting at least that many syntactic parameters.

If the number of independent parameters is somewhat larger, say 50, then the corresponding number of syntactically distinct grammars is somewhat more than one thousand trillion. If the parameters are 100 in manageable number, then the corresponding number of grammars is, innocuously, over one million trillion trillion (i.e., greater than 10 raised to the 30th power).

Alongside these numbers, the increase in numerical coverage due to work in microparametric syntax in recent years is quantitatively modest. Yet it may not be premature to speak of the beginnings of a qualitative improvement in our understanding of syntactic variation. Microparametric syntax is a powerful tool, whose growth is perhaps to be compared with the development of the earliest microscopes, that allows us to probe questions concerning the most primitive units of syntactic variation. And since the invariant principles of UG can hardly be understood in isolation from syntactic variation, this tool promises to provide invaluable evidence that will shape our understanding of those principles themselves.

REFERENCES

- Baker, Mark C. 1996. *The Polysynthesis Parameter*. Oxford & New York: Oxford Univ. Press.
- Benincà, Paola 1994. *La variazione sintattica. Studi di dialettologia romanza*. Bologna: Il Mulino.
- Chomsky, Noam. 1980. "On Binding". *Linguistic Inquiry* 11.1-46.
- . 1981. *Lectures on Government and Binding*. Dordrecht: Foris.
- . 1986. *Knowledge of Language*. New York: Praeger.
- . 1995. *The Minimalist Program*. Cambridge: MIT Press.
- Collins, Chris & Höskuldur Thráinsson. 1993. "Object Shift in Double Object Constructions and the Theory of Case". *Papers on Case & Agreement II. MIT Working Papers in Linguistics* 19, ed. by C. Phillips, 131-174. Cambridge, Mass: Dept. of Linguistics, MIT.
- Comrie, Bernard, ed. 1987. *The World's Major Languages*. New York & Oxford: Oxford University Press.
- Crystal, David, ed. 1987. *The Cambridge Encyclopedia of Language*. Cambridge: Cambridge University Press.
- Dikken, Marcel den. 1995. *Particles. On the Syntax of Verb-Particle, Triadic, and Causative Constructions*. New York & Oxford: Oxford University Press.
- Emonds, Joseph E. 1976. *A Transformational Approach to English Syntax. Root, Structure-Preserving and Local Transformations*. New York: Academic Press.
- Hellan, Lars & Kirsti K. Christensen, eds. 1986. *Topics in Scandinavian Syntax*.

- Dordrecht: D. Reidel.
- Henry, Alison. 1995. *Belfast English and Standard English. Dialect Variation and Parameter Setting*. New York & Oxford: Oxford University Press.
- Johansson, Stig. 1979. "American and British English Grammar: An Elicitation Experiment". *English Studies* 60,2.195-215.
- Kayne, Richard S. 1981. "On Certain Differences between French and English". *Linguistic Inquiry* 12.349-371.
- . 1983. "Le datif en français et en anglais". *Analyses grammaticales du français. Études publiées à l'occasion du 50e anniversaire de Carl Vikner. Revue Romane*. [Numéro spécial 24], ed. by M. Herslund, O. Mordrup & F. Sorensen, 86-98. English version in R. S. Kayne, 1984, *Connectedness and Binary Branching*. Dordrecht: Foris.
- . 1985. "L'accord du participe passé en français et en italien". *Modèles Linguistiques* VII. 73-90.
- . 1989a. "Null Subjects and Clitic Climbing". *The Null Subject Parameter*, ed. by Osvaldo Jaeggli & Ken Safir, 239-261. Dordrecht: D. Reidel.
- . 1989b. "Facets of Romance Past Participle Agreement". *Dialect Variation and the Theory of Grammar*, ed. by Paola Benincà, 85-103. Dordrecht: Foris.
- . 1991. "Romance Clitics, Verb Movement and PRO". *Linguistic Inquiry* 22.647-686.
- . 1992. "Italian Negative Infinitival Imperatives and Clitic Climbing". *Hommages à Nicolas Ruwet*, ed. by L. Tasmowski & Anne Zribi-Hertz, 300-312. Ghent: Communication & Cognition.
- . 1993. "Toward a Modular Theory of Auxiliary Selection". *Studia Linguistica* 47.3-31.
- . 1994. *The Antisymmetry of Syntax*. Cambridge: MIT Press.
- Klima, Edward S. 1964. "Relatedness between Grammatical Systems". *Language* 40.1-20. Reprinted in *Modern Studies in English. Readings in Transformational Grammar*, ed. by D.A. Reibel & S.A. Schane, 227-246. Englewood Cliffs, New Jersey: Prentice-Hall.
- Merat, Farokh 1974. *Une comparaison grammaticale et lexicale de l'anglais britannique et américain enseigné aux étrangers*. Thèse de Doctorat de 3e Cycle, Université de Paris VII.
- Poletto, Cecilia 1995. "Split AGR and Subject Clitics in the Northern Italian Dialects". Paper presented at the 18th GLOW [Generative Linguists of the Old World] Colloquium, *GLOW Newsletter* 34.46-47.
- Renzi, Lorenzo & Laura Vanelli. 1983. "I pronomi soggetto in alcune varietà romanze". *Scritti linguistici in onore di Giovan Battista Pellegrini*, 25-35. Pisa: Pacini.
- Trudgill, Peter & Jack K. Chambers, eds. 1991. *Dialects of English. Studies in Grammatical Variation*. London: Longman.
- & Jean Hannah. 1994. *International English. A Guide to Varieties of Standard English*, 3rd edition. London: Edward Arnold.
- Zandvoort, Reinard Willem. 1965. *A Handbook of English Grammar*, 3rd edition. London: Longmans.