

10 Variation and Syntactic Theory

ALISON HENRY

This chapter investigates the relationship of variation to (Chomskyan) syntactic theory. In contrast to sociolinguistics, where variation has been central, the study of variation has made much less impact, if any, on the development of syntactic theory. This chapter considers the reasons for this, suggests that variation needs to be integrated into syntactic theory, and proposes some means by which this might be achieved.

The central goal of syntactic theory has been to develop a theory of the representation of language in the mind/brain of individual speakers, whereas the goal of work on language variation within sociolinguistics has mainly been concerned with the understanding of how language operates in society. The data of syntactic theory have relied on the intuitions of native speakers, whereas sociolinguistic approaches study language as actually used. It is perhaps not surprising therefore that rather different perspectives have developed about the nature, and indeed the very existence, of variation.

In sociolinguistics, language is seen as inherently variable, and much work has been concerned with identifying the conditioning factors – both linguistic and social – that determine that variation. One might say that if language was not variable, there would be no sociolinguistics.

By contrast, the study of variation has generally been explicitly or implicitly excluded from work on syntactic theory. Chomsky (1965) proposed that the subject of study should be “the ideal speaker-hearer in a homogeneous speech community,” arguing that this idealization was justifiable unless it was the case that such a speaker could not learn language. Of course, idealization may be necessary in scientific endeavor, but it is important that such idealization should not fundamentally alter the nature of the object under study. If syntax is inherently variable, then studying it as if it were not will not advance understanding.

As Hudson (1997) notes of work on variation:

most of this work has fallen clearly within the sphere of sociolinguistics, with its special focus on the relationships between linguistic and social structures; very

little could be described as the study of language structure as such, and even less has had any influence on (synchronic) theories of language structure. Indeed, it is hard to think of a single example (until very recently) where statistical data on inherent variability has been used as evidence in discussion on language structure. (Hudson 1997: 73)

A number of aspects of work on syntactic theory and morphosyntax have indeed been contingent upon *lack* of variation. For example, Chomsky (1995) proposed an economy principle under which movement occurs only when it is forced to do so. Such a grammar explicitly excludes optionality. If something moves only if forced, it will be impossible in principle for there to be an internalized grammar in which any movement operation is optional. If the option not to move exists, movement will not take place, since it will not be forced to do so.

It is perhaps surprising that the body of work on language variation has not had more impact than it has on work on syntactic theory. One of the reasons that syntactic theory has not been confronted with the data of variation is that these data in general are collected in rather different ways, and with different goals, from those of syntactic theory. This, as we shall see in the next section, has meant that there has sometimes been a quite different understanding of what the facts are, with the research methods within syntactic theory tending not to lead to findings of variation.

1 The Nature of the Data

Work on syntactic theory and on language variation has on occasion been based on quite different raw data, with work on syntactic theory finding no variation, while that in sociolinguistics has found a considerable amount of variability. This is no doubt because the nature of the data collection mechanism can lead to quite different data being gathered. A clear example of this is in relation to agreement patterns in sentences with expletive *there*.

The study of such sentences has been central to the development of syntactic theory. In particular, syntacticians have sought to explain why, in sentences such as (1), the verb agrees with the Noun Phrase which follows it:

- (1) There are three books on the table

A major proposal of Minimalist Syntax – that there is a numeration, a list of words selected from the lexicon prior to the generation of a sentence – has its roots in the nature of expletive structures, and a proposal by Chomsky (1998) that feature movement does not imply movement of the overt Noun Phrase, is again closely tied to the nature of expletives, which require long-distance agreement between the verb and post-verbal subject. Thus, these structures have been very central in the development of the theory.

One striking feature of work on English expletive structures within syntactic theory has been that it has assumed the standard English structure, with agreement, to be the only possible one in English. Chomsky (1995: ch. 4) does note in a footnote that some speakers can say:

(2) There's three books on the table

as an alternative to

(3) There are three books on the table

but argues that *There's* is a low-level substitution for *There are* and that the construction without agreement is not productive, since, he claims, it does not occur in uncontracted form, in the past tense or in questions:

(4) *There is three books on the table

(5) *There was three books on the table

(6) *Is there three books on the table

Thus, the possibility of lack of agreement here has been largely excluded from consideration of these structures within syntactic theory.

While it may be the case for some speakers that, as Chomsky (1995) claims, the verb must agree with the post-verbal associate, studies from a variationist perspective on agreement in expletive structures have consistently shown that there is variation in agreement patterns, and indeed that the pattern without agreement is more common, even among standard speakers. Thus, Tagliamonte (1998), in a study of speakers in York, shows that non-agreement is almost categorical for her subjects in existentials. Indeed Sobin (1997) goes so far as to argue that the standard form with agreement is unnatural, an overlay on the natural non-agreeing form of a learned alternative which he calls a "virus."

What is clear is that agreement is obligatory for few speakers, yet much work on syntactic theory has been based on it being so, and none, as far as I am aware, on the need to account for variable agreement existing within the grammars of individual speakers, even though, if sociolinguistic work on expletive structures is representative of the general case, this is the dominant position in the population of English speakers at large. Thus, the question for syntacticians should be, not how there is agreement with a post-verbal noun-phrase, but how there is optional agreement.

Another central aspect of syntactic theory has been the null subject parameter (see, for example, Jaeggli and Safir 1989). Thus, it is generally claimed that English is a non-null subject language, with a requirement to have an overt subject in finite clauses, so that a sentence like (7) is ungrammatical (except where ellipsis is permitted, as an answer to a question such as "What does he do on Saturdays?"). This contrasts with languages like Spanish which allow apparently subjectless sentences, as the Spanish equivalent in (8) shows.

- (7) *Goes to the theatre
- (8) Va al teatro

However, study of spontaneous speech has led to the realization that English can at least under certain circumstances permit null subjects. Thus Cote's (1996) study of telephone conversations showed widespread use of null subjects, which were almost as frequent as overt pronouns in subject position.

It thus seems to be the case that English, at least under certain conditions, permits null subjects, something that has not really entered into the analysis of null arguments. Rizzi (1994), noting the existence of these null arguments, argues that they never occur in subordinate clauses, but spoken data show that this does occur, though less frequently than in matrix clauses.

While it is not surprising that different areas of linguistics have focused on different aspects of the constructions – one might not expect theoretical syntacticians to be particularly interested in how social factors impinge on the choice of forms with and without agreement or the possibility of a null subject – it is perhaps a matter of concern that the nature of the raw data is in question on such central issues. This seems to be a confirmation that the use purely of intuitions as linguistic data do not necessarily reflect what speakers do. There are perhaps two aspects to this. The first is that the use of intuitions in practice often means the intuitions of the linguists themselves, colleagues and students in higher education, which means that there is a strong bias towards the standard language. Second, the reported judgments of speakers are undoubtedly influenced by what they have been taught about grammar, and by considerations of the supposed “correctness” of standard forms. This is particularly likely to be the case because, in practice, sentences are most often presented in written form, on a blackboard or printed sheet, and the standard is used more or less exclusively in writing. Moreover, the technique does not work very well when working on non-standard varieties, whose speakers generally err on the side of the standard when giving judgments (for discussion of this, see Henry 1992, 1995). Criticism of the use of intuitions as linguistic data has a long history within linguistics (see Labov 1998 for an outline and discussion of this), with an extended treatment in Schütze's (1996) book. This is not to say that such intuitions do not have their uses, especially as the sparseness of data on the syntax of many constructions in spoken data, and the need to establish what cannot be said, as well as what can, mean that intuitions are a useful shortcut. But they can clearly indicate ungrammaticality of aspects of the language that are in fact wholly grammatical. And this has undoubtedly masked the variability present in language, and meant that it has not been a core issue in the development of syntactic theory.

However, why have findings of variation in sociolinguistic studies not impacted on syntactic theory? As we note in Wilson and Henry (1998), work on variation and on syntax has essentially gone on in parallel, undertaken by different practitioners, with different outlets for disseminating their results. There is no doubt a further reason, however. Syntactic theory has as its goal

the representation of language in the mind/brain of a speaker-hearer. This has not on the whole been the aim of variationist studies. Thus, there have not been clear findings presented that individual grammars – as distinct from “community” grammars – contain variability. However, the need to encompass variation within the theory has become clear in the study of historical linguistics, as we shall see in the next section.

2 Variation in a Historical Context

It is not surprising that when “production data” are considered, the existence of variation becomes clear. This has particularly occurred in looking at syntactic change, where in an historical context, the absence of native speakers means it is necessary to look at textual data. In periods of language change, the general picture is of alternating forms persisting over a period, followed by the use of the new form, rather than abrupt adoption of a new form.

This might have led to the conclusion that variability is present in individual grammars, even if unstable historically. However, this has not been the case. The period of alternation, however, is in general viewed, not as a period of variation, but as one of competing grammars, bidialectalism, or internal diglossia. It is suggested, then, that speakers do not have grammars including variability, but rather alternate between different grammars.

An important contributor to work in this area, Kroch (1994) considers the rise of the use of periphrastic *do* in English, resulting in the use of constructions like (10), (12), and (14), as distinct from (9), (11), and (13).

- (9) How great tribulations suffered the Holy Apostle?
- (10) How great tribulations did the Holy Apostle suffer?
- (11) ... which he perceiueth not
- (12) ... which he does not perceive
- (13) ... Queen Ester looked never with swich and eye.
- (14) ... Queen Ester never looked with such an eye.

He argues that the change is explained by the loss of raising of the verb from the verb phrase into I. According to syntactic theory, based on the work of Pollock (1988), languages differ according to whether or not the verb can move out of the verb phrase into I (the position normally occupied by auxiliaries) when no auxiliary is present, and this accounts for a number of differences between languages in relation to negation, inversion, and adverb placement.

Kroch shows that over a period, there is a shift towards the use of *do* instead of verb raising, with the frequency of use gradually increasing in various sentence types. The data are shown in table 10.1.

Table 10.1 Frequency of *do* by sentence type

Dates	Time years	Negatives				Affirmative questions					
		declarative		question		transitive		intransitive		wh-object	
		%	N	%	N	%	N	%	N	%	N
1400–1425	25	0.0	177	11.7	17	0.0	3	0.0	7	0.0	1
1426–1475	50	1.2	903	8.0	25	10.7	56	0.0	86	0.0	27
1476–1500	25	4.8	693	11.1	27	13.5	74	0.0	68	2.0	51
1501–1525	25	7.8	605	59.0	78	24.2	91	21.1	90	11.3	62
1526–1535	10	13.7	651	60.7	56	69.2	26	19.7	76	9.5	63
1536–1550	15	27.9	735	75.0	84	61.5	91	31.9	116	11.0	73

Source: Kroch (1994)

Kroch proposes that there is a “constant rate effect”, by which he means that the frequency of *do* changes at the same rate across different constructions, and argues that this is because the underlying mechanism – loss of verb movement to I – is the same.

There is a problem with this however. If there is a change in a parameter – the loss of V movement to I – then one would expect the frequency of use of the new structure to be the same across all sentence types. But that is clearly not the case, with the frequency differing between, for example, negative declaratives and negative questions, and between affirmative questions with transitive and intransitive verbs. While one might argue for there being an explanation for a difference between negatives and questions – with the latter involving verb movement beyond I to C – there is no reason whatever why the transitivity of the verb should have any effect on movement of the verb to I, according to syntactic theory. The latter would in fact predict an instantaneous shift for individual speakers, or if there was “grammar competition” at the individual level, similar frequencies across all constructions which depended on the setting of this parameter.

Kroch emphasizes that the change was not instantaneous, but rather involved the alternation of old and new forms over a considerable period of time. However he does not grasp the nettle and allow that variable grammars must be possible. Rather, he argues that there are two grammars in operation, in competition with one another (Kroch 1994):

The options in question . . . are not alternating realisations within a single grammar, like extraposed versus non-extraposed constituents. Rather they seem always to involve opposed grammatical choices not consistent with the postulation of a single unitary analysis. In the present case, for example, contemporary accounts of verb-movement to INFL all agree that it is forced by the morphosyntactic contents of functional heads and cannot be optional. Because the variants in

syntactic changes we have studied are not susceptible of integration into a single grammatical analysis, the variation does not stabilize and join the ranks of a language's syntactic alternations. Instead, the languages evolve further in such a way that one or the other variant becomes extinct. (Kroch 1994: 183)

At least in relation to morphological doublets, Kroch argues that the child can only learn a single form in the course of language acquisition. He says, "Speakers can learn one or the other form in the course of language acquisition, but not both" (1994: 185). According to Kroch another form may be acquired later as a borrowing, but in a different way from the core acquisition of the language. Thus, variation is seen as something that occurs at certain periods, but is not part of the true nature of syntax as such.

Note that there is a considerable difference between a person having two grammars, and a single grammar which admits optionality. There is, further, a difference between optionality which results from lexical choices, and optionality which offers the speaker a real choice in terms of syntactic operations. If we return to expletives, we can see that the possibilities of saying

(15) There are three books on the table

Or

(16) There's three books on the table

could be attributed to there being two different *theres*. *There* (1) would not check all the properties of *are*, leaving these to be checked by the associate *three books*; *there* (2) would check all the properties, so that the associate *three books* would have no role in agreement. On the contrary, there might be a single *there* with true optionality in agreement.

A problem with Kroch's competition analysis is that it does not allow for stable variation across long periods of time. In his discussion of Kroch's paper, Hudson (1997) argues that there are cases where variation has continued for a considerable period in the language. For example, he cites the case of word order in Greek, where the alternation between SVO and SOV found in Homeric Greek continues into the language of the present day. Similar variability appears to have existed in relation to agreement in expletives over an extended period.

Thus Kroch's analysis faces syntactic theory with variation data, but does not conclude that there can be true optionality, preferring instead an analysis where there are competing grammars. A problem of the "grammar competition" model as a model of synchronic variability in syntax is that variability is not in general restricted at any one time to a single construction, but rather occurs in a range of structures. Thus in Henry (1995), I show that within Belfast English, there is variability in relation to agreement patterns, word order in imperatives, inversion in embedded questions, and the use of the relative pronoun in subject contact relative clauses. By no means every speaker has variation in all of these, so that there is a range of possible grammars with

and without variation for a range of structures; if there is grammar competition, then it is between a wide range of grammars, not just two, and a better characterization seems to be that individual structures/parameter settings are variable, rather than that there are actually separate grammars.

3 Frequency and Syntactic Theory

A key feature of variation is its statistical property: it is not just the case that there are two or more alternative forms, but each occurs with a particular frequency. It is certainly the case that while syntactic theory has sometimes been amenable to encompassing optionality, it has never incorporated statistical properties of those alternations. Before we go on to look at those properties, and how and if they might be encompassed in a grammar, it will be useful to look at the historical development of syntactic theory, which has alternated between highly restrictive versions where it is difficult to see how optionality would be incorporated, and more flexible theories where it would be possible to envisage optionality.

Syntactic theory has, during its development, been, fortuitously, alternately more and less amenable to accommodating variation within the theory. Thus, the first syntactic frameworks (Chomsky 1957, 1965) viewed linguistic theory as for the most part a matter of prescribing rule formats. Language structure consisted of rules, consisting of a structural description and a structural change. The fact that more or less any rule was possible if it could be expressed in a given format, and that it was possible to envisage rules having some percentage of likelihood of applying, meant that it was particularly amenable to incorporation of variation, and indeed this was the period when this rule format was adopted and incorporated as “variable rules” into sociolinguistics.

After this, it became apparent that this format was not restrictive enough to make significant claims about natural language, and, with Government and Binding Theory (Chomsky 1981), came the claim that there was only a single rule – Move α – under which anything could in principle be moved anywhere. Its operation was constrained by a number of principles, such as subjacency, which restricted the distance that an element could move, and the empty category principle, which required that any element, including a trace left by movement, had to be properly governed. Clearly, under such a theory, there can be optionality: an element may move somewhere, but need not, as long as in both cases the principles of the theory are not violated. It is, however, more difficult to see where variability would attach, the principles being absolute and the single rule of Move α not being what is variable, but rather some of its individual manifestations.

Parameter theory developed out of Government and Binding Theory, and envisaged that languages differed from one another along certain fixed parameters, perhaps with binary values. As we point out in Wilson and Henry

(1998), parameter theory is in itself an acknowledgment of variation; though of highly constrained variation, and the question arises as to whether it is possible to analyze the wide variety of dialects and indeed idiolects in a system which seems more adapted to characterizing differences between “languages.”

Within the parameter-setting framework, studies began to be undertaken to a greater extent on non-standard dialects. Thus work by Benincà (1989), Brandi and Cordin (1989), Abraham and Bayer (1993) and Penner (1995) among others considered how the syntax of a range of dialects could be encompassed within the framework, that is whether the theory which had been developed to account for contrasts between different languages, could account for differences between dialects. But, with some exceptions, this work did not seek to encompass variation, but rather account for the structure of “dialects” that were considered homogeneous. Henry (1995), a study of Belfast English, does consider variability, at least in that variant realizations of the same construction are considered, and the implications for the theory of syntax dealt with. For example, there is optional fronting of the verb to C, the complementizer position, in imperatives.

- (17) You read that!
- (18) Read you that!

With both forms coexisting in the grammar of speakers, it is proposed therefore that there must be optionality available in the syntax, and that therefore C must be optionally strong – strength of features of a head determining whether an element is moved to that position – contrary to the general view in the theory that such optionality is not possible, movement only occurring if forced.

The Minimalist approach to syntax (Chomsky 1995) began with a recognition that the number of parameters was becoming so large as to be almost meaningless. It sought to reduce syntax back to basics and to establish how far the characteristics of human language were in accordance with the minimal requirements of a system linking sound and meaning. One can immediately see that the possibility of variation is further reduced – we have gone from a system emphasizing the differences between language varieties to one focusing on the highly constrained possibilities available. There has recently been a suggestion that certain rules can operate at a post-syntactic level, rather than in the syntax proper, and here there may be scope for variation to be included. However, it should be noted that variation is not seen only in peripheral stylistic aspects of language. Rather, it also appears in those core aspects that differentiate between languages.

We have seen that there has been considerable work on dialect variation, and some work taking into account optionality, but within core syntactic theory there has been little attempt to take frequency of variants into account. Where there are variants of a structure in use, it is often the case that they are used with different frequencies. An example is the use of non-agreement in existentials, mentioned above. Studies have consistently found that in spoken

English, the forms without agreement are more common than those with. While most of these studies have been done at a group, rather than an individual, level, it is clear that when it is found for example that one variant occurs 28 percent of the time, and the other 72 percent, this is not merely because 28 percent of the speakers use it all the time, and 72 percent never use it. Rather, we must assume that individual speakers have variable usage, and that part of their knowledge of language is that certain variants are more frequent than others.

The question arises as to whether this is a core part of linguistic competence, or something which is separate from the knowledge of grammar as such. While it is clear that it must be possible for a grammar to include variant realizations of different forms, it could be the case that the grammar allows these, but some other faculty determines their percentage use. On the other hand, it may be that such frequency is at the very core of the grammar.

What is clear is that frequency seems to be important in explaining language change, as seen in the work of Kroch and others. It has often been found that where there are two alternants, one gradually declines in frequency, until there is a stage where it is no longer used. Moreover, if change proceeds gradually as Kroch suggests, then a variable grammar must be able to be transmitted across generations in language acquisition. If this is the case, then grammars must be able to include “variable rules,” and the acquisition mechanism must be able to acquire them, including the statistical properties. If acquisition is relatively constrained – involving the setting of a small number of parametric options – then this suggests that the mechanism is as Valian (1990) suggests – the learning mechanism knows what the alternatives are, and evidence is weighted in favour of each alternative. Valian envisages that one alternative falls out of use, but if variation theory is correct, then in fact both variants may remain in use if each is used frequently enough, with the frequencies attached representing the amount of evidence the learner has had for each alternative.

4 The Implications of Syntactic Theory for Studying Variation

We have thus far concentrated on considering why syntactic theory needs to incorporate variation; but does variation need syntactic theory? That is, are we saying that syntax is variation, and that “anything goes” as far as syntactic structures are concerned? Do we need a syntactic theory? We argue in Wilson and Henry (1998) that the answer is yes. In particular, in order to understand how language changes, we need to be able to look at the interaction of the general structure of language, and the possible structures of human languages, with the variability that occurs when change is taking place. Thus, we argue that the use of inverted imperatives is disappearing, and that this is because of a conjunction of two factors – low frequency of use in the input data to language acquisition – a “variation” factor – and the fact that raising of the verb in one

particular structural type – imperatives – when verbs do not in general raise in English – makes the structure marked in terms of Universal Grammar. Low frequency in itself is not, as we shall see below, enough to predict change: rather there must be an interplay of frequency with linguistic factors.

Moreover, we need to understand the factors which can predispose the choice of variant in syntax. The factors predisposing the choice of one variant over another are, according to variation studies, many and varied. If these are to occur in grammars, and are to be learnable, one would expect them to be “natural kinds” in syntax. Thus one would not expect to find factors such as the phonological shape of words conditioning the occurrence of particular syntactic variants.

Within variationist studies, however, there has been little discussion of what type of factors can affect choice of variants, or of how the particular factors are chosen for analysis in any given case. Typically the factors chosen for entry into VARBRUL analysis appear without extensive discussion, and it is not clear how, apart from the intuitions of the researcher, these are arrived at, or whether there are any constraints on what can be a factor here. In acquisition, this makes the child’s search space extremely large, and ideally one would want to develop a theory of how language can vary. It might be found that it varies largely along the lines syntactic theory would predict, with variation between “parameter settings”; or it may be that it is restricted to this and some kind of syntactic natural classes.

There are some cases where the conditioning factors can be related to difference in the syntax predicted by syntactic theory. Let us look at the example of singular concord (Henry 1995, Montgomery 1997). In some varieties of English including Belfast English, the verb can apparently be singular while the subject is plural

- (19) The kids is out late
- (20) The kids are out late

Sociolinguistic work on this, primarily undertaken by Montgomery (1994, 1995) has shown that one major factor which influences use of the singular form is what he calls the “Subject type constraint”; in other words, the verb generally agrees with a pronominal subject, but not necessarily with other types of subjects. In sociolinguistic work, there does not appear to be a theory of what can be a conditioning factor. Thus, it would appear that, for example, “occurs after a word ending in –t” or “refers to a colour term,” or, perhaps more realistically, “occurs after a full noun phrase” could equally well be a conditioning factor as “pronominal” – nothing leads us to expect that there is anything special about pronouns. On the contrary, work in linguistic theory has shown that pronouns are more likely to trigger agreement, and be subject to particular constraints, cross-linguistically than full noun phrases; for example Koopman (1990) argues that pronouns must appear in a specifier position. Thus, the explanation of what can vary, and how, needs to look at work on syntactic theory.

5 Evidence for Variability in Core Syntax

If grammars are naturally variable, we would expect variation to appear in the early stages of children's grammars. On the other hand, if grammars were in some sense naturally invariant, then we would expect children to perhaps acquire a single grammar, only later adding another variant for stylistic or sociolinguistic reasons.

In a recent study of the acquisition of English in Belfast, we discovered that children not only acquired variable forms at an early stage, but also reflected the proportion in which the variants occurred in the input to which they were exposed. The following data are from (Henry et al. 1998).

As noted above, in Belfast English, there is a process known as "singular concord" (Henry 1995: ch. 2), under which subject-verb agreement is optional where the subject is a full noun phrase (rather than a pronoun); where there is no agreement, the verb shows up in the default third person singular form. Thus, there is alternation between forms like these:

(21) The books goes on the shelf

(22) The book go on the shelf

The adult pattern is generally to have singular concord occur less frequently than agreement, and the child adopts this in their grammar, as seen in table 10.2. The table shows, for all plural non-pronominal subjects, whether agreement occurred in the output of 2–4 year old children and their caregivers. An example of (–agr) is (23) and of (+agr) is (24):

Table 10.2 Agreement between children and caregivers: non-pronominal subjects

	Child		Caregivers	
	–agr	+agr	–agr	+agr
Stuart	3	33	2	17
Barbara	4	16	2	40
Conor	15	36	20	51
Michelle	0	25	2	22
Courtney	2	12	21	12
David	0	2	4	34
Rachel	0	4	3	37
Johnny	0	3	1	5
Total-	24	131	55	218
agreement	15%		20%	

Table 10.3 Agreement between children and caregivers: expletive *there*

	Child		Caregivers	
	-agr	+agr	-agr	+agr
Stuart	23	2	18	1
Barbara	14	0	24	4
Conor	30	0	29	0
Michelle	18	0	17	2
Courtney	33	3	25	1
David	5	0	32	0
Rachel	12	0	37	9
Johnny	2	1	2	0
Total-	137	6	184	17
agreement	96%		92%	

- (23) The toys is there
 (24) The toys are there

Although the occurrence of these structures is rather sparse, it is clear that the children can acquire variable use of the structure and use it in frequencies similar to those occurring in the input.

The pattern in "singular concord" sentences contrasts with agreement with the associate in sentences with expletive *there*, shown in table 10.3. An example of a sentence which is (-agr) is (25) and (+agr) is (26):

- (25) There was some flowers in the window
 (26) There were some flowers in the window

Here, we see a strong difference in pattern from the case with agreement with plurals in subject position. Agreement is much less frequent than non-agreement in the adult language. Again, this is the pattern the children also adopt. The children have learned the statistical distribution of forms at an early stage, apparently indicating that it is possible to acquire the statistical properties of syntactic structures as part of the acquisition process.

A similar pattern emerges with negative concord. Belfast English has variable use of negative concord: negative elements such as *no one*, *nothing no more* may or may not be licenced by a negative element *not* or *-n't*. Again, all children showed use of the more frequent form, and the frequency of use was similar to that in adult input, with negative concord occurring much less frequently than non-concord. Table 10.4 shows whether, in contexts where negative

Table 10.4 Use of negative concord by children and caregivers

	Child		Caregivers	
	+NC	-NC	+NC	-NC
Stuart	1	33	1	22
Barbara	9	11	8	39
Conor	3	37	21	58
Misha	1	27	5	68
Courtney	3	28	0	23
David	0	6	7	51
Rachel	0	4	0	28
Johnny	1	3	2	8
Total	18	149	44	297
%NC use	11%		13%	

concord is permitted, it occurred or did not occur. Thus a (+NC) sentence would be (27) and a (-NC) example would be (28):

(27) He didn't do nothing

(28) He did nothing

Note that the children appear capable of acquiring alternants with rather low frequencies. Thus the acquisition device, and the syntax acquired, must be frequency-sensitive in the way that studies of variability would lead us to expect.

6 Syntax, Variation, and Learnability

We have seen that the existence of variation, as commonly understood – that is, systematic variability between different ways of saying the same thing within the competence of a single speaker – has considerable implications for syntactic theory. However, these implications have scarcely been taken into account in the development of that theory, or in studies of language acquisition based on that theoretical model.

Minimalist syntax seeks to establish how good a fit the design features of natural language are for the minimal requirements of a system linking sound and meaning. The question arises as to why such a system should have variation – this simply seems to add complications, both in terms of the syntax itself, and of the learnability of the syntax. Thus, a learner will have to acquire

more than one form for some structures, and also learn to use each of the forms with a particular frequency. To see why this is in fact a good design feature, however, we must think about the actual circumstances of language acquisition. A child is generally acquiring a grammar from the output of a number of different speakers, whose grammars are probably not identical; in order to do this, the child's acquisition device must be able to incorporate variation. Thus, imagine that the child is faced with two grammars, one of which generates (29) and the other (30):

- (29) There are three books on the table
 (30) There is three books on the table

To function as a member of a community, a child must be able to acquire a grammar which generates both (see Henry 1998). And to ensure that the child's grammar is not altered by very rare occurrences, which may be speech errors or the language of outsiders who are occasional visitors, the acquisition device must be frequency-sensitive. Thus, the community grammar provides input to the child, and the child acquires a "community grammar." Perhaps this is a design specification for a grammatical system, and acquisition device, which enables the child not only to acquire a language, but to operate as a member of the community.

REFERENCES

- Abraham, W. and J. Bayer (eds.) (1993). *Dialectsyntax*. Opladen: Westdeutscher Verlag.
- Benincà, P. (1989). *Dialect Variation and the Theory of Grammar*. Dordrecht: Foris.
- Brandi, P. and P. Cordin (1989). Two Italian dialects and the Null Subject Parameter. In O. Jaeggli and K. Safir (eds.), *The Null subject parameter*. Dordrecht: Kluwer.
- Chomsky, N. (1957). *Syntactic Structures*. The Hague: Mouton.
- Chomsky, N. (1965). *Aspects of the Theory of Syntax*. Cambridge, MA: MIT Press.
- Chomsky, N. (1981). *Lectures on Government and Binding*. Dordrecht: Foris.
- Chomsky, N. (1995). *The Minimalist Program*. Cambridge, MA: MIT Press.
- Chomsky, N. (1998). Minimalist inquiries: The framework. *MIT Occasional Papers in Linguistics* 15.
- Cote, S. A. (1996). Grammatical and discourse properties of null arguments in English. Ph.D. dissertation, University of Pennsylvania.
- Henry, A. (1992). Infinitives in a *for-to* dialect. *Natural Language and Linguistic Theory* 10: 279–301.
- Henry, A. (1995). *Belfast English and Standard English: Dialect Variation and Parameter Setting*. New York: Oxford University Press.
- Henry, A. (1998). Dialect variation, optionality and the learnability

- guarantee. *Linguistica Atlantica* 21: 41–78.
- Henry, A., J. Wilson, C. Finlay and S. Harrington (1998). *Language Acquisition in Conditions of Variable Input*. Report to Economic and Social Research Council.
- Hudson, R. (1997). Inherent variability and linguistic theory. *Cognitive Linguistics* 8: 73–108.
- Jaeggli, O. and K. Safir (eds.) (1989). *The Null Subject Parameter*. Dordrecht: Kluwer.
- Koopman, H. (1990). The syntax of the verb-particle construction. MS UCLA.
- Kroch, A. (1994). Morphosyntactic variation. In K. Beals, J. Denton, R. Knippen, L. Melnar, H. Suzuki and E. Zeinfeld (eds.), *Papers from the 30th Regional Meeting of the Chicago Linguistic Society Vol 2: The Parasession on Variation in Linguistic Theory*.
- Labov, W. (1996). When intuitions fail. *CLS 32: Papers from the Parasession on Theory and Data in Linguistics* 32: 76–106.
- Labov, W. (1998). When intuitions fail. Paper presented at the Parasession on Theory and Data in Linguistics, Chicago, Chicago Linguistics Society.
- Montgomery, M. (1994). The evolution of verb concord in Scots. In A. Fenton and D. Macdonald (eds.), *Studies in Scots and Gaelic: Proceedings of the Third International Conference on the Languages of Scotland (81–95)*. Edinburgh: Cannongate Academic.
- Montgomery, M. (1995). The linguistic value of Ulster Emigrant Letters. *Ulster Folklife* 41: 26–41.
- Montgomery, M. (1997). A Tale of Two Georges. In J. Kallen (ed.), *Focus on Ireland*. Amsterdam: Benjamins.
- Penner, Z. (1995). *Topics in Swiss German Syntax*. Bern: Peter Lang.
- Pollock, J. Y. (1988). Verb movement, UG and the structure of IP. *Linguistic Inquiry* 20: 365–424.
- Rizzi, L. (1994). Early null subjects and root null subjects. In T. Hoekstra and B. Schwartz (eds.), *Language Acquisition Studies in Generative Grammar: papers in honour of Kenneth Wexler from the 1991 GLOW Workshops*. Amsterdam: Benjamins.
- Schütze, Carson T. (1996). *The Empirical Base of Linguistics: Grammaticality Judgments and Linguistic Methodology*. Chicago: University of Chicago Press.
- Sobin, N. (1997). Agreement, default rules and grammatical viruses. *Linguistic Inquiry* 28: 318–43.
- Tagliamonte, S. (1998). *Was/were* variation across the generations: View from the city of York. *Language Variation and Change* 10: 153–91.
- Valian, V. (1990). Null Subjects: a problem for parameter setting models of language acquisition. *Cognition* 35: 105–22.
- Wilson, J. and A. Henry (1998). Parameter setting in a socially realistic linguistics. *Language in Society* 27: 1–21.