4 Convergence and divergence in grammar

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1 Introduction

This chapter offers an overview of the most salient current frameworks for analysing processes of convergence and divergence cross-dialectally (including those which occur between standard languages and related dialects) at the grammatical level. It also develops the view expressed in Wilson and Henry (1998) and Kallen (this volume) that combining insights from various models can enhance our understanding of the mechanisms of linguistic variation and change. The paradigms in question are the so-called 'generative' programme of Chomsky (1995) and the 'variationist' approach of Labov (1994). The emphasis in the former on 'top-down' theories of language has led to its being described as an 'Internalist' framework that conceives of 'Grammar' as having no external existence. This perspective is, however, contested by variationists, who have developed a 'bottom-up' or 'Externalist' model which takes 'Grammar' to be a product which is primarily socio-cultural rather than biological.¹ Consequently, each framework operates distinctive methods of analysis and the object of study in typical investigations which rely on these models is also markedly different. Variationists, for example, emphasise the systematic recording and analysis of socially situated language samples with due regard for the so-called

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¹ The notions 'top-down' and 'bottom-up' are borrowed from language processing models where the former refers to the type of processing which relies on prior knowledge to predict or enhance the perceived event or message. The latter, on the other hand, is used in connection with perceptual processing which extracts information directly from the sensory signal (for example, voice quality). These terms are used metaphorically here to capture the difference between the internalist (largely theory-oriented) and externalist (largely data-oriented) models of language as either being a state of mind/brain wholly internal to the individual ('top-down') or a matter of the customs/conventions of (different) speech communities ('bottom-up') (cf. Pinker 1994: 184 *et passim*).

'observer's paradox' and the unreliability of speaker-judgements (cf. Bell 1984; Giles 1984; Labov 1975, 1996; Le Page 1997; and Trudgill 1986). This type of research often focuses on speakers of non-standard dialects who are in contact with others in their community using a standard variety with much greater social prestige.² A major task facing analysts operating within this model is to determine whether there is statistical evidence for 'horizontal'/'vertical' convergence or divergence that can be correlated to some degree with social variables. Quantitative analysis in this model is not, however, restricted to ascertaining the significance of the sociocultural correlates of inherent variability, since even the earliest studies engaged with linguistic issues *pur sang* such as ascertaining the probability of occurrence of grammatical constructions in certain linguistic environments (cf. Cedergren and Sankoff 1974; Labov 1969, 1972a, 1994; and Sankoff 1974). By contrast, advocates of the biolinguistic programme contend that such external (performance) evidence is 'irrelevant to linguistics' (Smith 1989: 180) – the goal of which is perceived within this paradigm to be the refinement of our understanding of the underlying rules and principles that constitute an individual's 'knowledge of language' or competence (cf. Chomsky 1976, 1986b; Labov 1972b: 260ff., 1975; Milroy 1984a, 1985, and 1996; and Wilson and Henry 1998). Given this objective, it has been expedient to assert that a suitable investigative tool is native-speaker introspection in an idealised environment. In practice, as we plan to demonstrate in section 2.2, this often means that the resultant analyses reflect the grammaticality judgements of the theorist who may be unaware of the considerable degree of syntactic variation which potentially exists within the same speech community (Milroy and Milroy 1997: 47).

Although there remain certain formal resonances between the generative and variationist paradigms, the methodological differences between the two approaches to grammar created a schism between them which persisted through most of the later twentieth century (cf. Cheshire 1987, 1999; Kroch 1989; Sankoff 1988; Hudson 1985, 1986, 1995, 1997; and Rickford 1988). In this regard, Wilson and Henry (1998: 2) note that 'there have been few real attempts to marry these seemingly divergent positions' and Meechan and Foley (1994: 63), likewise, suggest that theoretical syntacticians and sociolinguists 'rarely, if ever, cross paths'. Nevertheless, researchers have occasionally engaged with

² Cf. Hinskens (1998b); Milroy (1987: 118); Harris (1984, 1996). In addition, the reader should note that, despite the orientation of 'classic' variationist accounts, there have been relatively few (of the sort outlined here) which handle processes of convergence/divergence as well as might be expected. This is partly due to the prevailing view within this type of research that speech communities are isolated from a perceived standard which obtains outwith its confines, yet is, nevertheless, capable of exerting considerable normative influence. Exceptions to this would include the variationist research that has more recently been developed with reference to contact models by Britain (1997, 2002a); Gerritsen (1999); Hinskens (1996); Kerswill (1994); Schilling-Estes (2000); and Trudgill (1986, 1994) *inter alia*.

the notion that inherent variability that is quantifiable has the potential not only to assess but also to refine theoretical conceptions of linguistic structure.³ As we observe in sections 2.2–3.5 below, the possibility of utilising convergent/divergent grammatical data for just this purpose has gained momentum since the publication of Chomsky (1981b), which was the first attempt systematically to incorporate cross-linguistic, though not 'inherent', diversity within the paradigm.

2 Literature Review

For present purposes, studies in the literature review which follows are categorised according to their major orientation, ignoring the fact that there is an amount of overlap between approaches by certain authors. The survey is not intended to be an exhaustive one, nor will it be strictly chronological. Instead, we plan to focus on major themes relevant to the original research described in sections 3–3.5 and to the investigation of convergence and divergence in grammar more generally.

2.1 Sociolinguistic approaches to syntactic variation

Although variationist research was initially as focused on matters of morphosyntactic variability as it was on those relating to the lexical and phonological levels, the body of research on the latter outweighs that devoted to morphosyntactic matters.⁴ However, as Britain (2002a), Kallen and Kirk (2001), and Schilling-Estes (2000) confirm, researchers in this framework have increasingly begun to refocus on issues relating to syntactic variation and dialect divergence within a dialect contact model as originally articulated in Harris (1984) and (1996). Perhaps the most important signal of this volte-face was the publication in 1991 of a monograph devoted to accounts of grammatical variability edited by Peter Trudgill and Jack Chambers. This collection describes constructions typical of traditional dialects which diverge both vertically and horizontally in that newer, related varieties have innovated from them. As such, they present unusual data for the modelling of linguistic variation and change in the fields of generative linguistics, historical linguistics, and sociolinguistics. The volume also contains analyses from urban communities (Cheshire 1991a; and Eisikovits 1991a, in particular) which augment previous research extending the Labovian

³ Early examples of research with such an orientation can be seen in the collection of papers from a 1987 *CLS* Parasession on variation in linguistic theory edited by Beals *et al.* (1994).

⁴ Strictly speaking, we exclude here research on pidgin and creole varieties, such as Winford (1984), in which the relationship between morphosyntax and variability was always more central.

paradigm to processes of linguistic variability at the grammatical rather than the phonological levels.⁵

As noted in section 1, the methodological practices of this framework are distinctive and most investigations begin by specifying a finite set of theoretical assumptions – normally in the form of working hypotheses and often arising from prior knowledge of the speech community in question. A representative sample of speakers is identified and they are recorded under reasonably controlled conditions. Systematic analysis of a substantial quantity of the data which ensues is undertaken and the criteria which govern the description of the speech samples themselves are exacting. In the first place, the identification of tokens must be as specified by the 'Principle of Accountable Reporting', namely, the total number of occurrences and the potential occurrences, i.e. non-occurrences, in the variable environment must be noted (Labov *et al.* 1968: 70). In addition, the 'Synonymy Principle' presupposes that tokens which have been identified as variants are, indeed, equivocal with regard to referential meaning (i.e. 'alternate ways of saying "the same" thing' Labov (1972b: 118)). The final objective is to contrast speech samples with respect to the frequency of occurrence of each individual variant as a proportion of the number of occasions when it could have occurred without altering referential meaning. The resultant figures can then be used in a sociolinguistic analysis of the data to classify factors (internal and external) in the environment which affect the distribution of variants and with which individual variants can, therefore, be assumed tendentially to co-occur.⁶

There has been a tendency (particularly within those variationist studies conducted in North America such as Sells *et al.* 1996a,b) to overemphasise the internal constraints on morphosyntactic variation at the expense of external considerations, which is not the case with research within the model on phonological variability. Indeed, one might go so far as to suggest that our knowledge of the degree to which external factors, such as education or ethnicity, are salient to variation at the level of morphosyntax remains considerably less sophisticated as a result.

⁵ Investigations with this orientation include: Bayley and Pease-Alvarez (1996); Beals *et al.* (1994); Britain (1997, 1999, 2002a); Cedergren and Sankoff (1974); Cheshire (1982, 1985, 1987, 1998, 1999); Cornips (1994, 1996b, 1998a); Coveney (2000); Cukor-Avila and Bailey (1996); Dines (1980); Eisikovits (1991b); Kikai *et al.* (1987); King and Nadasdi (1996); Kroch and Small (1978); Labov (1969, 1972a); Lefebvre (1989); Lemieux (1987); Naro (1981); Policansky (1976, 1982); Romaine (1980a, 1980b, 1982, 1984a); Sankoff (1973, 1974); Sankoff and Vincent (1977); Seppänen (1999); Tagliamonte (1997, 1998); Tagliamonte and Hudson (1999); Tagliamonte and Poplack (1988); Tagliamonte and Smith (1999); and Weiner and Labov (1983).

⁶ This is an oversimplification of the method which will suffice for present purposes. Cf. Chambers (1995); Coulmas (1997: Parts I and II); Hudson (1996); Labov (1994); Milroy (1987); and Milroy and Milroy (1997).

As noted above, there has also been a more general reluctance to focus on morphosyntactic aspects of dialectal differences within this paradigm and a number of reasons have been cited as crucial in this regard. Those that have received most attention in the literature are: (i) the quantification of syntactic variation; and (ii) the indeterminacy of synonymy/functional equivalence. Both contribute to Labov's (1991: 277) assertion that 'Syntactic change is an elusive process as compared to sound change', though the latter became less of an issue as the model evolved during the 1990s, as we will demonstrate below.⁷ Observing phonological variants in a manner which is accountable to the data is relatively straightforward even when the social dialect corpus is of modest proportions since these are, by their nature, relatively frequently occurring. It is not difficult to meet Labov's (1966: 181) requirement of '10–20 instances' and many researchers have been able to base their analyses on the >30 tokens per variable per speaker prescription advocated by Guy (1974). The open-ended nature of syntax, by contrast, entails that systematic observations of linguistic and social variability within dialect grammars often produce very small numbers of tokens indeed. Consequently, this level of language is regularly perceived within the paradigm to be less accessible to both speech communities and linguistic analysis for the purpose of creating social indices. In fact, as table 4.1 indicates, there can be a considerable range in the frequency of variants available. Furthermore, the robustness of the data appears to depend as much on the type of variable being investigated as it does on the size of the corpus. Thus, while Corrigan (1997) records a greater number of restrictive relative clause tokens than do Tottie and Rey (1997) or Policansky (1982), the same corpus ($n = 52,000$ words) contains only 3 tokens of the 'Hot-News' *after* perfect which both Kallen (1991: 63–64), Kallen and Kirk (2001: 73), and Harris (1984: 317) also observe to be relatively infrequent.⁸

Despite the apparent paucity of tokens in some of the research cited in table 4.1, the distributional results which they reveal with respect to age, gender, and grammatical constraints, for example, suggest that the frequency question is not insoluble and that accessibility to robust data sets may not be paramount in certain cases – even when the social and linguistic restrictions operating on

⁷ Detailed accounts of (i) are available in: Britain (1999); Cedergren and Sankoff (1974); Cheshire (1998); Hudson (1986, 1996, 1997a, 1997b); Kroch (1994); Labov (1969, 1972a); Naro (1981); Sankoff (1973); Sankoff (1988); Sankoff and Labov (1979); Singh and Ford (1989); and Wilson and Henry (1998). A comprehensive overview of (ii) can be obtained from: Cheshire (1985, 1987, 1999); Coveney (2000); Dines (1980); Fasold (1991); Harris (1984, 1996); Jacobson (1985, 1989); Labov (1978, 1991, 1996); Lavandera (1978); Lefebvre (1989); Romaine (1980b, 1984b, 1984c); Weiner and Labov (1983); Winford (1996); and Wolfram (1975, 1991).

⁸ Examples of these variables from Corrigan (1997) would be: (i) Restrictive relative clauses, namely, 'Subject-Contact/Zero Relative': *The magistrate $\emptyset$ was to try him was an old soldier too*; 'TH-relative': *Matha Locklin that lived under the roof with Padgy Bug*; 'WH-relative': *Coulter handed back the bottle of water which Smyth placed on the shelf*; and (ii) 'Hot-News Perfect': *One of the farls was after breaking*.

Table 4.1 *Tokens of variable X systematically observed in nine sociolinguistic investigations of syntactic variation*^a

Investigation	Variable construction	N Tokens
Rickford <i>et al.</i> (1995: 102)	AS FAR AS is concerned/$\emptyset$ +NP/ Gerund Complement <i>As far as the white servants $\emptyset$, it isn't clear</i>	1,200+
Corrigan (1997: 337)	Restrictive Relative Clause <i>The magistrate $\emptyset$ was to try him was an old soldier too</i>	633
Tagliamonte and Hudson (1999: 147)	BE LIKE Quotative <i>and they're like, 'Come on, go and get dressed'</i>	199
Tottie and Rey (1997: 226)	Restrictive Relative Clause <i>We killed bears an' panthers an' things like that what was eating up the stock</i>	164
Feagin (1979: 128)	Aux+ Completive DONE +past participle <i>I may have done lost it</i>	161
Britain (1999: 199)	AS FAR AS is concerned/$\emptyset$ +NP/ Gerund Complement <i>There were divisions as far as what roles there might have been</i>	156
Policansky (1982: 43)	Restrictive Relative Clause <i>All the fellers that we used to play with lived on the other side of the road</i>	122
Kallen (1991: 66)	'Hot-News' AFTER Perfect <i>It's after getting very long</i>	114
Tagliamonte and Smith (1999: 8)	WERE Past Tense <i>She said I were going to remain home</i>	62

^a The reader should note that the studies in this table differ with respect to the size of corpora analysed. Thus, Britain (1999) relies on a 2 million word corpus, whereas in Corrigan (1997) it is a mere 52,000. In some cases (Rickford *et al.* 1995, for example) corpus size is not mentioned at all. In addition, while Tagliamonte and Hudson (1999: 158) expressly comment in their paper that they have observed 199 tokens of *be like* quotatives from a total quotative corpus of 1,277, the studies differ in the degree to which they are explicit about the total number of tokens from which variable X is drawn, and this should be borne in mind when evaluating the extent to which the investigations in table 4.1 are absolutely comparable – at least from a methodological perspective.

the variable are highly complex (cf. Romaine 1980b: 191–192). For instance, although the corpus of Tagliamonte and Smith (1999: 13), by their own admission, is ‘severely limited’ with regard to the number of *were* tokens that could be isolated, it, nevertheless, reveals a pattern for constructions such as *She were young too* for standard *She was young too* that conforms to ‘that reported for most vernaculars of English, that is, levelling of *was* rather than *were*’ (1999: 14), namely, divergence from standard English. Following on from Romaine’s (1980b) suggestion (based on findings such as these) that there should be no absolute blueprint with respect to numbers of tokens, Britain (1999) concurs. He suggests that this may well be because: (i) grammatical variables often show sharp rather than gradient patterning; and (ii) ‘grammatical variation is generally more socially diagnostic than phonological variation’ (1999: 204). Indeed, certain sociolinguistic accounts of syntactic variation, given the low frequency of tokens, have proceeded on the hypothesis that fewer occurrences may be required to uncover statistically significant grammatical patterning within speech communities, though it remains to be seen whether universal principles are involved here that correlate, somehow, with the nature of individual morphosyntactic variables. This approach is particularly successful when investigating ‘low-level’ morphological variation, since it rests on the assumption that, from a purely external, social perspective, syntax may well be unable to function as subtly as phonological variation can. Hence, the stratification of ‘low-level’ morphosyntactic variants, even with relatively few tokens, is generally sharp since the middle class and well educated, for instance, will be likely to show near-categorical usage of standard forms (cf. Britain 1999: 200–205; Corrigan 1997; Chambers 1995: 51 and 116; Romaine 1980b; Wolfram 1969: 120–121, 1991: 95).⁹

There are other, ‘higher-level’ morphosyntactic variables, however, where the frequency problem is compounded by issues relating to pragmatic and semantic conditioning. As we noted earlier, applying the ‘Principle of Synonymy’ to morphosyntactic data is problematic for reasons that we can only outline in the present context. Central to the issue is deciding precisely how the sociolinguistic variable is to be defined. There was a revision in its interpretation suggested by Labov (1969) which introduced the concept of the ‘variable rule’, later further refined in Cedergren and Sankoff (1974); and Sankoff and Labov (1979). It

⁹ We conjecture that it is, indeed, possible to distinguish between types of morphosyntactic variable (‘low level’ vs. ‘high level’), though this is an area with respect to convergence and divergence in grammar which is in need of further research. Variables that are termed ‘low level’ here refer to those that are either purely morphological or purely syntactic, such as the contrast between preterite variants in English dialects (*I come/came to York yesterday*) discussed by Cheshire (1994). ‘High-level’ variables (introduced below) are those which might be classified as operating at the interface of levels of the grammar (between syntax and semantics/pragmatics, say). A potential case in point would be the active/passive contrast discussed at length in Lavandera (1978); and Weiner and Labov (1983).

became an extension of the ‘optional rule’ construct which was recognised in the generative programme as a means of distinguishing non-‘categorical’ elements of the grammar. Such rules were neutral in that the choice of one variant over another had no impact on grammaticality and, since syntax was conceived of as autonomous, optional rules were, therefore, assumed to be immune to extra-linguistic factors. The ‘variable rule’ extended the original by recognising linguistic constraints which favoured/disfavoured the use of particular variants and the degree of variability could be further conditioned by social correlates.¹⁰ Despite the fact that these were originally constructed to accommodate copula usage in African American Vernacular English (AAVE), it remained controversial as to whether one could postulate a syntactic ‘variable rule’ within the Labovian paradigm. While Sankoff (1973); and Weiner and Labov (1983) contended that it was, Cheshire (1987); Dines (1980); Lavandera (1978); Romaine (1984b,c); Sankoff (1988); and Winford (1996) *inter alia*, argued that there were a number of issues which remained unresolved. The restriction inherent in the definition of a ‘variable rule’ that it be constrained by ‘sameness of meaning’ was particularly contentious. Labov (1972b: 118) originally suggested that synonymy should be defined narrowly as ‘having the same truth value’. Other scholars argued that this decontextualised view (akin to Chomsky’s autonomous theorem) was difficult to apply on the basis that certain morphosyntactic variants normally occur in at least some pragmatic contexts where their propositional content is not synonymous and where they are not functionally equivalent (cf. Jacobson 1989; Lefebvre 1989; Sankoff 1988; and Winford 1996). Lavandera (1978), for instance, asserts that such a definition of referentiality is too abstract in that the insistence on synonymy entails that in each case the alternating forms refer to the ‘same state of affairs’ (Weiner and Labov 1983: 82).¹¹ The dilemma can be illustrated by a brief examination of the ‘Hot-News’ *after* perfect mentioned earlier and illustrated again in (1) below, which is problematic on account of the fact that it is a ‘high-level’ variable conditioned by both syntactic and semantic/pragmatic constraints:

- (1) One of the farls [soda bread portion] **was after breaking**¹²
(Corrigan (1997: 160))

Since the structure often occurs in contexts like this one where recency or completion is being signalled (hence, the term ‘Hot-News’), one might postulate that the standard British English construction shown in (2) is a plausible variant:

¹⁰ Differences between the traditional generative view of the variable rule and the sociolinguistic version are articulated in Singh and Ford (1989).

¹¹ Cheshire *et al.* (this volume) address the ‘sameness of meaning’ problem as well as the fact that it is often very difficult to obtain sufficient numbers of tokens for a given case of syntactic variation (the editors).

¹² In this particular context, the speaker was referring to an event in the recent past, i.e. that a piece of the soda bread had just broken off while it was being cooked on a griddle.

(2) One of the farls **had just broken**

However, such an alternant would not be unequivocal. In fact, (2) violates the demand of strict synonymy and there is no absolute functional equivalence either since Kallen (1991: 62) has demonstrated that syntactically identical Irish-English perfective constructions to that represented by (1) can also be interpreted pragmatically as the universal perfect in variants such as (3) below:

(3) All the week **is after being** cold

In 'divergent dialect situations' (Winford 1996: 180) such as this one, it is not at all straightforward to make the necessary assumption that speakers of the dialects in question share a 'panlectal identity' with respect to their grammatical systems and, hence, diverge from one another only superficially (cf. Harris 1996: 32; Hinskens 1998b: 174 and 177; Winford 1984, 1993, and 1996). The number of reported cases of miscommunication between such speakers demonstrates the lack of mutual intelligibility and the degree of deep-seated structural divergence which may actually pertain (cf. Milroy 1984b). This has led to the suggestion that variants such as those exemplified in (1) and (2) above are exponents of underlyingly distinctive grammars (standard vs. dialect) which are clearly divergent.¹³

It has also been argued that other higher level morphosyntactic variants are similarly problematic with respect to synonymy (cf. Cheshire 1987). Meaning in such cases is frequently mutable (non-conventional) and as such is highly contingent on the context of the utterance in spontaneous speech. Consequently, it has been suggested that morphosyntactic variation of this type rarely serves to differentiate social groups because of its dependence on pragmatic and semantic conditioning. Given the distinction, therefore, between 'classic' phonological and morphosyntactic variables which can be adequately handled by traditional variationist techniques, there are strong arguments for either excluding higher level morphosyntactic variables like these from such analyses or for relying on different methods of data collection. Hence, Labov (1975) and Harris (1983) used elicitation techniques in the analysis of internal constraints operating on negative attraction and perfectivity in divergent English dialects. Although it might be argued that this methodology is reminiscent of that favoured within the generative paradigm, there are important differences. In the first place, experimental sociolinguistic research relies on prior knowledge of variability within the speech community gained by observational methods and it is on this basis that hypotheses are formulated and tested. Secondly, sociolinguists who use this approach, unlike their generativist peers, take account of phenomena such as: (i) the observer's paradox;

¹³ Lesley Milroy (p.c.) proposes that these outcomes are most likely when there is a historical language contact situation and this is corroborated by evidence from similar divergent dialects in Corrigan (1993, 1996, 1997, 2000); and Winford (1993, 1996).

(ii) speakers' attitudes towards stigmatised varieties; (iii) the repetition effect; (iv) the judging of syntactic constructions as ungrammatical simply on the basis of lexical items; and (v) the fact that written forms are unduly influenced by prescriptive educational practices (cf. Cheshire 1985, 1987, 1998, 1999; Cornips 1997, 2000; Coveney 2000; Harris 1983, 1984, 1996; Labov 1975; Milroy 1987; Silva-Corvalán 1994; Winford 1996 *inter alia* (see also the case study in section 3)).

2.2 Parametric approaches to syntactic variation

The biolinguistic programme sketched in section 1 conceives of Universal Grammar (UG) as a system of Principles and Parameters (P&P).¹⁴ The latter are integrated within various subsystems of UG (Binding, Case, and Government). Given its 'Internalist' perspective, the P&P model offers no straightforward definition of either language or dialect *per se* since these are attributes of speech communities rather than individuals. Hence, languages are viewed essentially as abstractions and 'variation', in P&P terms, refers primarily to differences between individual grammars rather than between or within languages/dialects. The generic principles of UG would not, solely, accommodate the variation which exists between languages, since they are underspecified. The latter is accounted for by the so-called parameters which permit generative accounts of the extent to which variation is possible and the manner in which it is constrained: (i) between languages; (ii) within the acquisition of the same language; and (iii) between different historical states of the same language (cf. Wilson and Henry 1998: 4–5). Therefore, it would not be unreasonable to infer that a variety which has most parameter settings in common with another will be syntactically closer to it than it will be to others in which the parameter settings are different (cf. Brannigan 1996: 25; and Wilson and Henry 1998: 12). Hence, where a variety 'x' comes to share parameter settings with a variety 'y' as a result of linguistic variation and change, one might conceive of them as converging. By the same token, in cases where 'x' and 'y' share very few settings then this would argue for them being grammatically divergent.¹⁵

¹⁴ For analyses of convergence/divergence in grammar within theoretical models not reviewed in this chapter like Cognitive Grammar (Langacker 1990, 1994; Hudson 1984, 1990, *inter alia*); Head-driven Phrase Structure Grammar (Pollard and Sag 1987, *inter alia*) and Lexical Functional Grammar (Bresnan 1995, *inter alia*), see Börjars *et al.* (1996); Börjars and Chapman (1998); Chapman (1995); and Hudson (1985, 1997a, 1997b).

¹⁵ Intralectal parametric variation at the level of morphosyntax is discussed in: Abraham and Bayer (1993); Belletti (1993); Belletti and Shlonsky (1995); Benincà (1989, 1994, 1996); Bernstein (1991); Brandi and Cordin (1989); Burzio (1986); Christensen and Taraldsen (1989); Elorudi (1998); Haegeman (1988, 1990, 1997); Henry (1992, 1994, 1995, 1996, 1997a, 1997b); Holmberg (1986); Jaeggli and Safir (1989); Kayne (1989a, 1989b, 1994); Landa and Franco (1996, 1998); McCloskey (1991, 1992); Muysken (1989); Platzack (1987); Sobin (1987); Suñer

A single abstract grammatical difference or parameter setting can be manifested in a number of constructions which are seemingly unrelated on the surface (like the problematic 'Hot-News' *after* vs. 'Have just' perfect case outlined in section 2.1).¹⁶ Hence, the classic *pro*-drop parameter is associated not only with the availability of null subjects in those languages which have a positive setting for the parameter ([+*pro*-drop] such as in Irish or Spanish) but also with the occurrence of: (i) post-verbal subjects (4); (ii) apparent violations of *that* trace effects (5); and (iii) a rich verbal morphology (4 and 5), illustrated in the Irish examples given below:

- (4) *pro* **Tógaim** bainne anois
 Ø take-PR-1SG(post-verbal subject) milk now
take milk now
 'I take milk now'
- (5) Cé dúirt tú a bposadh í?
 INTERR say-PAST- you-2SG REL marry-VN- her-3SG
 2SG 3SG
who said you that married her
 'Who did you say married her?'

In the discussion which follows, it will be suggested that it is possible for a single parameter setting, such as [+*pro*-drop] or [+perfective] (see section 3.4.1), to be associated with structural and social variation, irrespective of potential pragmatic incongruities. Indeed, by extension, the same would hold for the full range of syntactic variants attributed to one parameter (cf. Cornips 1994, 1998a). Parametric variation in this regard satisfies one criterion of the notion 'sociolinguistic variable' reviewed in section 2.1 in that the variants attributed to different parameter settings may be considered to be competing forms involved, for example, in processes of language change inducing convergence/divergence between varieties, although it does not share or even imply any sameness of cognitive meaning (cf. Cheshire 1987, 1999; and Winford 1996: 184 *inter alia*).

A distinction should be drawn at this point between the notions 'parametric variation' and what we would like to term 'discrete variation'. The former

and Lizardi (1995); Toribio (1993, 1996, 2000); and Trosterud (1989). The triggering experience of language contact settings has been accounted for using this model by: Corrigan (1993, 1997); De Graff (1997); Guilfoyle (1986); and Lightfoot (1988, 1991, 1999). Parametric variation in historical contexts is described in: Adams (1987); Henry (1997b); van Kemenade (1987, 1993); van Kemenade and Vincent (1997); Kroch and Taylor (1994); Lightfoot (1989, 1991, 1999); Pearce (1995); Pintzuk (1991, 1993); and Roberts (1985, 1993, 1997), *inter alia*.

¹⁶ In the Minimalist Framework of Chomsky (1995), parameters can be reinterpreted as features of functional categories, though this need not concern us here.

refers to that type of syntactic variation outlined immediately above, namely, differences in parameter settings between two languages. Discrete variation, by contrast, describes the object of investigation introduced in section 2.1, i.e. analysing and accounting for the preferential usage by working-class females in community x for English clauses in which subjects [+*pro-drop*] are deleted [-*pro-drop*] in informal contexts (cf. Haegeman 1990). In the latter type of analysis the researcher carefully discriminates all contexts in which the variable can be said to occur or not occur without regard for any associated syntactic phenomena that correlate with this variable cross-linguistically, such as the presence of postverbal subjects, rich verbal morphology, and so on.

However, as we noted in section 1, and as Kallen (this volume) also argues, most research within the generative framework takes account of related structural phenomena using the P&P apparatus but is preoccupied with such internal evidence, leading Trudgill and Chambers (1991: 295) to appeal for 'a more empirically based approach'. In this regard, they refer, for example, to one of the theoretical assumptions of Chomsky (1989) which is derived from the ungrammaticality in standard (American) English of *do*-support in declaratives such as (6) below.

- (6) He **did** burn it
[Ihalainen (1991: 148) – Wessex English]

The fact that the feature is robust in southwestern British vernaculars and has also been observed elsewhere (cf. Corrigan 1997; and Edwards *et al.* 1984) weakens the universality of Chomsky's position, reinforcing the view advocated in this chapter that formal syntax ignores an important resource for refining and assessing its theoretical models when it overlooks evidence from divergent traditional dialects such as these.¹⁷

In so far as empirical insights from divergent dialects are considered at all, it is often for the purpose of clinching a theoretical argument. Moreover, analyses – especially in the early research – are restricted to a narrow range of languages, most prominent of which is standard English (cf. Haegeman 1997: 15–16). Hence, Chomsky and Lasnik (1977) invoke an *ad hoc* *For-to* filter for distinguishing standard American English from divergent North American dialects and British Isles Englishes in which structures such as (7a–f) below are perfectly grammatical:¹⁸

¹⁷ See also: Corrigan (1993, 1997); Docherty *et al.* (1997: 276 and 308); Henry (1992, 1994, 1995, 1996, 1997a, 1997b); Hudson (1995); Milroy (1984a, 1984b, 1986, 1996); Milroy and Milroy (1997: 47); Labov (1975, 1996); and Sobin (1987).

¹⁸ Cf. Carroll (1983); Koster and May (1982); and Lightfoot (1979: 186). Accounts of the same phenomenon are offered in Corrigan (1997, 2003); and Henry (1992, 1995) which demonstrate the recent advances that have been made within P&P in accounting for vertical divergence.

- (7) a Mary wants **for to** leave
[Carroll (1983: 416) – Ottawa Valley English]
b Who did you try **for to** go to the church social with you?
[Chomsky and Lasnik (1977: 426) – Ozark English]
c **For to** tell her like that!
[Henry (1995: 83) – Belfast English]
d The brown mug was sent **for to** use it
[Corrigan (2003) – South Armagh English]
e He's come **for to** collect the rent
[Miller (1993: 130) – Scots]
f The firemen were putting on breathing apparatus **for to** go into the house
[Beal (1993: 200) – Tyneside and Northumbrian English]

Despite recent advances in the use of exemplification from dialects that diverge from standard English norms within the generative literature (particularly Henry (1995) *inter alia*),¹⁹ the theory-building orientation of the research continues to tolerate the analysis of data which is not sociolinguistically accountable in a variety of ways.²⁰

The practice can be illustrated by McCloskey (1992), who has proposed that selectional restrictions apply to certain predicates in Irish-English which account for the grammaticality contrasts in utterances like (8a–d), illustrating 'Embedded I(nflection)-to-C(omplementiser) Fronting' (I°-to-C°) in which the standard English *if/whether* complementiser is not phonologically expressed and the subject and auxiliary have been inverted from their usual embedded question [NP *subject*, I°] order.

- (8) a Johnny Matthews **asked** did he ate his supper
b *Johnny Matthews **knew** did he ate his supper
c Do you **know** why did he eat his supper?
d Johnny Matthews **didn't know** did he ate his supper

Since predicates like *ask*, (8a above), *inquire*, and *wonder* might be broadly described as eliciting information, McCloskey (1992) argues that they could be construed to function semantically as if they contained the interrogative operators of matrix questions which we might designate morphosyntactically as [+Q]. If this is how Irish-English speakers interpret this class of predicates,

¹⁹ The fact that Henry's (1995) treatment of Belfast English is a notable exception in this regard, can be gathered from her comment that 'it is important to check judgements . . . particularly to ensure that structures said to be ungrammatical have not in fact been so judged simply because they are non-standard' (1995: 12). See also Milroy (1996).

²⁰ For a fuller discussion of this theme, see Hale (1994); Klemola (1997); and Labov's distinction between 'Group A, the "social" group' and 'Group B, the "asocial" group' of linguists in Labov (1972a: 260ff.).

then it is expected that they would be treated syntactically as [+Q] and, therefore, be permitted to undergo I°-to-C° fronting just like any other interrogative form, hence the grammaticality of (8a). On the other hand, predicates such as *discover*, *establish*, *find out*, *see*, and *know* (8b) are not interpretable as requests for information and, therefore, must be marked morphosyntactically as [−Q]. Thus, they should be treated by Irish-English speakers in the same way that standard English speakers deal with both classes, namely, as embedded complements, the heads of which are filled by lexically selected COMPs blocking the V°-I° complex from fronting to C° which predicts the ungrammaticality of (8b). However, as the acceptability in Irish-English of (8c) and (8d) above suggest, these lexical restrictions are nullified when the [−Q] class appears as a complement to a [+Q] matrix interrogative (8c) and they are also improved when they are embedded under a [+NEG] root verb (8d) (McCloskey 1992b: 34; Corrigan 1997: 134).²¹

The divergence between standard English and Irish-English grammatical norms are crucial to McCloskey's refinement of Chomsky's (1986a: 6) 'Adjunction Prohibition', which is argued to be a universal condition on the categories to which adverbial phrases can be adjoined. To this end, McCloskey (1992: 38) claims that these contrasts are not just specific to Irish-English, but are common to English vernaculars more generally. It is also argued that the range of variation between the acceptance and rejection of embedded inversion with *know*-type predicates is highly constrained cross-dialectally. He proposes, for example, that acceptability among non-standard speakers varies between those who 'adamantly do not' accept inversion in the complement of this subset of verbs to those who will tolerate it but only 'under the right semantic and pragmatic conditions' (when interrogative/negative constructions are involved, for instance, as in (8c/d) cf. McCloskey 1992: 38). However, while these proposals presumably reflect McCloskey's own introspective judgements as a speaker of a particular northern variety of Irish-English,²² they can easily be countered by empirical evidence from other vernaculars from the same dialect region shown in (9):

- (9) a They used to burn a bit of paper to **see** was there a letter coming
[Corrigan (1997: 268) – South Armagh English]
b The police **found out** had the goods been stolen
[Henry (1995: 107) – Belfast English]

²¹ Although McCloskey (1992) does not make this suggestion, the possibility of V2 with the [−Q] class of predicates in this variety of Irish-English may be criterial on the WH- and NEG-criterion, respectively of Rizzi (1991).

²² The reader is not explicitly informed in the text, though this is not unusual within this framework, as Klemola (1997: 960) observes in connection with the data used by Lightfoot and Hornstein (1994).

In both cases, embedded inversion is grammatical even after the [—Q] subset of verbs which do not permit adverbial adjunction to their CP complements and in the absence of the important contextual factors. In other words, embedded inversion occurs in (9a and b) despite the fact that the verbs in question all belong to the *know* class, which, according to McCloskey (1992: 38), cannot be inverted in this way in positive, non-interrogative environments such as these. This suggests that the lexical restrictions cited by McCloskey (1992) may well not be universally constrained in the manner that he contends them to be, and that Irish-English and standard English diverge from one another in interesting ways that cannot be accounted for simply by recourse to the Adjunction Prohibition. Although the grammaticality judgements exemplified in (8a–d) above may be reliable for some speakers, the counter-examples in (9a and b) add further weight to Labov's (1996) proposals that intuitions – particularly at the grammatical level – may fail to be commensurate with observational data, even in those cases where variants are merely indicators rather than markers or stereotypes (cf. Bard *et al.* 1996; Chambers and Trudgill 1980: 84–85; Labov 1975, 1994: 78, 1996: 102; and Sobin 1987). Indeed, one might go so far as to say that the generalisations emerging from syntactic accounts such as McCloskey (1992) or Lightfoot and Hornstein (1994), which Klemola (1997) has been critical of on similar grounds, are not consistently successful in predicting the patterns of variation which the findings of sociolinguistic accounts of the same communities have revealed. By the same token, the outcomes of sociolinguistic investigations, while occasionally disconfirming the results obtained in purely syntactic accounts, are not used as effectively as they might be to examine, in any principled way, the extent to which their findings with respect to internal constraints, for example, may have a universal dimension. Their outcomes are too often expressed in language-specific terms and there is not enough attention paid to considerations of how dialect or sociolect 'x' is acquired.²³ While it is likely that a degree of the morphosyntactic variability which sociolinguists have found will remain immune to any such universal treatment, it is probable that certain patterns which they demonstrate to be either externally or internally constrained may be predictable from paying closer attention to cross-linguistic data and the evidence available to language acquirers.

In this way, the P&P model which underpins McCloskey (1992) offers a number of advantages to the treatment of convergence and divergence in grammar compared to standard variationist accounts such as those described in section 2.1, particularly when the framework is enhanced by Labov's caveat and

²³ While we are not aware of any sociolinguistic accounts of syntactic variability which take this approach, it has begun to emerge in more recent sociophonological accounts such as Foulkes *et al.* (1999); and Docherty *et al.* (2000); and is implicit in Labov (1989).

certain tenets of the latter. This is, principally, because variationist treatments often neglect the implications which their findings may have for current theories of syntax – although they surpass generative treatments in the methodological exactitude that they achieve regarding accountability to the data. Following the P&P assumption that grammar is an integrated, genetically endowed, system, it would not be unreasonable to expect (micro-) variation in one structure containing a CP projection, say, also to be reflected in the usage of similar constructions by a particular community of speakers. For instance, should evidence come to light of a relict English dialect in which the complementiser position in a finite clause can be doubly-filled, say, (*a man who that lay dead*),²⁴ one might reasonably hypothesise that the same may be true of its tenseless clauses, on account of the universal properties attributed to complementisers within the framework. Indeed, in more general terms, it is also likely that variation at one level of the grammar will, necessarily, have implications for other areas of the highly complex mechanism which is the human language faculty (cf. Docherty *et al.* 1997: 275; Hudson 1995: 1514; and Muysken 1995).

However, as Muysken (2000: 48–49) points out, for all its advantages, the P&P approach has yet to fully explain the extent to which languages and, indeed, dialects of the same language can vary so considerably. Moreover, as Corrigan (1997: 136) remarks, there is the additional problem that, although the concept of parameter is a useful device for describing language-particular properties and cross-linguistic differences, we would agree with Muysken (2000: 49) and Platzack (1996: 375) that the parameter concept itself is 'rather fuzzy', and most attempts to find constructions in different languages correlated by a particular value of a single parameter can be severely doubted'. These difficulties were recognised early in the development of the model and can be demonstrated by the fact that Irish, which we described earlier as [+*pro-drop*], lacks some of the well-known properties of such languages (McCloskey and Hale 1984: 487–488). Indeed, McCloskey (p.c.) has suggested that where Irish is concerned, parametric differences appear to be 'a matter of degree rather than reflections of binary on/off settings'.

Further research, such as that outlined in sections 3–3.5, in which the sociolinguistic and biolinguistic paradigms are employed in a 'mutually supportive' manner is, therefore, critical to improving our understanding of processes of

²⁴ This possibility was available, for example, in Old English:

Ure Drihten arædde anes ealdormannes dohtor, seo ðe læg dead
Our Lord RAISE-PAST an alderman's daughter, who that lay dead
'Our Lord brought to life an alderman's daughter who lay dead'

[AHP, VI, 176 in van Kemenade (1987: 224)]. See also Seppänen (1999), who describes the persistence of this doubly filled COMP strategy in Middle and Early Modern English.

convergence and divergence at the grammatical level (cf. Chomsky 1999: 34).²⁵ This is particularly pertinent in the light of Muysken's (1999b: 72 and 2000: 41–43) suggestion that the opposition between I-language and E-language phenomena is not, necessarily, watertight. He argues, for example, that the cognitive abilities which shape the I-language determine the constraints on forms found in the E-language, and that it is the norms created within E-language which make the I-language coherent. Investigations of this type should have greater explanatory and predictive force with regard to their outcomes than treatments of identical phenomena within the variationist paradigm, yet they rely on similar methodologies (including the quantification of distributions) which makes them accountable to the data in a variety of ways that is not true of conventional biolinguistic treatments relying solely on the introspective method. Indeed, as we hope to demonstrate in section 3, this interdisciplinary approach also indicates the manner in which systematic observation of variable data 'helps us to fix on what the constraints are that the syntactic derivations must respect' (Sells *et al.* 1996a: 624).²⁶

3 Parametric Convergence/Divergence and the Extra-linguistic Factors (Real) Time and Geographical Space: A Case Study of Limburg and its Environs

3.1 Introduction and research question

This case study of Limburg (the Netherlands) and the neighbouring dialects of Rhineland (Germany) relates the processes of syntactic convergence and divergence to the extra-linguistic factors 'real time' (change between 1885 and 1994) and 'geographical space' (cf. Cornips 1996a). Until 1815, the southern part of Limburg and the area around it in Belgium and Germany formed a political unit with relative linguistic homogeneity within the wider Dutch–German dialect

²⁵ Research with this orientation returns to the arguments of Labov (1969, 1975); and Kroch (1980) which suggested that insights from the variationist paradigm were valuable to the generative-introspective programme and would include: Cameron (1992); Cornips (1994, 1996a, 1997, 1998a, 1998b); Cornips and Hulk (1996, 1999); Corrigan (1993, 1996, 1997, 1998, 2000, and 2003); Sells *et al.* (1996a, 1996b); and Wilson and Henry (1998).

²⁶ In this way, our approach is somewhat reminiscent of the Optimality Theoretic account of negative inversion in AAVE recently proposed in Sells *et al.* (1996a). Their model takes 'grammar' to be a set of constraints which are ranked and views an 'optimal' derivation therein to be one in which lower- and higher-ranking constraints are equally satisfied. Variation between dialect grammars or, by extension, between different stages of the same language can be accounted for by permitting 'rerankings' to occur. In other words, the strength of certain constraints can weaken relative to others which were once lower ranking so that divergent optimal outputs can be achieved (across time and geographical space, for example).

continuum (cf. Hinskens 1996: 59–63). In 1839, Limburg was incorporated into the kingdom of the Netherlands. However, until 1867 it was in the ambivalent position of being a Dutch province and at the same time a member of the German federation. The linguistic consequence of the separation of Limburg in 1839 from Belgium and Germany was that the dialects which displayed a number of similarities at this juncture came under the influence of divergent languages, namely standard Dutch (SD) and German (SG). It is assumed that the creation of this new Dutch province has potentially significant implications for convergence/divergence phenomena at the grammatical level. In this chapter, however, we will confine our discussion to the following issues: (i) whether 'horizontal' convergences and/or divergences are related to 'vertical' convergences or divergences across a time-span of 100 years; (ii) if this research question can be answered affirmatively, how exactly is this relationship expressed?; (iii) whether internal structural factors interacting with external variables determine the processes of syntactic convergence and divergence and to what extent do they do so? (cf. Auer and Hinskens 1996).

In the case study exploring (i–iii) which follows in sections 3.2–3.5, it is argued that from a diachronic point of view a dialect and/or a standard language *x* and *y* are converging if, in the total (abstract) variation space allowed for by the human language capacity, *x* and *y* are closer or more alike than in a previous stage of both systems *x* and *y*. Consequently, it is claimed that any two varieties are converging with each other if they show a growing clustering of syntactic properties in the variation space. By the same token, if they are divergent then no such clustering will be attested. An important objective of the case study is also to illustrate exactly how the P&P framework can be harnessed to define variation space quite precisely (cf. Arends *et al.* 1995: 12). It will be suggested, for instance, that convergence/divergence at the grammatical level can be reduced to the number of parameter settings which varieties have in common.

3.2 The syntactic variant

As noted above, in this case study of Limburg Dutch (LD), we will explore the idea that variation space can, in fact, be defined by P&P.

Two types of so-called 'middle' construction will be our focus, namely, the adjunct middle and impersonal middle. The basic types are presented in (10a and b) below.²⁷ It is important to note that the presence of the reflexive marker *zich* is ungrammatical in standard Dutch. In general, it is assumed that

²⁷ The reader should note that orthographic practices in the examples differ between informants and they are copied exactly as the informants gave them in the original questionnaire responses.

middles have one essential property in common with passives, i.e. the logical subject argument is syntactically absent or somehow suppressed, although it is semantically present (cf. Hoekstra and Roberts 1993; Keyser and Roeper 1984).

(10) a	LD	‘t	zit	zich	lekker
		EXPL	(subject)	sit-3SG-PR	REFL ADV-comfortable
		<i>it</i>		<i>sits</i>	<i>comfortably</i>
		op	dizze	stool	
		P-in	DEM-this	N-chair	
		<i>on</i>	<i>this</i>	<i>chair</i>	
b	LD	Disse	stool		zit
		DEM-this	N-chair (grammatical subject)		sit-3SG-PR
		<i>this</i>	<i>chair</i>		<i>sits</i>
		zich	lekker		
		REFL	ADV-comfortable		
			<i>comfortably</i>		
		‘One sits comfortably in this chair’			

In the impersonal middle in (10a), for instance, the pronoun *het* 'it' (strong form) or *'t* 'it' (weak form) is always a non-referential or quasi-argument. Further, the impersonal middle requires both the locative PP *op dizze stoel* 'in this chair' and the manner adverbial *lekker* 'comfortably'. The adjunct middle in (10b) is the so-called 'personal' variant of the impersonal middle in (10a). The former, however, differs from the latter in that: (i) the locative PP *op dizze stoel* 'in this chair' is absent; and (ii) the locative PP complement *disse stoel* in (10b) has acquired the status of grammatical subject.

The two types of middle construction in (10a and b) constitute a binary linguistic variable, that is, the reflexive is either present or absent signalling the dialectal and the standard Dutch varieties, respectively (cf. Haeseryn *et al.* 1997: 52, 1420; Hoekstra and Roberts 1993; Cornips 1994, 1997). Similarly, 'plain' and reflexive middles can also be distinguished cross-linguistically, as illustrated for English (E) and French (Fr) in (11a) and (11b) below:

- (11) a E This shirt washes well
 b Fr Cette chemise **se** lave facilement
this shirt REFL washes easily
 'This shirt washes well'

However, the situation with respect to this type of variation in Heerlen, a bidialectal community in southeastern Limburg, is that both plain and reflexive middles occur at the levels of the individual and the community in both (regional) standard Dutch and in the local dialect. In particular, a reflexive middle is considered to be a dialect variant in Heerlen by younger as opposed to older

speakers ($\chi^2 = 4,75$, $df = 1$, $p < .05$) and also by speakers with a low as opposed to a high level of education and occupation ($\chi^2 = 4,75$, $df = 1$, $p < .05$; cf. Cornips 2000).²⁸

In this case study we will describe the degree of syntactic convergence/divergence with respect to the presence or absence of the reflexive marker among standard Dutch and standard German and related dialects as well as between the dialects of Limburg and Rhineland. Furthermore, we will assume that the presence of the reflexive marker has been brought about by a chosen value of a parameter setting.

3.3 The database and results

In this study, the data regarding middle constructions in the Limburg and Rhineland dialects were collected by means of written questionnaires, namely, the Willems questionnaire of 1885, the Meertens Instituut questionnaire of 1994, and the Amt für Rheinische Landeskunde (henceforth, Rheinische) questionnaire of 1995. With certain trivial exceptions, the Meertens Instituut questionnaire is similar to that of the Rheinische and both are based on the results of the earlier Willems questionnaire and, as such, can be considered repetitions of it. A written questionnaire has the advantage of systematically gathering dialect data in a large geographical area within a short time-span. Moreover, it is an elicitation technique that enables the researcher to standardise both the collection and the analysis of the material. In this regard it should be noted that the questionnaires upon which this analysis is based include a translation task of two alternatives (Willems questionnaire) and an acceptability judgement task reminiscent of the successful experimental methods described in Labov (1975) and Harris (1983) (Meertens and Rheinische questionnaires). Hence, rather than eliciting direct intuitions by the formula: 'can/do you say X?' or 'do you judge X a grammatical/good sentence?', informants were asked the more indirect: 'do you ever encounter this variant in the local dialect?' and 'which variant do you consider to be the most common in your local dialect?' According to Rickford (1987: 159), such elicited 'intuitions' are in a way similar to those which formal linguists use, but differ from them considerably in at least three respects: (i) they are elicited from a sample of a community members rather than being derived from the linguist's own introspection; (ii) they are combined with and calibrated against the evidence of sociolinguistic interviews and observations in the communities (cf. Cornips 1994); (iii) heterogeneity is assumed by providing several alternatives, and they are designed to reveal competence in bidialectal, heterogeneous varieties rather than in a single, homogeneous

²⁸ However, a distribution of the usage of a reflexive middle in these dimensions cannot be given since only one token of an impersonal middle, e.g. a reflexive one, shows up in 33,5 recorded hours of spontaneous speech (cf. Cornips 1994).

variety. Moreover, the open ended-nature of syntax, illustrated in section 2.1 above, is highly relevant to middle constructions as they are extremely rare in recordings of spontaneous speech (see note 29). In view of this, once various task-effects (as described above in section 2.1) are considered in any resultant analysis, the method is an extremely useful one as demonstrated in Cornips (1996b) for the Willems and Meertens questionnaires described below. In this regard, Rickford (1987: 172) concludes that 'while elicited intuitions are valuable, and increased use of them seems vital to further progress in the field, their exploitation is not without difficulty. However, the difficulties which they pose – including the problems of vernacular shift and reliability – do not justify our ignoring or neglecting them. . . . more survey sociolinguists should become involved in ongoing efforts to understand intuitive judgements better and use them more fruitfully.' Consequently, analysis of the data provided by these questionnaires makes it possible to conduct a real-time investigation of syntactic change in the LD and Rhineland dialects between the nineteenth and twentieth centuries.

3.3.1 The 1885 Willems questionnaire In 1885, the Willems questionnaire was distributed throughout the Dutch-speaking regions of Belgium and in the southern part of the Netherlands, including the province of Limburg and the Rhineland area (the total number of localities/villages is 121). In this questionnaire, local dialect respondents were offered a choice of three adjunct middles placed in exactly the same order as in (12a–c) and were asked to 'translate' the SD constructions into their local vernacular. In this regard, the grammatical subject in the adjunct middles below (based on the verbs *slapen* 'to sleep' and *zingen* 'to sing' in (12a) and (12c), respectively) denotes a location whereas the grammatical subject (based on the verb *schrijven* 'to write' in (12b)) denotes an instrument. The construction in (12b) can be defined as an instrumental construction since the corresponding regular transitive contains an instrumental PP headed by *met* 'with': *Ik schrijf met deze inkt* 'I write with this ink'.

- (12)a SD Dit bed slaapt goed
 this bed sleeps well
 'This bed is comfortable'
 b SD Die inkt schrijft goed
 this ink writes well
 'This ink writes well'
 c SD Die zaal zingt licht
 this room/hall sings easily
 'This hall has good acoustics [lit. 'sings easily']'

Table 4.2 Results for the 1885 Willems questionnaire aggregated for the entire research area

Input: 'Plain' Adjunct Middle (13a)			Input: 'Plain' Instrumental (13b)		
Response type:	n = 121	%	Response type:	n = 121	%
• plain adjunct middle <i>dit bed slaapt goed</i>	23	19	• plain instrumental <i>die inkt schrijft goed</i>	99	82
• reflexive adjunct middle <i>dit bed slaapt zich goed</i>	11	9	• reflexive instrumental <i>die inkt schrijft zich goed</i>	2	2
• plain impersonal middle <i>in dit bed slaapt het goed</i>	0	–	• plain impersonal instrumental <i>met die inkt schrijft het goed</i>	0	–
• reflexive impersonal middle <i>in dit bed slaapt het zich goed</i>	17	14	• reflexive impersonal instrumental <i>met die inkt schrijft het zich goed</i>	0	–
• corresponding 'active' <i>men slaapt goed in dit bed</i>	31	26	• corresponding 'active' <i>men schrijft goed met die inkt</i>	3	2
• other type of construction	4	3	• other type of construction	2	2
• 'not a common construction'	17	14	• 'not a common construction'	4	3
• non-response	18	15	• non-response	11	9
total	121	100	total	121	100

Moreover, Willems also offered the transitive counterparts of (12a) and (12c) as alternatives, namely, *In dat bed slaapt men goed* 'in this bed sleeps one well' and *In dien zaal zingt men gemakkelijk* 'in this hall sings one easily' (see also table 4.2).

Table 4.2 reveals the results regarding the constructions in (12a) (left-hand column) and (12b) (right-hand column) for the 1885 Willems questionnaire from a quantitative perspective.

The quantitative results of this Willems questionnaire reveal a very interesting grammatical and geographical distribution of middles in LD and the neighbouring dialects of Germany in the Rhineland area (RD) (cf. Cornips 1996a). First of all, the adjunct middles in which the grammatical subject denotes a location, as in (12a and c), for instance, is not found in either Limburg or in the Rhineland area. The 23 instances of this plain adjunct middle in table 4.2 are all recorded in the surrounding dialects of Belgium.

Secondly, adjunct middles with the reflexive *zich* (11 tokens in table 4.2) are found exclusively to the north of Limburg and Rhineland area, as illustrated in (13):²⁹

²⁹ The reader should note again that orthographic practices in the examples (13a) *dae zâl* and (14a) *die zaol* 'this hall' differ between informants, and they are copied exactly as the informants gave them in the original questionnaire responses.

- (13) a LD north Dae zâl zinkt **zich** gôd
 this hall sings REFL easily
 b RD Der saal sengt **sich** legt
 this hall sings REFL easily
 'This hall has good acoustics'

Thirdly, the reflexive impersonal middle (17 tokens in table 4.2) is also extant across the entire dialect regions of both Limburg and the Rhineland area, though it is important to note that this type of middle (illustrated below) was not present in the questionnaire.

- (14) a LD In die zaol zink et **zech** gemekelek
 in this hall sings it REFL easily
 b RD En dâne sal sengt et **sich** god
 in this hall sings it REFL easily
 'This hall has good acoustics'

Crucially, despite the fact that the Willems questionnaire offered only adjunct middles in which the grammatical subject denotes a location without a reflexive, an analysis of its response type indicates that this construction (i) is not extant, or (ii) it occurs with a reflexive, or (iii) it is construed as an impersonal middle with a reflexive. These consistent substitutions of the plain adjunct middle presented in the questionnaire provide strong evidence that this construction is not attested for the local dialects of the respondents in the Dutch Limburg and Rhineland areas (Carden 1976: 101).

On the other hand, the adjunct middle in which the grammatical subject denotes an instrument (henceforth, instrumental construction), as in (12b), is found with a reflexive in the Rhineland area (two instances are illustrated in table 4.2) but not a single instance of this type, i.e. with a reflexive, is recorded for the entire province of Limburg. Instead, the instrumental construction occurs as a plain construction (99 tokens in table 4.2) throughout Limburg:

- (15) a RD Di Tinte/Enk schriv **sisch** jot
 this ink writes REFL well
 b LD Dieën aenkt schrif Ø gout
 this ink writes well
 'This ink writes well'

These distributional differences are highly suggestive of the possibility that the instrumental construction and the adjunct middle are distinctive and, therefore, ought to be analysed separately, and we will return to this disparity below. Note that table 4.2 above reiterates the differences which occur between the

1885		South of Limburg	North of Limburg	Rhineland
impersonal middle	+ zich	✓	✓	✓
adjunct middle	+ zich	*	✓	✓
instrumental middle	+ zich	*	*	✓

Fig. 4.1 Distribution of the instrumental, adjunct, and impersonal middles in 1885.

adjunct middle with/without the reflexive and the instrumental construction with/without the reflexive.

The findings regarding Willems 1885 can be captured as follows. As far as the independent variable area is concerned, figure 4.1 reveals a pattern in which the reflexive instrumental construction implies the existence of the reflexive adjunct middle, whereas this latter implies the existence of the reflexive impersonal middle. In addition, since an impersonal reflexive middle construction is attested in the south of Limburg there is an implication that it will also be present in the north. By contrast, the presence of the adjunct middle in the north of Limburg does not imply its existence in the south. Hence, it is assumed that the syntactic variants, i.e. the constructions with and without the reflexive, as in table 4.2 and figure 4.1 are brought about by different values of a single parameter (cf. sections 2.2 and 3.4.1).

3.3.2 The 1994/1995 databases In the later Meertens and Rheinische questionnaires, an adjunct middle, an impersonal middle, and the instrumental construction were all offered, as presented in (15) and (16), respectively. Importantly, both questionnaires always administered two variants per type of construction, namely, a variant with and one without the reflexive (i.e. a total of six variants). It is important to note that heterogeneity is assumed by the provision of several alternative choices to informants in the Willems and in the Meertens and Rheinische questionnaires:

Meertens questionnaire in 1994:

- (16) a Deze stoel zit [± zich] gemakkelijk
 this chair sits comfortably
 b Het zit [± zich] gemakkelijk op deze stoel
 one sits comfortably in this chair
 'One sits comfortably in this chair'
 c Die inkt schrijft [± zich] goed
 this ink writes well
 'This ink writes well'

Table 4.3 Results for the entire province of Limburg from the Meertens Questionnaire

Input: A = reflexive adjunct middle in (17a); B = reflexive impersonal middle in (17b); C = reflexive instrumental in (17c).						
Response Type:	A		B		C	
	N = 19		N = 18		N = 24	
	N	%	N	%	N	%
common construction	15	79	18	100	18	75
'not a common construction'	4	21	0	0	6	25

Rheinische questionnaire in 1995:

- (17) a Dieser Stuhl sitzt [± sich] herrlich
 this chair sits comfortably
 b Es sitzt [± sich] herrlich auf diesem Stuhl
 it sits comfortably in this chair
 'One sits comfortably in this chair'
 c Diese Tinte schreibt [± sich] gut
 this ink writes well
 'This ink writes well'

For each variant in (16) and (17), the dialect respondents were asked to answer the following two questions: (i) 'do you ever "encounter" the variant in your local dialect?'; and (ii) 'which variant do you consider to be most common in your local dialect?' Their responses are discussed below and we will pay particular attention to the grammatical and geographical distribution of the findings for both the Meertens and Rheinische questionnaires. Table 4.3 displays the quantitative results for responses to the constructions in (16) drawn from the Meertens questionnaire.³⁰

The quantified results of the Meertens questionnaire in 1994 reveal interesting syntactic changes through time and space. Specifically, (i) the reflexive adjunct middle in (16a) has become fully grammatical in the southern Limburg dialects; and (ii) the instrumental construction with *zich* as in (16c) has emerged and it too has spread throughout the province of Limburg as exemplified in (18a) and (18b), respectively:

³⁰ As noted above, the Meertens questionnaire was administered throughout the Netherlands and in the Dutch-speaking regions of Belgium. However, the data presented here are the responses for the Dutch province of Limburg only.

	South of Limburg 1885	North of Limburg 1885	Entire province of Limburg 1994	Standard Dutch 1994
<i>reflexive impersonal</i>	✓	✓	✓	*
<i>reflexive adjunct</i>	*	✓	✓	*
<i>reflexive instrumental</i>	*	*	✓	*

Fig. 4.2 Converging dialects in Limburg 1885–1994.

- (18) a LD south Dèzze stool zit **zich** lekker (goëd)
 this chair sits REFL comfortably
 'This chair is comfortable'
 b LD sth./nth. Dieze ink sjrief **zich** plezeerig
 this ink writes REFL well
 'This ink writes well'

This suggests that there has been a convergence of dialects in this region between 1885 and 1994. The findings with respect to the Meertens questionnaire 1994 can be described as follows. Regarding the independent variables 'area' and 'time', figure 4.2 demonstrates a distribution in which the reflexive instrumental construction implies the existence of the reflexive adjunct middle, whereas the latter implies the existence of the reflexive impersonal middle (a pattern which is not dissimilar to that shown in figure 4.1 above).

Moreover, figure 4.2 reveals that speakers in twentieth-century Limburg have more types of reflexive middle in their linguistic repertoire than was the case for speakers in the previous century. In our terms, this suggests that there has been a change over time in the extent to which syntactic properties associated with reflexives cluster in the variation space, the range being greater in 1994 than it was in 1885. It is assumed that these clustering properties, i.e. the presence of a variety of reflexives, are brought about by just one parameter setting, as we will see in section 3.4. Hence, in the later twentieth century, southern Limburg dialects have a parameter setting which is closer to that of northern Limburg varieties of the previous century. Consequently, it would seem reasonable to suggest that convergence has taken place in LD as a whole (cf. Hinskens 1996). Interestingly, figure 4.2 also reveals that this phenomenon does not, necessarily, amount to convergence towards the standard variety since there is robust evidence here for divergence as the reflexive variants remain entirely ungrammatical in standard Dutch and the Limburg dialects have not extirpated their reflexive middles.

The results of our analyses of the Rheinische questionnaire in table 4.4 and figure 4.3 below, indicate a language change in the opposite direction: i.e. the reflexive adjunct and reflexive instrumental middle have (almost) disappeared. In this case, the Rhineland dialects appear to have converged towards the

Table 4.4 Results for the 1995 Rheinische questionnaire

Input: A = reflexive adjunct middle in (18a);
 B = reflexive impersonal middle in (18b);
 C = reflexive instrumental in (18c).

Response type:	A		B		C	
	N = 19		N = 19		N = 19	
	N	%	N	%	N	%
common construction	2	11	16	84	2	11
'not a common construction'	17	89	3	16	17	89

	Rhineland 1885	Rhineland 1994	Standard German 1994
reflexive impersonal	✓	✓	✓
reflexive adjunct	✓	*	*
reflexive instrumental	✓	*	*

Fig. 4.3 Converging Rhineland dialects and the Standard language, 1885 and 1994.

standard language. Hence, only the reflexive impersonal middle is fully grammatical in most varieties of RD and in SG (cf. Fagan 1992).

It should be emphasised that the results of both types of questionnaires, the Willems questionnaire and the Meertens and Rheinische questionnaires, are comparable. Although the Willems questionnaire included a translation task there is hardly any reason to assume that a repetition-effect is involved since (i) several alternatives were offered; and (ii) no repetition of the 'plain' middle was found in either Limburg or the Rhineland area. Secondly, the recent questionnaires were designed to reveal competence in heterogeneous varieties since every local dialect speaker nowadays is truly bidialectal. Hence, he/she will also speak the standard language, though this was not, necessarily, the case with regard to the local dialect speakers interviewed at the time of the Willems questionnaire. In sum, the impact of convergence in Limburg has, clearly, led to an increase in the structural distance from the standard language since 1885. By contrast, the use of reflexives by speakers of the Rhineland dialects in 1994/1995 indicates convergence towards the pattern associated with the standard language and divergence from the Limburg dialects.

3.4 Towards an analysis

In the previous section, we observed the degree of syntactic convergence/divergence among standard languages and related dialects as well as between the

dialects of Limburg and the Rhineland. The presence or absence of the reflexive in the three types of construction may be considered to have been brought about by a chosen value of a parameter setting. Let us first discuss which parameter may be assumed to play a role in middle constructions with and without a reflexive.

3.4.1 Parameter settings manifested in middle constructions Clearly, not every verb with its internal argument is able to undergo middle formation, as shown in the argument middle constructions in (19):

- (19) a This shirt washes easily
 b *This book sees easily

This well-known constraint on middle formation is the so-called Affectedness constraint. The common assumption about middle formation is that it is only acceptable if the promoted argument (the logical object) is 'affected' (cf. Jaeggli 1986; Tenny 1987; Hoekstra and Roberts 1993; Fagan 1992, Cornips and Hulk 1999). In that case the 'affected' object is preposable, as in (19a). Apparently, the syntactic property of preposability versus non-preposability of the object appears to correlate with an independent semantic distinction. Although the notion 'affected' object is, to a certain extent, intuitively clear, the precise way to implement this idea has often been left rather vague. In Cornips and Hulk (1999; and Hulk and Cornips 2000), it is argued that the notion affected object or Affectedness is an essential element in the larger question about aspectual properties of verbs and predicates, namely, affectedness is not solely linked to the verb but is crucially linked to the aspectual properties of the predicate as a whole, that is to say, it is related to the event structure of the entire sentence. To illustrate this, consider the following contrast in standard Dutch:

- (20) a SD *Dit portret schildert prettig
 this portrait paints easily
 b SD Dit plafond schildert prettig
 this ceiling paints easily

The ungrammatical middle in (20a) differs from the grammatical one in (20b) in that the verb *schilderen* 'paint' in the latter combines with a different kind of object, namely *plafond* 'ceiling' instead of *portret* 'portrait'. Apparently, this minimal contrast indicates that only the object in (20b) is an affected object by which middle formation is allowed. This minimal contrast in (20) presents a deeper understanding of the interaction between the aspectual properties of the predicate and the affected object. Interestingly, the corresponding regular transitives of the middles in (20) differ aspectually: the former depicts the event only as telic (bounded, accomplishment), whereas the latter allows both an atelic

and telic event reading since it combines with temporal adverbials expressing duration and with temporal adverbials expressing a specific point in time:

- (21) a SD Ik schilder dit portret in een uur/*een uur lang
 I paint this portrait in an hour/*for an hour long
 b SD Ik schilder dit plafond in een uur/een uur lang
 I paint this ceiling in an hour/for an hour long

From the contrast in (21), Cornips and Hulk (1999) assume that (i) middle formation is connected with the whole predicate or the event structure of the entire sentence; and (ii) only predicates which depict the event as atelic and telic may undergo middle formation. Hence, the Affectedness constraint is redefined as an (inner)aspectual property of the predicate. This aspectual property holds for both plain and reflexive languages. Now consider the striking contrasts in acceptability between the standard Dutch plain and the Heerlen Dutch reflexive middles in (22) and (23), respectively. These contrasts reveal that all the transitive verbs selecting unaffected objects in the corresponding regular active constructions can undergo middle formation if the middle combines with the reflexive *zich*:

- (22) a SD *Frans leert gemakkelijk
 French learns easily
 b SD *Frans verwerft gemakkelijk
 French acquires easily
 (23) a HD Frans leert **zich** gemakkelijk
 French learns REFL easily
 b HD Frans verwerft **zich** gemakkelijk
 French acquires REFL easily

This is also the case cross-linguistically:

- (24) a Eng *That tells easily
 b Fr Ça se raconte facilement

Although not explicitly discussed in the literature, the Affectedness constraint also holds for adjunct middles as shown by the following examples:

- (25) a SD *?Dit park rent gemakkelijk
 b SD Deze schoenen rennen gemakkelijk
 This/these park/shoes run(s) easily

Intuitively, it is clear that the locational complement of the verb *rennen* (run) in (25a) is not affected by the action expressed by the verb, whereas the locational complement *schoenen* (shoes) is affected by the action of the same verb (cf. Cornips and Hulk 2002). Consider now the corresponding Heerlen Dutch middles with *zich*:

- (26) a HD Dit park rent **zich** gemakkelijk
 this park runs REFL easily
 b HD Deze schoenen rennen **zich** gemakkelijk
 these shoes walk REFL easily

Just as we have seen in the case of argument middles with transitive verbs, (22) to (24), the presence of *zich* allows verbs with unaffected complements to undergo middle formation. The only difference between the grammatical and the ungrammatical examples is the presence and absence of the reflexive marker. Consequently, only the predicates with *zich* as in (23) but not in (22) have the required property to undergo middle formation.³¹ This required property is an aspectual one: the reflexive marker does not trigger an event type shift, but it offers a different perspective on the event, in particular, *zich* imparts a sense of achieving an inherent end-point of the event (as will become more clear below) (cf. Cornips and Hulk 1999; Hulk and Cornips 2000). In brief, the aspectual relation between the verb and its (internal) arguments is exactly what is at stake in the Affectedness constraint.

Importantly, it is argued independently by a number of authors that the reflexive marker also plays an aspectual role in other types of constructions (cf. Labelle 1992 for French; and Almagro 1993; Nishida 1994; and Zagana 1994 for Spanish). Compare the following unaccusative constructions with and without a reflexive. The reflexive unaccusative construction in Heerlen Dutch gives rise to an ungrammatical result if it is combined with an adverbial phrase expressing duration, whereas it is fully grammatical if it is linked to an adverbial phrase expressing a specific point in time, as can be seen in (27a) and (27b), respectively:

- (27) a HD *dat het ei **zich** 3 minuten lang gekookt heeft
 that the egg REFL for 3 minutes boiled has
 b HD dat het ei **zich** in 3 minuten tijd gekookt heeft
 that the egg REFL in 3 minutes' time boiled has

Contrary to what is the case in the example in (27b), the unaccusative constructions without a reflexive in both standard Dutch and Heerlen Dutch can

³¹ Notice that it is important to keep apart the two factors involved in the aspectual 'make-up' of middle constructions. The first is the Affectedness constraint that is a condition which tells us which verbal predicates can undergo middle formation; it doesn't tell us anything about the outcome of such a formation. The notion Affectedness has to do with what has been called Aktionsart: it expresses (inherent) aspectual properties of a verb. *Zich* has a role to play with respect to this type of aspectual impact of the Affectedness constraint. The second aspectual factor involved in middles is the event type of the entire construction after middle formation has taken place. As is well known, in most languages middles denote states. The operation of middle formation somehow abstracts over the kind of event denoted by the verb in its active voice and turns it into a state. *Zich* has no role to play in this operation.

easily be construed with temporal adverbials expressing duration and also with temporal adverbials expressing a specific point in time:

- (28) HD/SD dat het ei 3 minuten lang/ in 3 minuten gekookt heeft
that the egg for 3 minutes/ in 3 minutes boiled has

The aspectual differences between the two constructions with and without a reflexive in (27) and in (28) are very subtle, depending on the way in which the speaker wants to present the situation. According to Labelle (1992) and Cornips and Hulk (1999), when the unaccusative construction occurs without a reflexive, the (aspectual) focus is on the process of transformation of the entity in subject position, whereas when the reflexive is present, the (aspectual) focus is on the end-point or the final state of that entity. So, the occurrence versus absence of *zich* has an influence on the event structure of the whole sentence in representing a certain viewpoint on a (telic) event. The presence of *zich* does not alter the Aktionsart of the verb nor does it modify (sub) parts of events that are characterised by the verb. Rather, it attributes to the state introduced by the event structure of the (unaccusative) verb itself. It is for this reason, that *zich* is considered to be an aspectual marker which supplies more information about the existing aspectual structure. Just as in the case of middles, the reflexive marker has both a syntactic role – triggering a movement analysis, i.e. preposing of the object – and an aspectual one, triggering a different perspective on the event focusing the final state.

Consider now the following alternating transitive predicates denoting consumption in Heerlen Dutch. The reflexive dative 'consumptive' construction in Heerlen Dutch is, in analogy with the reflexive unaccusative construction, ill formed if it is combined with an adverbial phrase expressing duration (cf. (29a)), whereas the construction is fully grammatical if it is linked to an adverbial phrase indicating an end-point of the action expressed by the predicate (cf. (29b)). Note that the alternating constructions without *zich* are again fully acceptable with both types of adverbial phrase:

(29)a	HD	*Zij	eet	zich	5 minuten lang	een boterham
		she	eats.	REFL	for 5 minutes	a sandwich
b	HD	Zij	eet	zich	in 5 minuten	een boterham
		she	eats	REFL	in 5 minutes' time	a sandwich
c	HD/SD	Zij	eet		5 minuten lang/	een boterham
					binnen 5 minuten	
		she	eats		for 5 minutes/in 5	a sandwich
					minutes' time	

According to Almagro (1993: 136) and Nishida (1994: 442), the presence of the reflexive marker refers to the delimitation of the event or, rather, it highlights

the fact that the totality of an object is involved in the situation or that the event is completed.

From the above, it is proposed that the functional category Aspect – that may be presented structurally as [IP [I' [AspP [Asp [VP]]]]] – (cf. Cornips and Hulk 1999; and Hulk and Cornips 2000) functions as a parameter in which the presence of the reflexive is thought to be brought about by the different settings of the parameter (cf. Cornips 1994, 1998a).³² The syntactic variation can be accounted for by assuming that in Heerlen Dutch the setting [+perfective] is the marked value for the parameter AspP whereas in standard Dutch the AspP projection has a default value. In this way, aspectual differences between standard languages/dialects and cross-linguistically can be viewed in parametric terms. It is very important to note that while this single abstract grammatical difference, i.e. the chosen value of the Aspect parameter, is not visible immediately, it is manifested in a number of very different constructions such as argument middles (see (22), (23), (24)), adjunct middles ((25), (26)), unaccusative constructions ((27), (28)), and 'consumptive' constructions in (29). The holistic view of syntactic variability taken by the P&P model (and also illustrated by McCloskey (1992) in section 2) reflects more clearly the fact that grammars are, in fact, highly integrated systems. Hence, the advantage of the P&P model over a variationist account of this phenomenon is that it is possible to show that seemingly unrelated constructions can belong to the same parameter and that they can be related with respect to structural and social variation which cannot be done by means of the linguistic variable alone (cf. Cornips 1994, 1998a). For this reason, Muysken (1995: 2) argues that the linguistic variable approach forces a perspective on (syntactic) variation in which it always implies isolated, loose elements. Hence, in the Labovian framework, the data revealing optionality within a grammar such as that illustrated above involve three distinct and discrete linguistic variables, namely (i) the middle variants with and without the reflexive; (ii) the unaccusative variants with and without the reflexive; and (iii) the 'consumptive' variants with and without the reflexive.

3.4.2 The notion 'argument structure' as a principle of syntactic organisation In the present section we hope to demonstrate how this parametric approach accounts for: (i) why variation is possible and why it is constrained with respect to the presence or absence of the reflexive *zich* in the three types of construction, namely adjunct, impersonal, and middle; and (ii) why there is an implicational relationship (from both a chronological and geographical perspective) between the impersonal middle, the adjunct middle, and the instrumental construction with *zich*, revealing why these constructions may or may

³² It is relevant to note that within Generative Grammar there is not a fully elaborated theory of Aspect.

not cluster together in the variation space (cf. Cornips 1996a; figures 4.1 and 4.3). To this end, we will address these issues by considering the hermetic nature of grammar in terms of the notion 'argument structure' as a principle of syntactic organisation.

Consider again the impersonal and adjunct middles in (10) repeated here for convenience as (30):

- (30) a LD 't zit **zich** lekker op dizze stoel
 it sits REFL comfortably in this chair
 b LD Disse stoel zit **zich** lekker
 this chair sits REFL comfortably
 'This chair is comfortable'

We will first assume that: (i) the occurrence of the reflexive *zich* in middles manifests the absorption of the logical subject argument (cf. section 3.2, where absorption should be taken to be neutral regarding the various theoretical instantiations of this phenomenon); and that (ii) the adjunct middle, as in (30b), is derived from an underlying locative PP, (PP_{loc}) such as *op dizze stoel* 'in this chair', by means of incorporation of the P_{loc} 'in' into the verb *zit* 'to sit', as illustrated in (20) (cf. Ackema and Schoorlemmer 1994: 174 and 1995):

- (31) LD **zich** lekker zit [*op dizze stoel*]
 incorporation at the level
 of lexicon=> **zich** lekker [*zit + op*] dizze stoel
 movement in syntax=> dizze stoel **zich** lekker zit t_i
 'One sits comfortably in this chair'

This process of incorporation accounts for the facts that: (i) the preposition in the impersonal middle really 'disappears' in the adjunct middle; and (ii) the DP grammatical subject *dizze stoel* 'this chair' is still interpreted as a location as a result of function composition by which the verb expresses the combined semantics of the verb and the PP_{loc} (cf. Ackema and Schoorlemmer 1994 for a more detailed analysis of this process of incorporation). Since *zich* manifests the absorption of the logical subject argument, it is proposed that in the Limburg and Rhineland dialects incorporation takes place at the lexical level and, as a result, the DP *dizze stoel* 'this chair' that was embedded in the PP becomes the grammatical subject by means of movement in syntax (cf. Cornips 1996a; Cornips and Hulk 1999). Hence, the analysis of the reflexive adjunct middles involves two operations, namely: (i) incorporation of the PP_{loc} into the verb; and (ii) moving of the embedded DP in PP_{loc} to the subject position.

The notion 'argument structure' imposes constraints on the degree of variation possible in the usage of adjunct middles since not every P_{loc} may incorporate into the verb. Consider, for instance, the following relative clauses in which

the relative pronoun *waar* 'where' has been extracted from the PP (so-called R-extraction, cf. Van Riemsdijk 1978). R-extraction is considered a diagnostic for the adjunct or argument status of locative PPs. According to a barrier theory such as outlined in Chomsky (1986a), the P_{loc} should constitute a barrier for movement, and hence for R-extraction, if it is an adjunct. Since R-extraction is blocked in (32a), whereas it is fully grammatical in (32b), we know that the PP *in het restaurant* in (32a) is an adjunct whereas the PP *in de zaal* in (32b) is an argument.³³ Consequently, deriving an adjunct middle is blocked in the middle counterpart of (32a), i.e. (33a), whereas it is permitted in the middle counterpart of (32b), i.e. (33b). From this distributional evidence, it seems reasonable to conclude that extraction of the prepositional head of the PP_{loc} in 'in' or the process of incorporation should also be permitted in these contexts:

- (32) a SD *het restaurant $waar_i$ het prettig [pp in t_i] eet
 the restaurant where it nicely in eats
 'The restaurant where it eats in nicely'
 b SD de zaal $waar_i$ het prettig [pp in t_i] zingt
 the hall where it nicely in sings
 'The hall which has good acoustics'
- (33) a SD *Dit restaurant eet prettig
 this restaurant eats nicely
 'This sun sings nicely'
 b SD Deze zaal zingt prettig
 this hall sings nicely
 'This hall has good acoustics'

From the above, it is clear that the formation of the adjunct middle requires one operation more than the formation of the impersonal middle, namely, the process of incorporation of the preposition which can only take place if the PP is an argument. This may explain: (i) the chronological and geographical implicational relationship between both types of middle construction; and

³³ Another diagnostic is from Hornstein and Weinberg (cited in Ackema and Schoorlemmer 1994: 85). This test also involves P-stranding, which again allows one to distinguish between argument and adjunct locatives (see the grammaticality contrast between (ib) and (ic)).

- (i) a I slept in my bed in New York
 b Which bed did you sleep in (in New York)?
 c ?*Which city did you sleep (in your bed) in?

As the contrast between (ic) and (iia) shows, it depends on the verb whether or not a particular locative PP is an argument:

- (ii) a I lived in New York
 b Which city did you live in?

(ii) the existence of the impersonal middle in all dialects/standard languages and in both time periods.³⁴

The question remains how, exactly, is the instrumental construction linked to the adjunct middle? Let us consider the instrumental construction in more detail:

- (34) SD Deze inkt schrijft goed
 this ink writes well
 'This ink writes well'

It is convincingly argued by Hoekstra and Roberts (1993) that in SD, the verb *schrijven* 'to write' in (34) takes *deze inkt* 'this ink' as a logical subject argument or as an external argument. Their analysis of the instrumental construction differs from that presented above in that the former does not invoke incorporation and assumes that the grammatical subject is an external argument mapped directly onto the subject position. If the grammatical subject in the instrumental construction is, indeed, an external argument, we would expect it to have other properties characteristic of adjunct middles as well. For instance, we would anticipate that a grammatical outcome would result were one to combine it (i) with a different kind of adverb that is ungrammatical in a middle construction (such as *dik* 'thickly' in (35a)); or (ii) with an object such as *de letter 'O'* 'the letter "O"' in (35b). The grammaticality contrasts between (35) and (36) below bear this out:

- (35) a SD Deze inkt schrijft dik
 this ink writes thickly
 'This ink writes thickly'
- b SD Deze inkt schrijft de letter 'O' goed
 this ink writes the letter O well
 'This ink writes the letter "O" well'
- (36) a SD *Deze zaal zingt dik
 this hall sings thickly
 'This hall has good acoustics'
- b SD *Deze zaal zingt dit lied goed
 this hall sings this song well

Moreover, we would expect the instrumental construction to be grammatical in languages such as English and standard German, although these varieties do not allow for an adjunct middle. This anticipated outcome is also confirmed as the grammaticality of (37a–b) demonstrates:

³⁴ It is important to note that the formation of the (reflexive) impersonal middle has no such restrictions, i.e. whether the locative PP is an adjunct or an argument.

- (37) a E This ink writes well
 b SG Diese Tinte schreibt gut
 this ink writes well
 'This ink writes well'

Finally, the mandatory absence of *sich* in the SG example (37b), involving an external argument, is accounted for if it is assumed that the reflexive is a morphological marker signalling the absorption of the external argument. Crucially, variation at these specific points in the grammar is possible since the instrumental construction is ambiguous: it may be interpreted both as a regular transitive in which the logical subject argument or the external subject argument is present, as in (35) and (37) or as an adjunct middle in which the logical subject argument is not syntactically overt, as in (36). With respect to the latter interpretation, the verb *schrijven* 'to write' in the instrumental construction extant in the Limburg and Rhineland dialects has been reanalysed as a detransitivised verb which does not project an external argument. Thus, in the instrumental construction, incorporation of the preposition has taken place and the presence of the reflexive is a manifestation of the movement of the embedded DP *die inkt* 'this ink' in *PP_{instr}* (Cornips 1996a; Cornips and Hulk 1999). This is clear from a comparison of (31) above with (38) immediately below:

- (38) LD **zich** prettig [met deze inkt] schrijft =>
 zich prettig [schrijft + met] deze inkt =>
 deze inkt **zich** prettig schrijft
 'One writes well with this ink'

By contrast, the instrumental construction without the reflexive is interpreted in both the Rhineland and Limburg dialects as a regular transitive construction. Thus, it is assumed that variation with respect to the presence or absence of the reflexive exists at these specific points of the grammar since the instrumental construction is structurally ambiguous. The distributional evidence presented in the previous sections clearly suggests that the formation of the reflexive instrumental implies the presence of an adjunct middle. Hence, the instrumental construction without a reflexive must first be reanalysed as an adjunct middle. This accounts for the geographical and chronological implicational relationship between the adjunct middle and the reflexive instrumental middle. In the dialects of northern Limburg, both middle formation and incorporation were productive processes during the nineteenth century. The 1994 Meertens database, however, reveals that these processes (the reflexive adjunct middle, in particular) have become highly productive and now extend over the entire province of Limburg. In addition, the process of incorporation has produced a new variant, namely, the instrumental construction with the reflexive.

This syntactic change, causing two types of construction to become reflexive, i.e. adjunct and instrumental middles, shows that these constructions cluster together in the variation space which may be explained in terms of parameter theory.

4 General Conclusion

In this chapter we have argued that the variationist approach and the generative programme (since the publication of Chomsky 1981b) are salient frameworks for analysing processes of convergence and divergence between related language varieties at the grammatical level. However, differences in methodology, analyses, and findings with respect to variation have led to the creation of a Janus-like orientation within these two disciplines. Thus, variationists focus on the representativeness of their speakers, controlled recordings of the vernacular, and the collection of a substantial quantity of data in order to achieve descriptive and observational adequacy. By contrast, generativists focus on native-speaker introspection in an idealised environment in their pursuit of explanatory adequacy. Moreover, an integral aim of sociolinguistic accounts is to ascertain the significance of inherent variability for a range of sociocultural correlates with respect to 'community' grammars, whereas the Chomskyan tradition seeks only to delimit the set of possible languages and to discover the universal constraints by which all 'individual' grammars are bound.

In this chapter we hope to have demonstrated that investigations of convergence and divergence at the grammatical level which utilise the interfaces of both frameworks and rely on real time, variable corpora in addition to speaker judgements, have greater observational and explanatory force than that of a single paradigm applied to either type of data in isolation. A good case in point is the empirical evidence provided in section 2.2 which ran counter to McCloskey's claims regarding the distribution of certain predicates in embedded inversion constructions (I^0 -to- C^0 Fronting) among speakers of divergent Englishes. On the basis of evidence such as this, it was argued that allowing for microvariation within universal constraints so that the resultant analysis remains accountable to the data will eventually bring about important refinements within generative theory.

We have also examined the idea that variation space is defined by parameter theory accounting, at a high level of abstraction, for some of the reasons why certain related varieties cluster together from a syntactic perspective. In this way, processes of convergence/divergence in grammar (or notions such as 'alike'/'different') can be analysed more explicitly than is possible within standard variationist analyses. The case study, for example, demonstrated the manner in which a parametric approach can account for the amount and type of variation, in addition to the restrictions on variability, associated with middle

constructions in the Limburg and Rhineland dialects which would not be as transparent within a 'discrete' variationist analysis.

The perspective adopted here is in line with new ways of analysing variation suggested by the findings of other research into the phenomenon of grammatical variability in which theoretical concerns have become much more central. This is partly due to the welcome relaxation of the generative position on the status of social accounts from that of Smith (1989), as can be seen from the quote below:³⁵

Internalist biolinguistic inquiry does not, of course, question the legitimacy of other approaches to language, any more than internalist inquiry into bee communication invalidates the study of how the relevant internal organization of bees enters into their social structure. The investigations do not conflict; they are mutually supportive. In the case of humans, though not other organisms, the issues are subject to controversy, often impassioned, and needless. (Chomsky 1999: 34)

We believe that the analyses and observations made in this chapter suggest interesting avenues for further research. Three issues, in particular, have come to the fore, namely (i) identifying the exact relationship between intuitions and performance data; (ii) exploring the extent to which grammatical theory should attend to introspective judgements about certain types of construction that never surface empirically (cf. Labov 1975, 1996; and Bard *et al.* 1996); and (iii) the hypothesis that morphosyntactic variables can be differentiated into those that are 'low level' and, therefore, accessible to sociolinguistic analysis, and those that are 'high level', where it is less clear that variation serves to differentiate social groups because it is neither purely morphological nor purely syntactic given its dependence on pragmatic/semantic conditioning. Although it has not been possible fully to investigate (i-iii) in the present context, we intend in future research to explore further both introspective and empirical data from divergent Dutch and English dialects. We plan to focus on whether there are cross-linguistic prohibitions operating on the failure of intuitions and to examine empirical observations which are stable across communities of speakers yet run counter to universal constraints postulated within P&P (i.e. question (i)). Similarly, we would like to ascertain the extent to which speakers of divergent Dutch and English varieties share introspective judgements regarding constructions that are grammatically possible intuitively but are not recoverable from observation alone (i.e. question (ii)). We also intend to use cross-linguistic data to explore the hypothesis (following Muysken

³⁵ Such research includes Beals *et al.* (1994); Cornips (1994, 1998a), *inter alia*; Corrigan (1997), *inter alia*; Henry (1992), *inter alia*; Hudson (1995); King and Nadasdi (1996); Klemola (1997); Kroch (1994); Landa and Franco (1996); Muysken (1995), *inter alia*; Pintzuk (1993); Rickford *et al.* (1995); Seppänen (1999); Sells *et al.* (1996a,b); Toribio (1996), *inter alia*; and Wilson and Henry (1998).

1999b) that investigations into the extra-linguistic constraints inducing convergence/divergence at the grammatical level are particularly successful when examining 'low-level' morphosyntactic variation (verbal paradigms, for example), which more clearly pertain to the external domain of language as a social construct than they are when accounting for 'higher level' variables (passivity, for instance), which are associated with areas of the grammar that are more commonly the focus of what Chomsky (1999: 34) terms 'internalist biolinguistic inquiry'.

While we admit that research of this kind is in its infancy, we would argue that the approach that has been taken in this chapter, incorporating as it does a range of variationist and generative criteria, appears to be a fruitful method for interpreting syntactic phenomena associated with processes of convergence and divergence in grammar.

5 Phonology, grammar, and discourse in dialect convergence

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1 Introduction

The phenomenon of dialect convergence presents us with an opportunity to examine an issue that is not yet well understood in variation studies: the extent to which linguistic variation in different components of language patterns in similar ways. There have been more studies of phonetic and phonological variation than of any other kind, with the result that we now know a great deal about how sound changes typically spread through a speech community. Studies of morphosyntactic variation have been gently increasing in number, but sociolinguistic analyses of variation in discourse and, especially, in syntax remain relatively scarce. We still do not know, therefore, whether generalisations concerning the spread of sound change apply equally well to other types of language change, nor whether stable linguistic variation in phonology, grammar, and discourse features has a similar sociolinguistic distribution within a community.

The study of dialect convergence might shed light on these questions because the expectation here is, precisely, that there should be considerable commonality in the direction of change and, perhaps, in the rate of change also. If regionally or socially marked phonological features are being levelled within a community, we might expect other regionally or socially marked features to be levelled as well, with perhaps the same speakers or the same social groups driving all types of change. In this chapter we use data from our recent project on levelling in urban dialects in England to explore the question of whether there is isomorphism between patterns of variation and change in phonology, grammar, and discourse. Where grammatical variation is concerned, we will draw a distinction between morphosyntactic variation, where syntax has morphological effects, and syntactic variation, involving changes in word order or in clause structure. Thus, morphosyntactic variation is illustrated by the variable expression of agreement on present tense verbs in some English dialects (*I goes* versus *I go*); and syntactic variation by alternation between a passive construction and its active counterpart (*my phone was stolen* versus *someone stole*

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