Relative Markers in Late Twentieth Century Written British English'

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ABSTRACT

This paper deals with tlie study of language change in progress by using two parallel rorpora of written British English sampled within a period of thirty years. The constructions analysed are two sets of competing relativisers: non-subject who *vs.* whom *and possessive* whose *vs.* of which. *The data show that, with the exception of the otherwise infrequent relativizer* who, *there has been a decrease in the distrihution of case-marked* whom *and* whose *as well as of the analytic form* of which. *Furthermore, ir is argued that these smaller figures are the result of tlie interaction of grammatical and stylistic developments. Thus such formally and semantically complex relativisers as* whom. whose, *and* of which *seein to have been replaced by other simpler relative and non-relative alternative constructions, and this process in turn might be a reflection of other stylistic developments affecting written English over the last thirty years.* (Keywords: British English. Relative Markers. Parallel Corpora. Change in Progress).

RESUMEN

Este trabajo trata del cambio lingüístico en nuestros días utilizando dos corpus paralelos de inglés escrito británico compilados con una diferencia de treinta años. Las construcciones analizadas las conforman dos grupos de pronombres relativos en los que existe variación: who *y* whom *en funciones distintas de las de sujeto, así como los relativos posesivos* whose *y* of which. *Los datos indican que. con la excepción del poco frecuente* who, *ha habido una disminución en el uso los citados pronombres relativos. Se afirma que tal disminución se produce como resultado de la interacción entre cambios gramaticales y estilísticos. Así, pronombres tan complejos formal y semánticamente como* whom, whose *y* of which *parecen estar siendo substituídos por otras construcciones relativas y no relativas más simples, y este proceso a su vez bien pudiera ser un reflejo de otros desarrollos estilísticos que han afectado al inglés escrito en los últimos treinta años.* (Palabras Clave: Ingles Britanico. Pronombres de relativo. Corpus Paralelos. Cambio en curso).

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I. INTRODUCTION

This article explores the variation found in some of the relativisation strategies available in present-day written British English. The study involves a quantitative and qualitative analysis of the influence of a series of factors on the choice of *whom* vs. iiho in non-subject functions and of possessive *whose* vs. of *which*. At the same time. this study will offer some insights on morphosyntactic change in progress by comparing the distrihution of these relativisers and their conditions of use in two parallel corpora collected in 1961 and 1991. The above relative markers were especially chosen as there is some evidence of change in their distribution in the late twentieth century which needs to he verified.

The system of relativisation in English lends itself to interesting possibilities of diachronic variation between different relative markers. Commentators on linguistic developments in present-day English have often niade statements about the loss of case-marking in wh-pronouns (*whom*, *whose*) and the possible influence of innovative analytic relativisation methods (*who*. *of which*) on that process (Schneider 1992b: 437). On the other hand. there has been a long tradition of prescriptive studies aimed at reducing the numher of possible relativisation choices by enforcing the use of specific forms such as *whom* for object relatives over other relative markers such as *who*. *that*. and zero (e.g. Lowth 1762: Fowler 1965: 708). Such a prescriptive attitude has been operating since the end of the Early Modern English period. At that stage. for instance. the editors of the second and subsequent folios of Shakespeare's plays systematically replaced all forms of uninflected non-suhject *who* with the conservative form *whom* (Schneider 1992b: 445-446). As for the other relativizer considered here. the attitude towards considering the use of *whose* with nonpersonal antecedents as "awkward" also subsists in present-day English (Fowler 1965: 712: Quirk et al. 1985: 367: Bauer 1994: 79).

The next sections in this study analyse whether prescriptions on usage in present-day written British English still influence relativizer choice in the 1990s as strongly as some decades ago and whether there have been changes in the use of the different forms. Section II deals with some of the problems associated with the analysis of grammatical change in progress and the data on which the present study is based. Sections III and IV analyse recent developments in the distrihution of the above mentioned relative markers across a number of textual categories and structural environments. Section V discusses the complex interaction hetween linguistic developments in present-day written British English and the recent shifts in the stylistic norms of some of the genres. Finally, a summary of the main conclusions will be presented in section VI.

II. METHODOLOGY

Studying rnorphosyntactic change is fraught with a series of problems which explain why so little work has been done in this area in comparison with diachronic phonology. A change in the grammatical system. as Labov notes. "is an elusive process as compared to sound change; whereas you find sound changes in progress in every large city in the English-speaking world. we have comparatively little data on syntactic change" (Labov 1972: 226). Morphosyntactic change is generally rather slow due to the low frequency of most constructions. Veiy often changes occur so slowly that they pass unnoticed. which makes it extremely difficult to

describe their origin and growth.

The difficulties found in studying change are more acutely perceived in the case of research into on-going change. Because of the transitory nature of some of the linguistic developments, research into change in progress, particularly within a short time period as is reported in this study, may give results which appear less certain than research into other kinds of change. The trends do not seem particularly clear, the results have to be hedged and a certain historical distance is needed to observe time-lasting change.

Lack ofquantitative evidence on present-day changes has been hard to come by and, as a consequence, there has been little research into changes in standard English using the Labovian methodologies. In some cases the evidence collected by many researchers is unsystematic and based solely on personal intuition. Such anecdotal observations often make their way into pedagogical grammars, which report on conteniporary trends of development without niuch empirical evidence, presenting a state of affairs that might have been more or less accurate some decades ago. Very often linguists and commentators on usage are unaware of many of the changes currently under progress or happen to report theni just because the particular usage under discussion has not been subjected to attack by prescriptivists.

Today, the problem of the lack of adequate data can no longer be a hindrance to the analysis of language changes in progress. Parallel corpora allow linguists to investigate how attitudes towards linguistic norms both model and are shaped by real language use as retlected in newspapers, official docurnents, scientific texts, novels, etc. Moreover, corpus-based approaches to change are able to verify or discredit the intuitions of linguists concerning linguistic developments in contemporary English. The data offered by the analysis of corpora may reveal changes either not previously noticed or unsystematically referred to in the literature.

In order to detect change in real time in the relativisation strategies available in present-day written British English, the present study is based on two comparable language corpora. *The Lancaster-Oslo Bergen Corpus of British English* (LOB) (Johansson et al. 1978) and its more recent counterpart, *The Freiburg-LOB Corpus of British English* (FLOB). Both corpora were sampled from two different yearx, 1961 and 1991, thus with a thirty-year span between them. They are both of the same size (one million words) and contain the same text categories. The fact that the two corpora are stylistically stratified into a wide range of genres niakes theni fairly representative of written British English as a whole. These genres can be subsumed under two general genre groups according to purpose and forniality: informative texts (text categories A-J) and fictional prose (text categories K-R).

Compilers of FLOB tried to match the 1991 material as closely as possible with that originally used in LOB. In the case ofjournalistic sources, they went as far as sampling texts from the same newspapers, magazines and periodicals as those used in LOB. In the sampling of excerpts from books and articles, great care was taken to choose materials on equivalent topics rather than to randonily select titles from bibliographical sources. The main aim was thus to achieve close comparability with LOB rather than statistical representativeness (Sand & Siemund 1992: Hundt et al. 1998).

LOB and FLOB allow us to have comparable texts published within a generation's time. By using these two parallel corpora we are able to hold several variables constant: medium, text type, dialect, etc. In this sense, the new corpus allows us to concentrate on linguistic developments in written British English over a period of thirty years due to the loosening of prescriptive attitudes towards the use of sonie of these relativisers (cf. Tottie 1997 for a similar tendency towards the use

of other relativisers).

Apart from scattered comments in several general works on relative markers in present-day English (e.g. de Haan 1989: Ball 1996). there exist two studies specifically dealing with non-subject *wh-* relativisation strategies using the well-known LOB and Brown corpora (Schneider 1992a; Johansson 1995). One possihle approach in the present study would he to take advantage of their data and compare their findings with those found in FLOB. However. there exist in variation studies several methodological prohlems when comparing one's data with those collected hy other researchers (see Bauer 1994: 84). The precise method of analysis used hy other scholars is very often not known. Sometinies the sources of their data do not render themselves to comparison with one's own. as the other scholars may not have counted just the same things in their analysis. As we shall see. this is precisely the prohlem with interpreting hoth Schneider's and Johansson's data on LOB and, as a consequence. it was decided that a new analysis of the data in LOB was necessary. Moreover. despite the availahility of the above mentioned research studies. none of them offers data on change in progress.

III. *WHOM* VS. *WHO* IN PRESENT-DAY WRITTEN BRITISH ENGLISH

ln present-day English *whom* is still going through a process that had its origins in OE with the coalescence of the accusative form (*whone/whane/whaene*) and the dative form (*whaem/wham*) into the oblique form *whom* by the late 15th century. The process of simplification of case-marked *whom* continued in speech and writing right after the end of the ME period with the increasing popularity of non-suhject forms such as *who*, *that* and zero (Brunner 1962: 157-158; Strang 1970: 143: Schneider 1992b).

The situation in present-day English is as follows: *whom* can appear in restrictive relative clauses having a personal antecedent when its function is that of direct ohject a s in (1) below- or ohject of a preposition as in (2):

> (I) One of his earlier comrades had been Edwin Forrest, an actor *whom* the younger James had caught in his later years... (FLOB G41: 59)
> (2) In her place came a man ahout *whom* hardly anything was known ahroad and little more at home. (FLOB B13: 113)

Only when the preposition precedes the relativizer, as is the case in formal English. *whom* is the only choice availahle. When the preposition is stranded or when the role of the relative marker is that of object of the verb *who*. *that* or zero can replace *whom*. In nonrestrictive relative clauses, both *wlzom* and *who* are possible. but not *that* or zero (Quirk et al. 1985: 1349).

Since Early Modern English two opposing norms have coexisted that account for the use of non-subject *whom* in English. On the one hand, grammarians and usage commentators have noted a certain reluctance to use *whom* in restrictive relative clauses. especially as the direct ohject of a verb (Foster 1968; Quirk et al. 1985: Declerk 1991). In speech *whom* is felt to he "pedantic" (Quirk et al. 1985: 1251) and thus speakers prefer *that*. zero or to a lesser extent *who*, which still tends to he regarded as incorrect due to its homonyniy with the subject form. Other reasons for the tendency in informal English to avoid *whom* are explained by the fact that spoken language disfavours placing non-suhject forms before the verb, especially if they have nonpersonal reference (Quirk et al. 1985: 1252).

Ori the other hand, from the 17th century onwards English prescriptive grammars under the influence of Latin have estahlished the rule by which *who* must be used in subject and subject complement functions, whereas *whom* is to he used in all the other environments (Traugott 1972: 183). As a result of normative teaching still current today (e.g. Fowler 1965: 708: Weiner 1983: 187). *whom* holds ground in the formal language, especially after prepositions (Schneider 1992b: 437)

Different empirical studies have reported on the present-day English reluctance to use personal *whom* to relativize on non-subject functions: some of these studies have also remarked a counterbalancing preference for *who*. Sapir (1921) used the disappearance of the non-nominative form as an example of the drift of English toward the loss of case marking in all but the personal pronouns. a further example of the tendency of English towards analytic rnorphosyntactic developments. In fact. Sapir even predicted the disappearance of *whom* "within a couple of thousand years" (Sapir 1921: 167). Quirk (1957) found more or less the same number of clauses with the three possibilities, i.e. *wh-* (*who* and *whom*), *that* and zero in his 1950s corpus of educated spoken British English. Overall, he noticed the reluctance to use *whom* in spoken English to have been active "for some generations" (Quirk 1957: 107). However, the corpus he used can hardly he representative of current English. and the number of occurrences he found are too low to reach any definite conclusions.

Bauer (1993: 75-76). using two comparable journalistic corpora from *The Times*, one for 1900-1980 and the other for the year 1989. was ahle to plot a significant decrease in the use of *whom* marking a direct object as a percentage of all relative clauses with human antecedents. This decrease. he observes. might he explained in part by a resurgence of *who* as an alternative. at least in journalistic texts. Thus. *whom* "is used virtually exclusively where there is relativisation on obliques with no preposition stranding" (Bauer 1994: 76)

One article has focused almost exclusively on the choice between object-case *whom* and *who*. Schneider (1992a) found ***irhom*** much less established in written American English. represented by the 1961 Brown Corpus. than in its British counterpart (LOB). He also found a small number of tokens of uninflected non-subject *who* in hoth corpora (two cases in Brown and eight in LOB). His figures are interesting for regional variation in the 1960s but there is a problem with interpreting and using his data as a tool for comparing present and past usages of these two relative markers. He lumps together both the relative and the interrogative uses ofthe pronouns in his analysis so that the specific conditions of usage for the relatives are not taken into account. Moreover. he includes in his data all the occurrences of *whom* as a partitive construction (*some **of** whom, both of whom...*) for which there is no alternative construction with the other relativisers. These procedures make his results from LOB unavailable for direct comparison with the data in FLOB, so in the present study it was decided to start a new analysis of the data in hoth corpora.

A comparative analysis of all the figures in LOB and FLOB shows that *whom* has been losing ground in recent written British English (187 cases vs. 129 cases). The diachronic difference is significant at the 0.5 per-cent level (chi-square = 0.0011, 1 d.f) and speaks in favour of the pronouncements made by many usage commentators about the decline of *whom* in British English. following a trend present in American English as the results offered by Schneider (1992a) show for Brown. Table 1 shows the distribution of *whom* vs. *who* in LOB and FLOB.

The results reported in Tahle 1 do not show a statistically significant clear-cut connection between the loss of case-marked *whom* and the emergence of *who* in recent years. The increase in the numbers for *who* in FLOB cannot be deemed statistically significant due to Cochran's restriction on low expected frequencies for this relativizer. In fact. the low percentages for

uninflected *who* in both corpora do not allow us to carry out a thorough analysis of this relativizer in the same way as will be done below for *whom*. It is possihle that the slight resurgence of *who* as a relativizer for non-subject functions might be strengthened by its colloquial usage as an interrogative pronoun govemed hy a verh or a preposition (*Who did you see?/Who did you talk to?*).

Table 1: Distribution of *who* and *whom* by corpus			
Corpus	***who***	***whom***	**Row Total**
LOB	3 (30%)	187 (89.2%)	190 (58.3%)
FLOB	7 (70%)	129 (40.8%)	136 (41.7%)
column total	10 (3.1%)	316 (96.9%)	326 (100%)

Table 2 compares the figures for *who* and *whom* according to specific stylistic factors (genre group) and structural factors (clause type. syntactic function of the relative marker. position of the preposition) in hoth corpora considered together.

Table 2: General constraints on the choice between *who* and *whom*			
	who	***whom***	**Row Total**
Genre group			
non-fiction (A-J)	7 (70%)	262 (82.9%)	269 (82%)
Fiction (K-R)	3 (30%)	54 (17.1%)	57 (17.5%)
Clause Type			
Restrictive	7 (70%)	186 (58.9%)	193 (59.2%)
Nonrestrictive	3 (30%)	130 (41.1%)	133 (40.8%)
Syntactic Function			
Direct Object	10 (100%)	122 (39.2%)	132 (41.1%)
Object of Prep.	0 (0%)	192 (60.8%)	192 (58.9%)
Preposition			
no preposition	10 (100%)	124 (39.2%)	134 (41.1%)
before *wh*	0 (0%)	191 (60.4%)	191 (58.6%)
stranded	0 (0%)	1 (0.3%)	1 (0.3%)
column total	10 (3.1%)	316 (96.9%)	326 (100%)

Overall. *who* is preferred in restrictive relative clauses and is invariahly used in direct ohject functions. It is also more common in informative prose (A-J). which contradicts Quirk et al's (1985) assertion on the informal character of *who* in non-subject functions. On the other hand. *rvhom* is the best option in restrictive relative clauses as well as in informative genres. especially in text types G (biography and essays). J (science and leamed writings). F (popular lore) and H (official documents). These four genres account for over half of the overall occurrences of *whom* in LOB and FLOB.

The only constraint that might indicate a statistically significant diachronic preference for either *who* or *whom* is the syntactic function of the relativizer. viz. direct object or object of a preposition. Uninflected *who* is invariahly used in direct object functions. whereas the most typical

function of *whom* is that of object of a preposition. However. the possibility of calculating the chi-square is blocked here as in all the other cases in Tahle 2 by the low expected frequencies for *who*. In the cases in which *whom* is used with a preposition. it is also noticeable that only in one case out of 192 the preposition is stranded. as (3) shows:

> (3) But how wimpish a reaction! Was this a sign of the essential impotence of the scholar and academic as against the Man of Action - the Man of Action *whom* scholars and academics hattened on...? (FLOB: L21 92)

It is also interesting to consider the four cases –one found in LOB and three in FLOB– of a hypercorrected use of *whom* in what Quirk et al. (1985: 103) call "a subject in a partially object environment". Three of these four occurrences appear in the reporting of direct speech. The following is an example frorn FLOB:

> (4) Certainly not beside his anxious wife (Glenn Close) *whom* I must confess reminded me more of Lady Macheth thaii any other Gertrude I have come across. (FLOB: C02 159)

The fact that three out of the four cases where we find this hypercorrected usage come from the most recent corpus could he an indication of the growing uncertainty felt by many speakers about the conditions of use for *whom* which was already noticed by Sapir (1921).

The above nientioned diachroiiic tendency for the loss of the relativizer *whom* can be checked in Table 3. This Tahle throws some light oii whether the recent decrease in the use of the inflected form in FLOB is favoured by specific structural and stylistic conditions or there has been a constant rate of loss in all possible environments.

Table 3: General constraints on the choice between who and *whom*

	LOB	FLOB	Row Total	χ^2
Genre group				
non-fiction (A-J)	150 (80.2%)	112 (86.8%)	262 (82.9%)	
Fiction (K-R)	37 (19.8%)	17 (13.2%)	54 (17.1%)	.12508
Clause Type				
Restrictive	112 (59.9%)	74 (57.4%)	186 (58.9%)	
Nonrestrictive	75 (40.1%)	55 (42.6%)	130 (41.1%)	.65344
Syntactic Function				
Direct Object	73 (39%)	51 (39.5%)	124 (39.2%)	
Object of Prep.	114 (61%)	78 (60.5%)	192 (60.8%)	.92907
Preposition				
no preposition	73 (39%)	51 (395%)	124 (39 2%)	
before *wh*	114 (61%)	77 (59 7%)	191 (60.8%)	
stranded	0 (0%)	1 (0 8%)	1 (0 3%)	47534
column total	187 (51.2%)	129 (40.84)	315 (100%)	

The data show that we cannot state any statistically significant diachronic correlation

between the loss of *whom* and the paranieters of clause type, syntactic function of the wh- fomi and the position of the preposition. The percentages for these environments are evenly distrihuted in both corpora. Contrary to what was expected. *whom* is not becoming relegated to the function of object of a preposition (cf. 60% of the occurrences with this function in LOB with 60.5% in FLOB).

The only environment which comes closest to the level of statistical significance is that of genre group; *whom* is especially on the decrease in fictional texts in recent British English (LOB 19.8% vs. FLOB 13.2%) as compared with its distribution in non-tictional ones. Thus it appears that the rate of loss for the case-marked pronoun is slightly faster in informal settings. possibly due to the increasing incidence ofother relative markers such as *who*. *that* and zero. This result would be in line with the reported tendency for *whom* to become a more and more stylistically marked option. However, the distributions are clearly not significant if the two corpora are divided into smaller textual categories as proposed by Hotland & Johansson (1982: 12). viz. A-C. D-H. J and K-R. Looking at specific genres. the only text types in FLOB which show an opposite tendency towards the decline of *whom* are genres B (7 tokens in LOB vs. 13 tokens in FLOB). D (0 vs. 14 tokens) and E (1 vs. 5 tokens).

As regards the range of prepositions used when *whom* appears as the object of a preposition. both corpora behave in a similar way. The occurrence of individual prepositions gives only one statistically significant association: *to* collocates much more freely with *whom* in LOB than in FLOB: the difference is significant at the five percent level. Summing up. although the overall incidence of the relativizer *iihom* is much lower in FLOB. we can state with some confidence that the constraints operating in LOB are rather similar to those operating in the more recent corpus. which speaks in favour of a case of fairly stable variation over three decades.

IV. *WHOSE* VS. OF *WHICH* IN PRESENT-DAY WRITTEN BRITISH ENGLISH

W*hose* was originally both the genitive interrogative and relative form of masculine and feminine *who* and neuter *what*. It first made its appearance in the fourteenth century. at first with personal antecedents but soon afterwards it accepted nonpersonal ones. In Early Modern English it had two functional competitors. *whereof* and *of which*. The former relative marker lost ground rapidly at the end of the seventeenth century. while *of which*. which had its origins in the Middle English partitive construction after a numeral or a quantifier (*many of iihich, two of which*) emerged as an attributive possessive form. an analytic unmarked relative pronoun which has competed with the synthetic case-marked *whose* (Schneider 1993: 243).

Thus. in present-day English the relativisation of the genitive relationship can he realised in English by means of the possessive modifiers *whose* and *of which*. although there exist other available means of expressing this semantic relationship with or without relativisers. as can be illustrated in (5a-e):

(5a) The house *whose* roof was damaged
(5b) The house *of which* the roofithe roof *of which* was damaged
(5c) The house *that had* its roof *damaged*
(5d) The house *in which/where* the roof was damaged
(5e) The house *with* the damaged roof

Examples (5c), (5d) and (5e) represent three formally simpler altematives in speech. The first two of these exeniplify nonpossessive relative constructions. with *that* as a relative niarker plus the verb "to have" in (5c) and a relative clause headed by *in which* or *where* in (5d). (5e) uses a prepositional phrase with *with* as a nonrelative alternative to the possessive construction (Johansson 1995: 253-258).

Whose can have both personal and nonpersonal antecedents. When its antecedent is nonpersonal, there is a teiidency to avoid the use of *whose* because many language users consider this pronoun as the exclusive genitive form of personal *who* (Quirk et al. 1985: 367). In spite of this. in some fields of discourse *whose* referring to nonhumans is still common, as is the case with mathematical definitions and formulae (Poutsma 1926-29: 967: Quirk et al. 1985: 1250):

> (6) [Formula] where the *lA*... are constants depending on the derivatives of {150 (1) at \151 = {151}*1*: n** and *whose* precise value will not concern us. (LOB: J20 244)

The paradigmatic variant of *whose* is *of which*, which can be only used with nonpersonal antecedents. As regards its position in the relative clause, *of which* can be placed before as well as after its head (*the house of which the roof/the roof of which was damaged*). This unstable position of the relativizer as well as its more complex form make it an awkward variant of *whose*, a relativizer that is relegated to formal English and more likely to appear in nonrestrictive relative clauses (Quirk et al. 1985: 1249: Declerk 1991: 537). As can be seen, neither *whose* nor of *which* with nonpersonal antecedents are considered fully acceptable in English for different reasons (Schneider 1992b: 255). What remains to he seen is whether this state of affairs is likely to produce linguistic change and. if at all, in which direction.

The factors conditioning the distribution of *whose* and *of which* in different text types and regional varieties of English have been the object of a handful of articles and a monograph. Schneider (1992a) treats *whose* and *of which* when discussing the case marking of *wh-* pronouns in British and American English. He finds that figures in the Brown corpus are much lower for both relativisers. although further processing of the data leads him to the conclusion that there are no significant regional differences in the use of both pronouns as regards text category, type of relative clause. seniantics of the antecedent and the position of *of which*. But his results must be regarded with caution. as he incorporates both interrogative uses of *whose* and partitive uses of *of which* to his analysis. which makes his results unavailable for comparison with those in FLOB in the present study. In his corpus-based analysis. Schneider concludes that "for the recent period the feeling is that *whose* has been gaining ground again, especially if it is referring to nonhuman antecedents" (Schneider 1992a: 231). A similar conclusion is reached by Bauer (1994: 79). who has reponed on a tendency towards having a smaller percentage of tokens of *whose* referring to humans and a corresponding increasing use of this relativizer with nonhuman antecedents.

Johansson's (1995) monograph deals with the variation between *whose* and *of which* in relative clauses in British and American written and spoken English of the 1960s and 1970s. It is to be noticed that he niakes a threefold distinction between possessive relatives with personal. nonpersonal and collective reference. In the present study, however. collectives have been grouped under the nonpersonal label to maintain the traditional twofold distinction between personal and nonpersonal antecedents made in most studies on relativisers. Moreover. Johansson's detailed analysis concentrates on the uses of *whose* with nonpersonal reference to the exclusion of *whose* referring to human entities. With these provisos in mind. Johansson found that relative clauses with *whose* and *of which* are constructions five times as frequent in written discourse as in speech and

that the proportions of the two relativisers are roughly the same in both media. Thus *whose* is chosen approximately in 75% of the cases and the heavier and more complex *of which* in 25% of the examples. Johansson's results are interesting because they point out a difference in the choice of these two variant forms in speech and writing which might predict their present and future distribution in discourse.

In a corpus-based study of relativisation strategies in a one-million-word corpus of New Zealand written English collected in or after 1986. Sigley (1997: 220) found significantly less numbers of both relativisers in his corpus (56 cases overall) than Johansson. With nonprsonal antecedents. *whose* appeared in 63% and of *which* in 27% of the cases. As for casual conversation in New Zealand English. this scholar found oniy 6 tokens for *whose* (only one with nonpersonal reference) and none at all for *of which*. The results are a likely indication that late twentieth-century New Zealand written English is at a more advanced stage than that suggested by either Brown or LOB (or even FLOB. see below for cornparison) with respect to the decline ofpossessive relative niarkers.

When we look at the recent diachronic distribution of these two relativisers. we can observe that *whose* occurs 292 times in LOB vs. 235 in FLOB. For *of which* the ratio is 41 to 31 cases. respectively. The immediate conclusion that can be drawn is that there has been a progressive diminution of both relativisers in present-day written British English. The difference between LOB and FLOB is even statistically significant at the 5 per-cent level in the case of *whose* (chi-square = 6.1651, at 1 degree of freedom). The resulrs thus accord with the progressive avoidance of the troublesome choice between the possessive relative markers *whose* and *of which* through the use of altemative constructions which are more typical of informal conversation (Johansson 1995: 257).

Table 4 offers an account of the general constraints affecting the choice of the relativisers with nonpersonal antecedents in both corpora, as it is only in these contexts where we tind paradigrnatic variation between *whose* and *of which*.

Table 4: **Constraints on the choice between *whose* and *of which* with nonpersonal antecedents**

	whose	*of which*	Row Total	χ^2
Corpus				
LOB	109 (58.3%)	41 (56.9%)	150 (57.9%)	
FLOB	78 (41.7%)	31 (43.1%)	109 (42.1%)	.84435
Text Type				
non-fiction (A-J)	166 (88.8%)	65 (90.3%)	231 (89.2%)	
fiction (K-R)	21 (11.2%)	7 (9.7%)	7 (10.8%)	.72627
Clause Type				
restrictive	131 (79.1%)	13 (18.1%)	144 (55.6%)	
nonrestrictive	56 (29.9%)	59 (81.9%)	115 (44.4%)	.00000
column total	187 (72.2%)	72 (27.8%)	259 (100%)	

The overall figures clearly indicate that *whose* is three times more frequent than *of* which in both collections of texts. The oniy environment which clearly determines the choice of relativizer is the type of relative clause involved. As expected. the higher complexity of the analytic relativizer *of which* niakes it better suited for non-restrictive relative clauses. whereas *whose* patterns more

highly in restrictives. The conditioning power of the remaining constraints do not reach the conventional statistical level. Both non-personal relativisers are cornplex constructions associated with information-centred genres (A-J). in special with the niost formal writings (scientific and learned texts). due to their conciseness and explicitness of reference.

Tables 5 and 6 show the diachronic distribution of each relativizer according to the different environments.

Table 5: **Distribution of *whose* by corpus and various other constraints**

	LOB	FLOB	Row Total	χ^2
Text Type				
non-fiction (A-J)	251 (89%)	201 (85.5%)	452 (85.8%)	
Fiction (K-R)	41 (11%)	34 (14.5%)	75 (14.2%)	.88909
Clause Type				
Restrictive	185 (65.7%)	145 (61.7%)	330 (62.6%)	
Nonrestrictive	107 (34.3%)	90 (38.3%)	197 (37.4%)	.69646
Antecedent				
personal	183 (64.9%)	157 (66.8%)	340 (64.5%)	
nonpersonal	109 (35.1%)	78 (33.2%)	187 (35.5%)	.32379
column total	292 (55.4%)	235 (44.6%)	527 (100%)	

Table 6: **Distribution of *of which* by corpus and various other constraints**

	LOB	FLOB	Row Total	χ^2
Text Type				
non-fiction (A-J)	37 (90.2%)	28 (90.3%)	65 (90.3%)	
fiction (K-R)	4 (9.8%)	3 (9.7%)	7 (9.7%)	.99110
Clause Type				
restrictive	8 (19.5%)	5 (16.1%)	13 (18%)	
nonrestrictive	33 (80.5%)	26 (83.9%)	59 (82%)	.71172
Position of wh-				
before N	11 (26.8%)	10 (32.3%)	21 (29.2%)	
after N	30 (73.2%)	21 (67.7%)	51 (70.8%)	.61579
column total	41 (56.9%)	31 (43.1%)	72 (100%)	

As shown in Table 5. figures for *whose* are higher with personal antecedents, in restrictive relative clauses and in informative texts. The differences between the two corpora according to these parameters are nevertheless negligible. There is. however. a slight tendency in the more recent corpus for *whose* to avoid nonpersonal antecedents. which to a certain extent contradicts the above mentioned predictions made by Schneider (1992a) and Bauer (1994) regarding the increasing availability of *whose* to refer to inanimate entities. The percentages are 64.9% for personal aniecedents and 35.1 for nonpersonals in LOB. whereas in FLOB the percentages are 66.8% and 33.7%. respectively.

The only clear-cut diachronic preferences that can be found are related to some of the individual genres. In LOB *whose* is comparatively much more common in genres H (official documents). J (science) and K (general fiction). In FLOB the relativizer is only slightly more frequent in categories B (editorials). E (skills, trades and hobbies). L (detective fiction). M (science tiction) and R (humour). In both corpora *whose* is abundant in G (essays and biographies) and J (scientific and learned texts).

Table 6 indicates that *of which* is more common in nonrestrictives about 90% of its occurrences in both corpora– and is usually placed after the noun it modifies (tire *house the roof of which*). As expected. there is also a clear correlation between the use of *of which* and text type: the more formal the text type. the more occurrences of the relativizer. As to its use in specific genres, the figures are so low that no clear diachronic differences emerge.

Summing up, Tables 4.5 and 6 show that with some exceptions which have to do with the distribution of *whose* in some specific genres, there are no specific conditions that can account for the recent decline of each of the two relativisers. The increasing rate of loss for *whose* and *of which* has been more or less constant independently of specific internal (i.e. linguistic) or external (stylistic) factors. Furthermore. *of which* does not seem to be gaining ground at the expense of its analytic counterpart.

V. OTHER PARALLEL GRAMMATICAL AND STYLISTIC CHANGES?

From comparing results obtained from LOB and FLOB we have spotted a recent trend towards the diminution in the of *whom*, *whose* and of *which*. In the analysis above we used two comparable stratified corpora to show that diachronically these relativisers are becoming disfavoured in both the most formal and the most informal types of written texts. A few caveats should, however. be taken into account before stating that the whole process reflects an imminent loss or ongoing grammatical change. The fact that both the structural and stylistic constraints are very similar for both samples (LOB and FLOB) seems to speak in favour of a case of stable variation over time.

Moreover. it might be possible. for example. that there is a stronger tendency in LOB. as compared to FLOB. to relativize on human antecedents functioning as direct object or object of a preposition. This would explain the decreasing number of *whom* relativisers in the more recent corpus. Furthermore. in our study of the two sets ofrelativisers I have not satisfied the principle of total accountability (cf. Labov 1969: 738). This means that. for instance. I have just counted all the instances of *whom* and *who* in functional competition. but not all the other cases in which any of these relativisers could have occurred. viz. the occurrences of the other paradigmatic variants (thnt and zero) in the two corpora. Similarly. in the case of the variation between *whose* and *of which*, I have disregarded all the cases where a possible paradigmatic variant could have been possible with other types of non-relative constructions. Thus. it is not so clear all these observations reflect a change in progress.

Throughout I have assumed that the compilers of FLOB have sampled comparable texts belonging to genres identical to those in LOB. The present diachronic study would thus follow a strict criterion of genre compatibility all-too-often taken for granted in many diachronic variation studies. However. even relying on identical textual categories and similar texts does not by itself guarantee that both corpora are a hundred percent stylistically compatible. Taking journalistic texts as an example (coded in LOB/FLOB as A. B and C). we still have to account for shifts in tone. intended audience, the layout of content, etc. in the past few decades. These changes have a bearing

on the level of formality. which also influences the choice of variant forms. Thus. Mair & Hundt (1996). studying the spread ofthe progressive in recent British and American English using FLOB and Frown (the 1991 counterpart of the Brown corpus). suspect that "the gap between the written aiid spoken norms ol'educated English has narrowed considerably over the past few decades" (Mair & Hundt 1996: 253). The increase in the use of the progressive could then he a syrnptoni of the "colloquialisation" of sonie or all of the genres of written English.

In the same fashion. the decreasing frequency of relativisers such as *whom*. *whose* and *of which* in FLOB would turn out to he not a sign of gramniatical change within a stable relativizer system that has remained the sanie for centuries. hut a consequence of stylistic and functional shifts affecting other aspects of the grammar. In journalistic texts, this would be reflected in a higher percentage of contractions. direct quotations from speech. first person pronouns. etc. As a consequence. the contexts in which the above nientioned relativisers would tend to appear havc been radically reduced and the force of prescriptive attitudes towards written English usage has lessened.

The pioneering work of Biher & Firiegan (1989) has shown that texts and genres change over time along several stylistic dirnensions characterised by sets of co-occurring linguistic features. As an exarnple. they have empirically shown that the linguistic characterisations ofessays. fiction and letters have changed dramatically over the last four centuries reflecting a pattem of drift towards more oral linguistic characterisations.

A recent proposal by Sigley (1997: 1998) accounts for the interaction between relativizer choice and formality of style in New Zealand English. Instead of relying on unanalysed or predefined corpus text categories used in the construction of corpora modelled on LOB (and such is the case of FLOB). he constructs a general formality index which can be calculated for each text and genre by counting word forms chosen to represent some aspect along the stylistic diniension of formality/informality. Suhsequently. text categories frorn the corpora are placed on these textual dimensions. and selected categories are evaluated for internal consistency. Such a prospect of establishing a formality index for hoth LOB aiid FLOB –which is beyond the scope ofthis pilot study would allow us to explore the cornplex interaction of stylistic shifts in present-day English genres and grammatical change as represented, for instance. in relativizer choice. Attention should he paid. for iiistance. to those linguistic features connected with formality which are normally associated with "explicit reference", as these features are thought to control the choice of wh-pronouns (Sigley 1997: 215).

CONCLUDING REMARKS

This research has paid attention to some of the patterns of variation and change related to the use of specific relative markers in present-day standard wrinen British English. The data on relativizer usage was ohtained from two collections of texts only thirty years apart in time: LOB texts were sampled in 1961 aiid similar materials froin FLOB were collected in 1991. Among the non-subject relativisers availahle to refer to human beings. hoth *whom* and *who* were found more often in the most formal type of texts aiid heading restrictive relative clauses. *Who* was only present in direct object functions. whereas *whom* seems to be promoted by a preceding preposition. By taking a look at the distribution of *who* aiid *whom* in the two collections of texts. we can state that whereas *whom* seems to he on the decrease in tlie more recent material (129 tokens in FLOB vs. 187 in LOB), *who* increases its nunibers from three to seven occurrences. As the overall numbers for *who* are too low

overall, we cannot conclude that *who* is replacing *whom*. In fact, the growing avoidance of the case-niarked relativizer may be just another sign ofthe preference for less explicit relative niarkers, in this case *that* and zero. *Whom* seems to be losing ground in all eiivironnittnts bur especially so in the iiiost informal text types (genres K-R). In fact, the presence of a few examples of hypercorrected uses of *whom* in FLOB could be taken as a sign that the form in question is becoming increasingly opaque and is doonied to fade away (most clearly in speech) in the near future or at least to be found in just the niost formal types of texts.

The analysis of the other set of relativisers considered here shows that both *whose* and *of which* are more typical of formal written English, although *whose* is preferred over the most complex *of which* with non-personal antecedents. Moreover, whereas the genitive case-marked pronoun patterns more highly in restrictives, the analytic of *which*, due to its more complex form, appears more frequently in nonrestrictives. As for the recent developments in this set, hotli possessive relativisers seem to be disfavoured, to a higher or lesser extent, in all structural and stylistic environnients in the more recent corpus, which might he accounted for by the availability of other relative or non-relative alternative possessive constructions in English. Only time will tell whether these relativisers gain new ascendance or become fossilised forms losing in semantic content, syntactic freedom and stylistic flexibility.

The paper has also shown that variation in relative clause formation in the late twentieth century is to a certain extent variation caused by stylistic factors which do not necessarily imply systemic changes. Funher work is needed along the lines of Biber & Finegan (1989) and Sigley (1997: 1998) to establish the correlation between stylistic and morphosyntactic developments. This is especially important in view of the difficulties found when studying on-going change over such a short period of time. Thus, the force of prescriptive attitudes towards usage might be less felt today than some decades in the past, and this must he checked by looking at related constructions liable to change such as other wh-relative pronouns. Finally, it needs to be said that iiiuch larger collections ofdata from different varieties of English should be available in order to determine with any exactness the behaviour of such uncommon relativisers as *of which*.

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