Pied-piping and preposition stranding in relative clauses (British English vs. American English)

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ABSTRACT

This paper analyses relative clauses in English in which the relativiser functions as complement of a preposition in order to examine variation between pied-piping and preposition stranding. Academic and journalistic writings are considered with the purpose of discerning if the new trend of colloquialisation of the language operates in British and American English. Drawing on data from the ICE corpora, this paper considers different factors to account for preposition placement distribution, paying special attention to register.

KEY WORDS

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1. Introduction

This paper analyses relative clauses in English, more specifically relative clauses in which the relativiser functions as complement of a preposition. The aim of this research is to examine the position that the preposition occupies in these constructions, either at the front of the relative clause, illustrating pied-piping, or at the end of the relative clause, showing preposition stranding. Variation between these two constructions depends on a large number of factors, text type allegedly being the most important one. Traditional approaches on this topic state that more informal texts favour preposition stranding, while more formal texts resort more frequently to pied-piping (Biber et al. 1999, 105). Nevertheless, more recent studies have proved that, in general and in global terms, preposition stranding has experimented a significant increase in use, whereas the frequency with which pied-piping appears has remarkably decreased, especially in written styles (Leech et al. 2009, 231-233). My study concentrates on two types of formal written texts in order to see if this new trend operates in English. I will pay attention to British and American English, the principal native varieties. The focus is on adnominal relative clauses, that is, relative clauses modifying a noun phrase, introduced by explicit relativisers. The following relative words have been included in the analysis, *that*[1], *which*, *who* and *whom* since both human and non-human antecedents will be considered.

Relative clauses are one of the most studied and analysed themes by linguists and grammarians. A great lot of attention is paid to these constructions presumably because of the variation and variability they offer. Of special interest has been the distribution of relative words introducing relative clauses. This paper, however, concentrates on the relative words which function as prepositional complements focusing on the place that the preposition which they accompany occupies. There are two main possibilities regarding prepositional placement in relation to relative clauses: pied-piping (1) and preposition stranding (2). In the former, the preposition is moved to the front preceding the relativiser; while in the latter, the preposition appears in the position where it is created. A third construction is also applicable; in this alternative, termed by Kortmann and Lunkenheimer as "preposition chopping" (3) (quoted in Suárez-Gómez 2014, 260), the stranded preposition is deleted. This third option is less frequent (also less studied) and considered ungrammatical by prescriptive grammars, but it is an acceptable possibility, especially in Asian Englishes (Newbrook 1998, 48-49). Preposition chopping, nonetheless, is out of the scope of this study.

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[1] I will consider *that* a relative pronoun, although several authors regard *that* introducing subordinate clauses as a conjunction (Jespersen 1933; Huddleston and Pullum, 2005).

(1) The book *in which* you are interested is out of print.

(2) The book *which* you are interested *in* is out of print.

(3) The book *which* you are interested is out of print.

In present-day English (henceforth PDE) both preposition stranding and pied-piping are valid and grammatical choices when referring to preposition placement, and different factors intervene to select one or the other. Register is regarded as an aspect of great importance since "the level of formality has always been considered a prominent factor in the discussion of preposition placement" (Hoffmann 2005, 280). It is highly accepted by linguists that the more formal a text is, the greater possibilities for pied-piping to appear, while preposition stranding is more used in informal contexts. One of the reasons that could explain this differentiation is the fact that eighteenth-century grammarians classified preposition stranding as ungrammatical and condemned its use as they argued that a sentence could not end with a preposition (Huddleston and Pullum 2002, 627). Influenced by this postulation some current prescriptive circles do not accept preposition stranding and "older people with traditional educations and outlooks still tend to believe that stranding is always some kind of mistake" (627). This traditional view has been challenged and disregarded by a great sum of academics who claim that this construction has always been used by English speakers (Biber et al. 1999, 625; Hoffman 2005, 280, among others). However, it is understandable that although stranding is presented as correct, it is still regarded as a sign of informal registers due to its prescriptive prohibition, while pied-piping is characteristic of formal styles.

Notwithstanding the fact that each of the constructions is preferred in a particular register, it has been proved that preposition stranding has gained ground over pied-piping in the last decades (Leech et al. 2009, 233). This phenomenon could be explained taking into consideration some studies which state that the English language is becoming more colloquial. In a paper focusing on the progress and change of language, Hundt and Mair found out that there is a tendency to narrow the gap between more formal and more informal ways of writing and speaking (1999, 221). This conclusion explains why preposition stranding shows a significant rise while pied-piping presents a contrasting tendency. It is my aim to analyse if this change is applicable to formal written texts and up to what extent. I will therefore base my analysis on samples taken from academic articles and the printed press from both North America and Great Britain, all of them drawn from the International Corpus of English (henceforth ICE).

In this paper I first provide a general outline of relative clauses as well as an overview of prepositional complements. I then focus on the corpus chosen for this study and refer to the process of data collection. Results and analysis are next presented, followed by the final conclusion.

2. General outline of relative clauses and prepositional complements

Adnominal relative clauses are subordinate constructions working as modifiers introduced by a relative word (or relativiser) which refers to an anaphoric element (the antecedent) realised by means of a noun phrase. Relativisers "can fill any suitable functional slot in its own relative clause" (Newbrook 1998, 44) in which there will always be a missing constituent located in the position we call 'gap'. We distinguish between two types of relativisers; *wh*-words and non-*wh*-words, the latter including both the invariable relativiser *that* (4) and the zero relativiser (5). *Wh*-words are divided into the relative pronouns *which* (6), *who* (7), *whom* (8) and *whose* (9), and the relative adverbs *when* (10), *where* (11) and *why* (12). Distribution among these relative words has been the focus of lots of scholarship studies, which show that the syntactic function of the gap, register, restrictiveness and animacy of the antecedent influence the choice of the relativiser (Biber et al. 1999, 608-622; Huddleston and Pullum 2005, 1047-1058).

(4)   The boy *that* you saw yesterday is my brother.

(5)   The boy ø you saw yesterday is my brother.

(6)   The painting *which* I bought is very popular.

(7)   The boy *who* came yesterday is my brother.

(8)   The boy *whom* you saw yesterday is my brother.

(9)   The boy *whose* painting I bought is my brother.

(10)   I remember the day *when* I bought the painting.

(11)   I bought the painting in a store *where* offers are made.

(12)   There is an important reason *why* I bought the painting.

Turning to the prepositional phrase (henceforth PP) I will briefly expose the main syntactic characteristics they present in terms of complementation. PPs are formed by a simple or complex preposition (the head) followed by a noun phrase (the complement). They can perform different syntactic functions, i.e. modifier of a noun, subject complement, object complement, indirect object, or prepositional complement of verb, of preposition, or of adjective (Brinton and Brinton 2010, 213).

Prepositional complements can be relativised, and if this occurs, the preposition may be fronted together with the relativiser (pied-piped construction) or left in the position it originates (stranded structure). Even when the preposition and the relative word are separated in the sentence, they still form a single constituent, the PP. Zero and *that* relativisers do not allow pied-piping while *wh*-words permit both constructions.

3. The Corpus

The data used in this study have been taken from the ICE (http://ice-corpora.net/ice/index.htm), and correspond to academic and journalistic texts representing British and American varieties of English. Samples derive from two sections, 'Academic Writing' and 'Reportage: Press News and Reports' of both ICE-USA and ICE-GB, which together amount to approximately 80,000 words (20,000 per variety and text type).

The data retrieval consisted of two different steps. The first one was automatic; all the examples containing one of the words used in this study were retrieved from the corpus. With this automatic search 2,896 examples were collected. The second step was manual; as was to be expected, the initial run returned over cases of non-relativisers and cases of relativisers in a position different from prepositional complement. Therefore, all the examples had to be analysed by hand in order to exclude non-relevant examples including those in which the relativiser did not function as a complement of preposition, i.e. cases of relative subjects (as in 13) and relative direct (14) and indirect (15) objects as well as cases of *that* introducing complement clauses (16), demonstrative *that* (17), determiner *that* (18), adverb *that* (19), and *wh*-words introducing interrogative structures (20).

(13) "The essential part of the 'modus operandi' *which* defines practical mastery is transmitted in practice . . . without attaining the level of discourse" (ICE-USA:W2A-012#57:1)

(14) A negative tactic *which* they employed to secure this was to eject all clergy whom they considered to be unsatisfactory. (ICE-GB:W2A-006#27:1)

(15) Soon Elsa falls in love with a king *whom* she wants to tell. (ICEUSA:W2A-006#40:1)

(16) However, throughout their lives Wordsworth and Coleridge shared the belief *that* the laws or principles of nature are at one with the ideas that constitute our humanity. (ICE-GB:W2A-003#24:1)

(17) I think I have a lot of work to do to achieve *that*. (ICE-USA:W2C-012#79:3)

(18)   But he said the delays aren't abnormal for a project of *that* scope. (ICE-USA:W2C-001#12:1)

(19)   I was already leaning in that direction, but it made it *that* much simpler. (ICE-USA:W2C-020#41:1)

(20)   *Who* communicates about the threat and for what purposes? (ICE-BG:W2A-017#27:1)

This second step brought a total of 165 tokens; however, other types of constructions had to be disregarded, as they did not fit in with the parameters of this study. Since the focus of my analysis is the variability between pied-piping and preposition stranding, categorical examples (knock-out contexts) that only allow one of the constructions were also excluded. This exclusion process includes partitive *of*-phrases that are part of a relative clause (21), in which the relativiser can only appear with a piped-piped construction.

(21)   People said they are bothered by noisy students, *many of whom* rent houses there. (ICE-USA:W2C-006#53:2)

In addition, as I concentrate on adnominal relative clauses, the only example found in the samples being a sentential relative clause (22) was also excluded.

(22)   I will come back. To which Stern responded, "My ears perked up when I heard him mention five years". (ICE-USA:W2C-020#12:1)

After excluding the examples with no variation, the final sample that has been used for this study consists of 148 examples in which either *that*, *which*, *who* or *whom* functions as a prepositional complement in an adnominal relative clause. All these examples were introduced into a database and categorised according to the following variables: preposition placement, text type, relative word, preposition used in the construction, function of the prepositional phrase and dialect (see sections 4.1.-5.7.).

4. Results and Analysis

4.1. Preposition placement in relative clauses: frequency

As shown in Figure 1, pied-piping is unquestionably the preferred option regarding relativisation as 93.24 percent of the examples analysed for this study resort to this construction. It appears in 138 cases while preposition stranding is only present in 10. Results for this analysis almost show a context of no variation; stranding is hardly used in my corpora as it represents 6.76 percent of the global tally. Although different factors (dealt with in the following sections)

account for the poor distribution between these two constructions, there is a key aspect that helps to understand this fact. Not including the relativiser zero in in this research analysis seems crucial. Biber et al. point out that "the relativiser is often omitted" with stranding (1999, 624); thus, it is probably safe to assume that if zero had been analysed, the frequency of stranding in relative clauses would have increased.

Figure 1. Distribution of pied-piping and stranding

■ Pied-piping   ■ Stranding
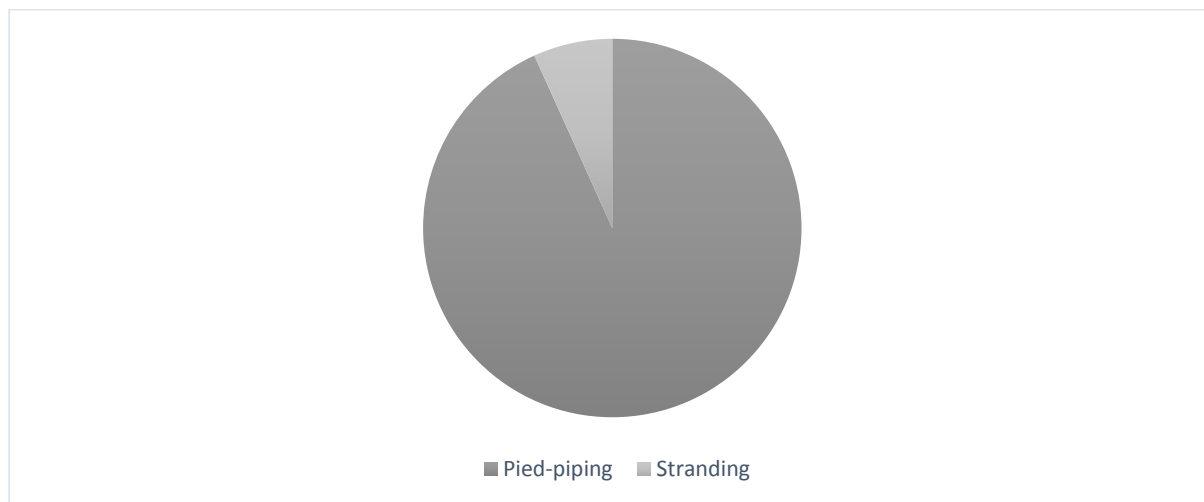
4.2. Accessibility Hierarchy

Before explaining in detail the different variables affecting preposition placement taken into account for this study, it should be mentioned the limited access that prepositional complements have regarding relativisation. Even though "the gap can correspond to almost any clause element in the relative clause" (Biber et al. 1999, 608), Keenan and Comrie expose a theory connected to relativised elements in which it is explained that there are some syntactic positions that are more easily relativised than others (1977, 66). In their study these authors present a hierarchical scale that conditions the accessibility of syntactic elements to relativisation, the Accessibility Hierarchy (henceforth AH). To put it briefly, Keenan and Comrie state that elements situated in the high part of the hierarchy (i.e. subjects, direct and indirect objects) are simple to relativise and process, while elements comprised in the low part (i.e. the oblique case, genitives and objects of comparison) present more difficulties. On that account, the authors conclude that "subjects are easier to relativise than any other position" (89) since they appear at the top of the AH. By extension, as "the relativiser occurs initially in a relative clause, subject gaps preserve the standard subject + verb + object/ predicative/ adverbial order […] while non-subject gaps result in a clause element displaced from its normal position" (Biber et al. 1999, 622), rendering a more ambiguous construction.

In my data, and in accordance to what these authors state, a great amount of the examples exhibit relativised subjects. Contrastingly, a very little proportion of examples analysed for this study show relative pronouns functioning as complements of preposition, which are encapsulated in the oblique-case function. Nonetheless, opposed to what Keenan and Comrie's research shows, examples of relativised direct and indirect objects (which occupy a high position in the AH) appear in fewer cases than prepositional complements. As Table 1 illustrates, subject is undeniably the most common position to be relativised in my data. A total of 1,139 examples present this feature. In contrast, the indirect object is only relativised in 10 examples. Keenan and Comrie provide an explanation for this fact as they argue that the "indirect object position is perhaps the most subtle one on the AH" (1977, 72). They explain that some languages, among which English is included, "assimilate indirect objects to the other oblique cases […] or to direct objects" (72). Hence, it is expected that the values presented by direct objects and prepositional complements are significantly higher than the ones presented by indirect objects.

Table 1. Frequency of relativised positions[1].

	AmPr	AmAc	BrPr	BrAc	Total
Subject	264	319	254	302	1,139
Direct Object	13	41	16	31	101
Indirect Object	2	4	0	4	10
Prepositional Complement	13	51	26	58	148

Am = American Br = British   Ac = Academic   Pr = Press

4.3. Register and text type

Register is a key factor when analysing preposition placement in relative clauses. Formal styles usually resort to the traditionally considered correct pied-piped construction, whereas preposition stranding is more common in colloquial or informal styles. My data, on the one hand, echo the general view that formal texts favour pied-piping (as Table 2 shows), and on the other, do not support conclusions drawn by Leech et al. that show a rising tendency in the use of stranding (2009, 233). This study demonstrates that although stranding is supposed to gain ground, formal texts still dominantly embrace the most traditional and formal construction. This

[1] No genitives or objects of comparison are found in my data.

fact contrasts with assertions that the English language is becoming more colloquial; Hundt and Mair, analysing press and academic prose writings, explore colloquialisation through linguistic innovations and document "advanced stages of their spread through the two major national varieties of English" (1999, 225). Nevertheless, my results parallel not these new trends, but traditional approaches comprehensively explained by Huddleston and Pullum (2002, 626-635) among others.

Table 2. Preposition placement regarding text type.

	AmPr	AmAc	BrPr	BrAc	Total
Pied-piping	9	49	24	56	138
	(69.23%)	(96.08%)	(92.31%)	(96.55%)	(93.24%)
Stranding	4	2	2	2	10
	(30.77%)	(3.92%)	(7.69%)	(3.45%)	(6.76%)
Total	13	51	26	58	148

Am = American Br = British   Ac = Academic   Pr = Press

Moreover, formal texts, contrary to informal ones, are regarded as being formed by rather complex structures. Complex constructions tend to disfavour stranding since it may be difficult to understand a sentence that contains a large number of constituents, especially if one of the constituents has its parts separated in the sentence. Hence, pied-piping is the less ambiguous option when dealing with complex structures, as it maintains the preposition and the relativised element together. Paraphrasing Trotta, Hoffmann argues that when the preposition is stranded "too much intervening material might prevent the discontinuous PP from being interpreted as a single constituent" (2005: 275). I will exemplify this argument using one of the examples taken from my data which shows pied-piping (23) and then transforming it to form a stranded construction (22):

(23)   Kant then figured that reason had some concepts, the Ideas of God, freedom, and immortality, *for which* we have no corresponding sensations and so no corresponding experience or understanding. (ICE-USA:W2A-005)

(24)   Kant then figured that reason had some concepts, the Ideas of God, freedom, and immortality, *which* we have no corresponding sensations and so no corresponding experience or understanding *for*.

This comparison clearly exemplifies how difficult the understanding of a sentence can be when there is a lot of intervening material between the relativiser and the preposition with which it forms a sole constituent. Some linguists, additionally, argue that examples such as (24)

are considered not only problematic but also ungrammatical, since comprehension is not fully guaranteed (Hankamer 1973, 44-51; Temperley 2003, 464-467). Analysing the grammaticality or ungrammaticality of structures such as (24) is out of the scope of this study; nevertheless, it seems logical that pied-piping is preferred in formal contexts, taking into account that it favours complex structures, as stranding the preposition in such environments would render processing difficulties.

Although both types of text selected for this study are included in the formal register and thus englobe the ideas presented above, some differences between journalistic and academic writing have been found regarding preposition placement. The most notorious contrast is the relatively high frequency of stranding in the samples taken from the American press. Granted that only 13 examples showed prepositional complements, 30.77 percent of them present the preposition stranded. This value differs from the percentages displayed by academic writings of both varieties as well as the percentage of the British press. This result echoes Hundt and Mair's findings that journalistic prose is more prone to favour oral-like constructions, while academic prose produces more conventional types of writing (1999, 225-226). Samples derived from the British press show fewer accounts of stranding, 7.69 percent, but this percentage is still higher than the ones in the academic section (3.92 percent in the American dialect and 3.45 percent in the British). Notwithstanding, the significant difference between the American and the British press reflects what Leech et al. have pointed out, a more evident trend towards colloquialisation in American than in British English (2009, 239-245). This final idea will be expanded on in section 4.7.

4.4. Choice of relativiser

As Table 3 indicates, *which* is the preferred option to form prepositional complements, with percentages above 90 percent, both in British and American English. *That* is slightly more used in the United States (7.69 percent versus the British 2.41 percent), although its use is still marginal. The same applies to *whom* in British English (3.61 percent versus the American 1.54 percent). The only relativiser that does not function in my data as a complement of preposition is *who*, which works as a relativised subject in 98.87 percent of the examples.

The clear dominance of *which* may be related to Keenan and Comrie's AH theory (1977), as it can be argued that syntactic positions that are more difficult to relativise tend to favour the most transparent and unambiguous relativisers, which are the overt *wh*-words. At the other extreme we find that no realisations of prepositional complement appear with *who*. As it is in the nominative case (i.e. functioning as subject), it needs to be 'transformed' into the

objective case *whom* to function as prepositional complement. Nonetheless, as *whom* is considered to be rather formal, the sequence *who* + stranded preposition is commonly used, especially in the informal style (Quirk et al. 1985, 368). *Who* was included in the analysis in order to check if this more informal construction occurred in formal styles, but it has been proved that the formal objective form *whom* is preferred in these contexts.

Table 3. Distribution of relative words per dialectal variety.

	which	*who*	*whom*	*that*	Total
USA	59	0	1	5	65
	(90.77%)		(1.54%)	(7.69%)	
GB	78	0	3	2	83
	(93.98%)		(3.61%)	(2.41%)	
Total	137	0	4	7	148

Regarding distribution of relative words in prepositional placement, Table 4 shows that in 135 of the 137 cases in which the relativiser *which* appears, it is part of a pied-piped construction (as in 25), while in merely 2 examples (as in 26) it is separated from the preposition it accompanies, creating stranding. The relative word *whom*, shows some variation (as in 27-28) between pied-piping and stranding, although it only occurs in 4 examples. *That* represents a 'knock-out' context as it only appears if the preposition is stranded (as in 29).

(25) One objection made by the Opposition was the haste *with which* the Government went ahead. (ICE-GB:W2C-001#34:2)

(26) The version of Aristotle's attitude towards divine providence *which* the Church Fathers knew and reacted *against*. (ICE-USA:W2A-008#11:1)

(27) Our founding paradigm of wisdom, *through whom* the ultimately sacred becomes accessible to us. (ICE-USA:W2A-002#43:1)

(28) You have to be very sure as *whom* you go in *with*. (ICE-GB:W2C-017#64:3)

(29) You have many more resources *that* you can refer customers *to*. (ICE-USA:W2C-015#10:1)

This last datum corroborates grammar manuals which argue that the relative word *that* can solely form stranded constructions, as pied-piping is not allowed. This prohibition can be explained looking back to early stages of the English language. Although both pied-piping and preposition stranding co-existed in Old English (OE), they took different relativisation strategies: preposition stranding demanded the invariable paradigm *þe, þat* (*that* in PDE), while

pied-piping called for the pronominal variants *se, seo, þat* (*wh*-words in PDE). "OE only allowed stranding in relative clauses introduced by the complementiser *þe* […] [and] this pattern was continued when *þe* was replaced by *that*" (Hogg and Denison 2006, 197). This phenomenon, however, changed in Middle English when stranding started to be used as well in relative clauses "introduced by the new relative pronoun *which*" (197). In PDE, *wh*-words allow both stranding and pied-piping, but *that* exclusively permits a stranded construction, following the tradition established in OE.

Table 4. Preposition placement distribution regarding relative words

|	*Which*	*Who*	*Whom*	*That*	Total
Pied-Piping	135	0	3	0	138
	(97.83%)		(2.17%)		
Stranding	2	0	1	7	10
	(20%)		(10%)	(70%)	
Total	137	0	4	7	148

4.5. Preposition selection

Another variable that was taken into account for this study was the choice of preposition. The only preposition that was excluded from this analysis, as it has been already mentioned, was preposition *of* forming a partitive construction as it resists stranding. The rest of prepositions were analysed since it was not considered that any of them produced perfect categorical contexts. Nonetheless, Hoffmann claims the contrary arguing that we can identify "prepositions that pied pipe obligatorily, […] verbs triggering obligatory stranding, and […] antecedents causing obligatory pied piping" (2005, 268). He presents various prepositions and prepositional phrases to illustrate this point; however, I will solely refer to the examples that can be found in my data in order to explain why such examples were not disregarded from the analysis.

Hoffmann exposes that the preposition *under* is an example of categorical particle which demands pied-piping (2005, 268). Following this statement, examples presenting *under* would have been disregarded for exhibiting knock-out contexts. Nevertheless, after finding in the Corpus of Contemporary American English (COCA) (Davies 2008-) examples that presented this preposition in the stranded position (30), it was decided not to exclude this preposition from the analysis.

(30)   It's probably the case there are about an extra 130 or so suicides a month, because of just the terrible stress *that* people go *under* when this happens. (COCA: NEWS)

Once it was decided not to exclude prepositions other than the partitive *of*, an analysis regarding the frequency in which the different prepositions appear was carried out. The most common preposition in my data is *in*, which is present in 42.57 percent of the examples. Other prepositions (as Figure 2 shows) present significantly lower values.

Figure 2. Distribution of prepositions.
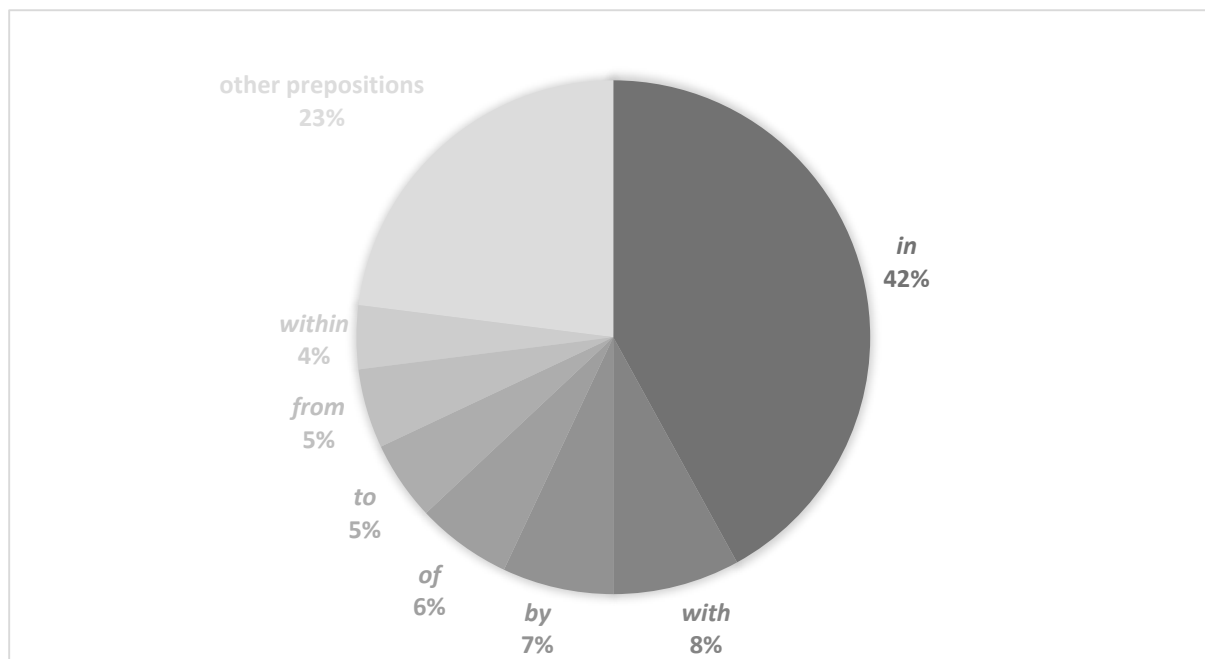
15 different prepositions are included in the label 'other prepositions'

As *in* is the most recurrent preposition, and *which* is the most common relativiser, it is not surprising that, by extension, *in + which* is the most used construction in my data. According to Biber et al. this sequence is more than common in academic prose, competing with its counterpart, the relative adverb *where* (1999, 624). In this research it is also exposed that in news this construction appears with some frequency, but in this case *where* is far more commonly used (625). Hence, it is presumed by this study that the sequence *in + which* regularly expresses the locative meaning of *where*. Of the 63 total examples in my data presenting this sequence, 41 refer to a locative expression. This values compare with other studies reflecting on the distribution of pied-piping and preposition stranding in locative contexts. For example, in Asian Enlgishes the pied-piped sequence *in + which* dominates over stranding even in conversational language, which is highly informal (Suárez-Gómez forthcoming). Thus, it seems logical that if colloquial contexts disfavour the more informal option, formal contexts resort to pied-piping.

Although *in* is the most frequent preposition in my data, it is not used in any of the examples that show stranding. In the light of this result, it could be thought that this preposition

does not allow this variant, but examples such as (31-32) (from Biber et al. 1999, 624) prove that *in* can be part of both pied-piped and stranded constructions. Nevertheless, of the 10 examples presenting the preposition stranded, 3 are formed using *with*, 2 use *to*, other 2 resort to *of*, and the prepositions *against*, *on* and *into* are used in 1 stranded construction. We see that different prepositions can form stranding, but as there are few examples using this construction, it is risky and speculative to provide absolute conclusions.

(31)   The apartments *in which* no one lives

(32)   the one *that* old James used to live *in*

4.6. Function of the prepositional phrase

Hoffmann argues that the syntactic function of the prepositional phrase in the relative clause has a significant impact on the choice between pied-piping and preposition stranding (2005, 259). He bases his analysis on the compulsoriness of the preposition phrase, and following his classification I will argue the following: my data show that no categorical statements can be made in relation to obligatoriness. Some studies state that stranding can only appear with compulsory PPs, while non-compulsory complements (usually called adjuncts) demand pied-piping obligatorily (264). This classification is not corroborated by this study, as both obligatory and non-obligatory complements display both pied-piping and preposition stranding, as Table 5 illustrates. Although it is a fact that non-obligatory complements only present the preposition stranded in 4 cases, I argue that this low value is caused not for the tendency of non-compulsory complements to resort to pied-piping, but for the low frequency of stranding in my corpus. The fact that out of 10 examples of stranded prepositions, 4 are part of a non-obligatory constructions, proves relevant in this case.

Table 5. Obligatoriness of the prepositional phrase.

	Obligatory	Non-obligatory	Total
Pied-piping	37 (26.81%)	101 (73.19%)	138
Stranding	6 (60%)	4 (40%)	10
Total	43	105	148

The majority of my examples allow either construction, and the choice between one and the other depends on different factors. For instance, example (33), which is formed by an

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obligatory PP, presents stranding, but this is demanded by the relativiser, since if we change *that* by *which* a pied-piped construction is possible, illustrated in (34), as exemplified in COCA (35). Comparatively, the pied-piped structure in (36), which presents a non-obligatory PP, can be realised by means of stranding (37) as well. Again, an example taken from COCA (38) is presented to illustrate the grammaticality of the alternative construction.

(33)   The aesthetic properties that seem to him so ontologically different from the non-aesthetic ones *that* one refers *to*. (ICE-USA:W2A-010)

(34)   The aesthetic properties that seem to him so ontologically different from the non-aesthetic ones *to which* one refers.

(35)   "Paul says, though the legislation *to which* he refers is unclear." (COCA: SHOW)

(36)   "Being There" was made into a 1979 movie, *for which* Mr. Kosinski wrote the screenplay. (ICE-USA:W2C-007#47:6)

(37)   "Being There" was made into a 1979 movie, *which* Mr. Kosinski wrote the screenplay *for*.

(38)   But I didn't see The Post, *which* you write *for*. (COCA: PRESCRIPTIVE)

4.7. Dialect

Another variable considered for this study was dialectal variation. Although the initial purpose of taking into account the two main varieties of English was discerning the overall distribution between pied-piping and preposition stranding in formal texts, it was decided to include a detailed analysis of the individual behaviour of each dialect. The initial question that arose was if the conclusion drawn by Leech et al. (2009, 239-249), stating that American English is becoming more colloquial than British English, could be applied to this research. Thus, if we accept that preposition stranding is a mark of informal registers, we should expect a major use of this construction in the variety of the United States. My data concords with this hypothesis as, notwithstanding the fact that stranding occurs with a very low frequency, the percentage of occurrence in American English is higher than the one in British English, as Table 6 shows.

Results derived from this comparison show that granted that stranding appears in very few cases in general, it can be said that the American variety accepts this construction more frequently. Almost 11 percent of the cases show stranding in this dialect, whilst not even 4 percent of the British examples present the preposition stranded. Another conclusive detail which explains the major occurrence of stranding in the American dialect is the appearance of the relative pronoun *that*. This relativiser needs to be accompanied by a stranded preposition;

hence, all examples presenting *that* will show stranding. And as seen in Table 3, this relative pronoun functions as a prepositional complement more frequently in the variety of the United States.

Table 6. Preposition placement in American and British English.

	U.S.A.	G.B.	Total
Pied-Piping	58 (89.23%)	80 (96.39%)	138
Stranding	7 (10.77%)	3 (3.61%)	10
Total	65 (43.92%)	83 (56.08%)	148

5. Conclusion

These findings illustrate the limited variation that exists between pied-piping and preposition stranding in relative clauses appearing in formal contexts. Due to the rather one-sided nature of the data in favour of fronted prepositions, it is difficult to offer conclusive results regarding the contexts where stranding tends to appear more regularly. Nonetheless, this paper shows that stranded prepositions are clearly disfavoured in formal styles in both British and American English. This conclusion has been presented and explained through the analysis of different variables that affect preposition placement selection, register being the most relevant regarding the aim of this paper.

Register has been considered the most decisive factor regarding the choice between pied-piping and preposition stranding, and most academics agree that formal contexts called for pied-piping while preposition stranding was regarded as a mark of informal style. More recently linguists such as Leech et al. (2009, 226-233) have shown through quantitative analyses a rising tendency in the use of stranding. These authors argue that "the change between 1961 and 1991/2 is in the direction of the less formal option, that is, in the direction of colloquialization [as] there is a highly significant decline in pied-piping […] and a considerable rise in stranding" (233). Nevertheless, my data do no corroborate this recent research since they show that in formal registers preposition stranding is hardly used. Journalistic and academic writings were chosen for this study with the aim to analyse if this new trend, which challenges traditional assertions regarding preposition placement, operates in British and American English. It has been proved, notwithstanding, that piped-piping is undeniably the preferred

option in the formal register. Some differences have been also found in terms of the text analysed. Press writings show higher values for preposition stranding than academic articles, corroborating the idea presented by Hundt and Mair that journalistic texts are experimenting a change towards a more informal style (1999, 225-226).

We have seen that *which* is the most common relative word functioning as a prepositional complement, and for the most part it presents a pied-piped structure. My data corroborates that the relativiser *that* only presents stranded constructions, creating a knock-out context, whereas *whom* allows both stranding and pied-piping. The relative word *who* is not articulated in the position considered for this study. The dominance of *which* relates to the dominance of the preposition *in*, as these particles account together for 70 percent of the total examples. In my data, this preposition is only complemented by *which* and in all of the cases it appears in the front of the relative clause. Different prepositions are realised by means of a stranded construction, *with* being the most common one; but as the values for stranding are considerably low, definitive and absolute results cannot be provided.

The function of the PP does not prove especially relevant in this study. My data do not present categorical contexts that were expected to be found before the analysis. Results for this research paper prove instead that distribution between pied-piping and preposition standing is not affected by the compulsoriness of the PP in the relative clause. Examples of both stranding and pied-piping appear with obligatory and non-obligatory complements in my corpus, creating variation. Although some specific complements create knock-out contexts, as Hoffmann argues in his research analysis (2005, 264-274), they do not appear in my corpus.

Taking into consideration all the different variables presented in this analysis, as well as the fact that prepositional complements are difficult to relativise, this paper proves that pied-piping is by large the preferred option in formal contexts when dealing with relativisation. We cannot argue that formal registers exemplify a knock-out context in the distribution between pied-piping and preposition stranding since some cases of stranding are present in my corpus. Nevertheless, claims that formal texts accept more regularly traits of informal registers cannot be applied to my results.

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