On *Whom* in American English from 1990: A Study Based on the Corpus of Contemporary American English

Shota KIKUCHI

Abstract

本稿では、Corpus of Contemporary American English (COCA)を用い、使用域や文法的 機能に着目しながら、1990年以降のアメリカ英語における whom の使用状況を調査した。 調査の結果、1990年以降においても whom の衰退は着実に進行しており、この変化は特 に話し言葉において顕著であることが明らかになった。whom の使用が義務的であると 言われている前置詞の後の環境全般においても衰退が観察されたが、学術雑誌は一貫し てこの流れに反していた。前置詞随伴の疑問詞構文・関係詞構文、数量詞+ofの構文に おいては、口語的な使用域において who の例が散見されるものの、whom が who を圧倒 する頻度で未だ根強く使用されていることが判明した。一方、口語的な表現に見られる 省略された疑問文においては、By whom?のような whom を用いるタイプが廃れつつあり、 By who?や Who by?のような who を用いるタイプと競合しているようだった。本稿で調 査した前置詞構文での役割が大きいため、whom が近い将来にアメリカ英語から完全に 消え去る可能性は考えにくいことが示唆された。

Key Words: whom, pied-piping, American English, change in contemporary English, COCA

1. Introduction

About a century ago, Sapir (1921: 156) made the following much quoted comment on *whom*:

It is safe to prophesy that within a couple of hundred years from to-day not even the most learned jurist will be saying "Whom did you see?" By that time the "whom" will be as delightfully archaic as the Elizabethan "his" for "its". No logical or historical argument will avail to save this hapless "whom".

Whom is still in use today, though considered by many to be moribund. Whereas it is extremely rare in conversation (Biber et al. 1999: 214), it is still very much alive as a style marker

whose correct use is acquired in the educational system (Mair 2006: 142). The prescriptive rule for the use of *who* and *whom* can be summarized as follows (Aarts and Aarts 2002: 124):

Who is used for the subject function, in formal as well as in informal English.

In informal English *who* can also be used for the direct object function or as prepositional complement (in clauses with a stranded preposition).

Whom is restricted to formal English. It is used for two functions: direct object and prepositional complement.

Many corpus-based studies have been accumulated on the use of *whom* in the twentieth century, including Schneider (1992), Aarts (1993; 1994), Aarts and Aarts (2002), de Haan (2002), Mair (2006), Mair and Leech (2006), Iyeiri and Yaguchi (2009) and Leech et al. (2009). These studies generally agree that whom is not so rare as has been widely assumed and is likely to persist as a prepositional complement, particularly as a style marker. As they deal primarily with the period before the 1990s, it is of great interest to observe the status of whom from the 1990s to present. Among corpora that serve our present purpose is the Corpus of Contemporary American English (hereafter COCA), which currently covers the period from 1990 to 2012.¹ This corpus is the largest freely-available corpus of English containing 450 million words and is updated regularly. It consists of five subcorpora (spoken, fiction, magazine, newspaper and academic) and thus enables us to examine the influence of the register difference on the choice of who and whom. Furthermore, its interface allows us to search for exact words or phrases, wildcards, lemmas, part of speech, or any combinations of these so that we can fairly precisely retrieve constructions which could not be easily handled in other corpora. On the basis of COCA, this paper investigates the use of whom in Present-day American English from a synchronic and diachronic perspective, with particular emphasis on different registers and linguistic circumstances.

After an overview of the historical decline of *whom* from the beginning of the nineteenth century, we shall first see the overall frequencies of *who* and *whom* in COCA and subsequently focus on the problem of whether *whom* is under threat in the one niche in which it remains more or less obligatory, i.e. after a preposition, paying particular attention to register and diachrony. Our scope will then be narrowed to several prepositional constructions involving a pied-piped preposition.

2. A Diachronic Overview of the Demise of Whom

As a starting point for the present study, let us first have a brief diachronic overview of the waning of *whom* in the history of the English language. The replacement of *whom* by uninflected

who began at the beginning of the Early Modern English period and has been progressing for several centuries (Schneider 1992: 231). The diminishing role of *whom* in the last few centuries can be best illustrated by the Corpus of Historical American English (COHA), which contains more than 400 million words from the 1810s to the 2000s.² As shown in Figure 1, COHA nicely portrays the steady decline of *whom* from the 1820s onwards with slight vacillation in the 1960s and 1970s.³

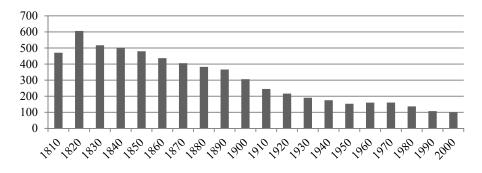


Figure 1. Frequency of whom in COHA (per million words)

3. Overall Frequencies of Who and Whom in COCA

The following results (Table 1) have been obtained concerning the overall frequencies of *who* and *whom* in COCA:

Table 1. *Who* and *whom* in COCA (absolute frequencies (abs), frequencies per million words (pmw) and percentage (%))

		who			whom		
	abs	pmw	%	abs	pmw	%	
Spoken	281526	2945.51	98%	5037	52.70	2%	
Fiction	179306	1982.83	96%	8234	91.05	4%	
Magazine	229299	2399.56	96%	9634	100.85	4%	
Newspaper	304767	3323.02	97%	9149	99.76	3%	
Academic	177362	1947.62	94%	10827	118.89	6%	
Total	1172260	2524.59	96%	42881	92.36	4%	

We can notice that *whom*, compared to *who*, is very restricted in use. In the *who/whom* dichotomy, *whom* barely accounts for 4 percent. As already mentioned in the literature (e.g. Aarts and Aarts 2002; Biber et al. 1999: 214), *whom* is most infrequent in spoken data (52.7 per million words), whereas it is relatively common in written registers. Not surprisingly, academic writing records the highest frequency of *whom* (118.89 per million words). Turning our attention to the proportion

of *whom* in the total of *who* and *whom* in five different subcorpora, we can observe that the highest percentage of *whom* is recorded in academic, while the lowest in spoken.

Next, we shall see whether *whom* has lost currency during the periods investigated. COCA consists of five periods, each spanning five years except for the last one (2010-2012). The results are shown below:

1			U.	,	
	1990-1994	1995-1999	2000-2004	2005-2009	2010-2012
who	2522.67	2526.56	2524.11	2557.26	2560.77
whom	101.70	94.47	91.20	88.28	79.69

Table 2. Frequencies of who and whom from 1990 to 2012 (per million words)

Table 2 reveals that whereas *who* has remained fairly stable, *whom* has declined steadily from 1990 to 2012. It is about 23 percent less frequent in the last period (2010-12) than in the first one (1990-1994). The power relationship between the two forms has changed as well: the share of *whom* has become smaller, having experienced a steady decrease from 3.9 percent (in 1990-1994) to 3 percent (in 2010-2012). Our results indicate that the decline of *whom* is still a change in progress in contemporary American English.

One may wonder here whether the decrease in the use of *whom* is equally observable in different registers. We may expect that written registers, especially academic texts, have prevented to a great extent the demise of *whom* while the spoken register has accelerated it. Figure 2 schematically shows the changing frequency of *whom* in five subcorpora:

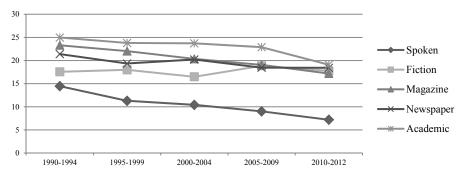


Figure 2. Frequency of whom in five subcorpora (per million words)

It can be seen that in all the registers except fiction the frequency of *whom* has decreased from 1990 to 2012. Spoken register has seen a drastic decrease in frequency of *whom*, about a 50 percent drop from the first period (14.5 per million words) to the last period (7.2 per million words).⁴ Rather unexpected is the convergence of written registers. There is a marked drop of

whom in magazines (26 percent), academic (25 percent) and newspapers (14 percent) over time so that these registers seem to have converged toward fiction, the only register that has remained relatively consistent in the frequency of *whom*.

We have thus far seen that the demise of *whom* has continued to progress from 1990 onwards, especially in spoken English. Does the diminishing preference for *whom* mean increased infiltration of *who* into the principal functions of *whom*? In what follows, we shall be examining the competition between the two variants in the principal environment in which *whom* is believed to have the upper hand over *who*, i.e. after a preposition.

4. Who and Whom Immediately Preceded by a Preposition

4.1 Overall Results

This section focuses on the two pronouns preceded by a preposition. According to Walsh and Walsh (1989), who presented to ten Louisiana State University students a questionnaire concerning the use of *who* and *whom*, all of the informants used *whom* as object of the fronted preposition. In his study on the choice between *who* and *whom* in the Brown family of corpora, Schneider (1992: 236) found no instance of *who* following a preposition. It is interesting then to investigate whether the same kind of tendency for *whom* to be chosen categorically in this environment exists in contemporary American English. The results are provided in Table 3:

	who				whom		
	abs	pmw	%	abs	pmw	%	
Spoken	5623	58.83	61%	3537	37.01	39%	
Fiction	1941	21.46	31%	4399	48.65	69%	
Magazine	2540	26.58	30%	5888	61.62	70%	
Newspaper	2722	29.68	32%	5710	62.26	68%	
Academic	1890	20.75	19%	7947	87.27	81%	
Total	14716	31.69	35%	27481	59.18	65%	

Table 3. *Who* and *whom* preceded by a preposition in COCA (absolute frequencies (abs), frequencies per million words (pmw) and percentage (%))

Admitting that irrelevant cases are unavoidably included in the statistics,⁵ it was quite unpredictable that *who* occurs so frequently (about 35 percent of the cases) after a preposition. The highest number of *who* is observed in the spoken material (58.83 per million words), which is not surprising in view of the claim made in the literature that the prescriptive rule is most likely to be violated in spoken English. However, we might not have expected to see that *who* is so frequent there as to have the majority: it accounts for as many as 61 percent. In the other registers,

whom is the dominant option, with academic register yielding the highest rate and number of *whom* (81 percent with 87.26 per million words).

The next question to be asked is whether the twenty-three years under investigation have seen a steady rise of *who* in this environment.

	1 1			,	
	1990-1994	1995-1999	2000-2004	2005-2009	2010-2012
who	28.19	31.15	33.51	32.28	35.02
whom	66.76	59.80	58.67	55.96	50.10

Table 4. Who and whom preceded by a preposition in COCA (per million words)

Table 4 indicates that *who* has increasingly started to be used after a prepsosition, with *whom* losing its prominence in this position. The shift is so remarkable that the ratio of *who* has increased from 30 percent (in 1990-1994) to 41 percent (in 2010-2012).

Do all the registers now show the tendency to employ *who* more readily than in the past? Figure 3 can provide an answer:

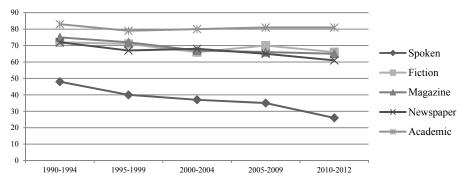


Figure 3. The ratio of whom in the total of who and whom in five subcorpora

Though the other registers seem more or less to have moved toward using *who* after a preposition over the course of the period at issue, academic does not seem to have changed its preference for *whom* here. This result seems to reflect the general view that prescriptive rules for the usage of *whom* are religiously observed in academic writing. On the other hand, there is a remarkable decline of *whom* in spoken texts: the ratio of *whom* has dropped from 48 percent (in 1990-1994) to 26 percent (2010-2012). As far as spoken English is concerned, *who* is not unlikely to take the place of *whom* even in this environment in the future, if this shift continues at this rate in the projected direction.

As already pointed out, however, our data inevitably contain irrelevant cases so that a genuine picture of the competition between the two forms in Present-day American English can

only be attained through circumscribing further the variable contexts. Thus, the investigation below will direct our attention to the following prepositional constructions: interrogative sentences with a pied-piped preposition (e.g. *To who/whom were you speaking?*), relative constructions with a pied-piped preposition (e.g. *That man to who/whom you were speaking is my math teacher.*) and partitive constructions (e.g. *There were five girls, all of who/whom were tall.*).

4.2 Interrogative Sentences with a Pied-piped Preposition

As a prepositional complement in interrogatives, only *whom* can normally follow the preposition, as shown in (1a) below:

- (1) a. For whom is she working?
 - b. *Who*(*m*) is she working for? (Quirk et al. 1985: 370)

Walsh and Walsh (1989) report that their informants selected *whom* exclusively in this syntactic context. Iyeiri and Yaguchi (2009), by contrast, collect two instances of interrogative *who* as a prepositional complement, analysing The Corpus of Spoken Professional American English (CSPAE). This section will concentrate on the choice between the two interrogative pronouns *who* and *whom* when they are immediately placed after a preposition, firstly directing a spotlight on complete interrogative sentences such as (1a). Though it is well known that there are alternative constructions with a preposition deferred at the end of the clause as in (1b), they will not be considered here, because locating them in COCA would be an exacting task.⁶ We can speculate, however, that they are more frequently attested than the pied-piping constructions and that *whom* is seldom found there. Iyeiri and Yaguchi (2009: 184-185), for instance, reveal that of 28 examples of relevant interrogative cases, as many as 21 (75 percent) illustrate the stranding of prepositions with *who* exclusively employed (rather than *whom*). Now, let us move on to considering Table 5 below, which categorizes interrogative sentences according to the type of (auxiliary) verb employed in the main clause:⁷

	who	whom
with be	1	47
with auxiliary <i>do</i>	0	58
with auxiliary have	0	3
with modal verbs	0	36
Total	1	144

Table 5. Interrogative pronouns who and whom preceded by a preposition in COCA (absolute frequencies)⁸

Not unpredictably, *whom* has turned out to be the dominant form here. Instances include such as the following:

(2) with be

a. To whom was that addressed?	(COCA: SPOK)
b. Against whom are they supposed to be conspiring?	(COCA: MAG)
(3) with auxiliary <i>do</i>	
a. To whom do they legally belong?	(COCA: MAG)
b. From whom did the church extort this \$ 5 million?	(COCA: NEWS)
(4) with auxiliary <i>have</i>	
a. <i>With whom</i> have you talked?	(COCA: SPOK)
b. To whom has he given this freedom?	(COCA: MAG)
(5) with modal verbs	
a. To whom would he impart that knowledge?	(COCA: FIC)
b. With whom should Russia align to advance its workaday interests?	(COCA: ACAD)

An important point to mention, however, is the use of *who* in the spoken section, which is illustrated below:

(6) "To who is the hardest person to say no to? Is it your family, your boss? We took to the streets to find out what you had to say." (COCA: SPOK)

This sentence is worthy of particular note in that the preposition is both stranded and moved to the front of the clause. This phenomenon can be viewed as an indication of hesitation between the two strategies of pied-piping and preposition stranding, against the background of the movement towards the latter in contemporary English (cf. Bauer 1994: 77).

Our results make a strong case that *who* will not take the place of *whom* in the pied-piping construction. The construction, however, has been considered as unnatural and said to sound pretentious (see, e.g., Evans and Evans 1957: 556; Otsuka 1969: 838-839). Table 6 demonstrates that it has been falling out of use in the last few decades:

Table 6. The decline of whom in the pied-piping construction in COCA (absolute frequencyies)9

	1990-1994	1995-1999	2000-2004	2005-2009	2010-2012
whom	50	34	32	24	4

As we noted earlier, in Present-day English the norm is to use preposition stranding, in which the contribution of *whom* is negligible. De Haan (2002: 226) finds that over 95 percent of all the cases where *whom* complements a preposition, the preposition immediately precedes *whom* in all the corpora studied (i.e. the Brown family of corpora and BNC). As early as the 1950s, Evans and Evans (1957: 556) observe that sentences such as *Whom are you looking for?* are "unnatural English and have been for at least five hundred years." Given the unnaturalness of the pied-piping construction and the meager role played by *whom* in interrogatives with preposition stranding, it is safe to predict that the role of *whom* as a prepositional complement in interrogative clauses on the whole will become further limited in the future.

Another important usage to be considered in this section concerns interrogative prepositional phrases such as *By whom*? and *Who by*?. Table 7 below treats the following types of interrogative phrases: (a) preposition + *whom* (e.g. *By whom*?), (b) preposition + *who* (e.g. *By who*?), (c) *whom* + preposition (e.g. *Whom by*?) and (d) *who* + preposition (e.g. *Who by*?).

		SPOK	FIC	MAG	NEWS	ACAD	Total
(a) preposition + whom	(e.g. By whom?)	13	90	13	5	18	139
(b) preposition + who	(e.g. By who?)	13	53	3	3	1	73
(c) whom + preposition	(e.g. Whom by?)	0	0	0	0	0	0
(d) who + preposition	(e.g. Who by?)	1	26	0	0	0	27
Total		27	169	16	8	19	239

Table 7. Interrogative prepositional phrases (absolute frequencies)

Unlike in the complete interrogative sentences discussed above, *who* is occasionally found in interrogative prepositional phrases regardless of the position of the preposition as shown in (8) and (9) below, whereas *whom* is never attested with a stranded preposition. These phrases are very frequent in spoken and especially in fiction, which has a close affinity to spoken language in its abundance of dialogue. These registers are also characterized by the frequent attestation of the phrases realized by *who*. Interestingly, type (d), which seems to be an innovative pattern, is confined to these registers. The reason for the absence of type (c) in our present corpus may lie in the fact that the use of *whom* and the postpositioning of prepositions are at odds in terms of style, the former being characteristic of formal style and the latter prevalent in conversation.

(7) preposition + whom

- a. "Did you know we're getting sued, too?" "No. *By whom?*" (COCA: FIC)
- b. "I've made arrangements to be taken to and from my treatments." "*With whom*?" Leanne takes a bite of muffin. "No one you'd know." (COCA: FIC)

(8) preposition + who

a. "You should apologize," said Brian. # "To who? For what?" said Stephanie.

(COCA: FIC)

- b. Unidentified Man 4: You say he was being blackmailed. *By who?* You don't know. For having an affair. *With who?* You don't know. Did anyone else know about it? Probably not. You don't know. (COCA: SPOK)
- (9) who + preposition
 - a. You said on the phone you were selling investments. *Who to?* (COCA: FIC)
 - b. "Just answer the question. Impertinence won't help you. What were you doing there?" "Going for a walk." "*Who with?*" (COCA: FIC)

Seen from a diachronic perspective, there is a change in frequency in these questions as shown in Figure 4:

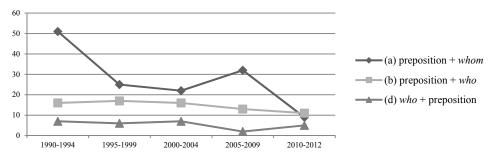


Figure 4. Changing frequency of the interrogative prepositional phrases in COCA (absolute frequencies)¹⁰

Type (a), which was the most common option in the first period, lost ground dramatically, falling into intense competition with the other types formed with *who* in the last period. Whether this indeed reflects a change in progress is an open question to be tackled elsewhere.

4.3 Relative Constructions with a Pied-piped Preposition

As in interrogative sentences, it is not common to use *who* as a prepositional complement in pied-piped relative clauses. The following types of sentences are proscribed in standard reference grammars:

(10) *This is the person *to who* you spoke. (Quirk et al. 1985: 368)

According to Walsh and Walsh (1989: 284-285), their informants entirely avoid *who* in this position. However, in a BNC-based study covering a large number of prepositions, de Haan

(2002: 215-216) reports 8 relative clauses featuring prepositions followed by *who*. In this section, the question will be addressed whether this nonstandard use of *who* has gained currency in contemporary American English. We limit our analysis to the following human antecedents: *person, people, man, men, woman, women, boy(s), girl(s)* and *those*.¹¹ As in 4.2, alternative constructions with a stranded preposition will not be examined here because of the difficulty involved in locating them in COCA. The results are shown in Table 8 below:

Table 8. Personal relativizers who and whom preceded by a preposition in COCA (absolute frequencies)¹²

Antecedent	who	whom
person, people, man, men, woman, women, boy(s), girl(s), those	3	2701

It is found that *whom* prevails over *who* in this environment. It should also be noted that it is attested much more frequently here than in the interrogative sentences investigated above, which is supportive of the view that its decline is in a more advanced stage in interrogatives (Iyeiri and Yaguchi 2009: 189). Of particular interest, however, is the use of *who* in this position, the three instances of which are as follows:

- (11) Well, what you really mean is phone me Friday, or call me if you need -- if you needs some help. People *for who* communication is easy put that stuff in the positive. And -- and people who its a struggle, they put -- tend to put it in the negative and -- and so forming a words is important. (COCA: SPOK)
- (12) The way you deal with that reality is -- and the worry is, if you are going to mother's house to use her phone and you are the one being tapped, you end up tapping your mother's phone and you find out your mother shoplifted, they hear that on the phone -- there is a way in which we wrote into the law that you cannot use anything you gather in that tap against anyone else on that phone, other than the person *for who* -- against whom you are seeking the tap. (COCA: SPOK)
- (13) Whether it is dialing a telephone or navigating a sailboat, computers open the door which allow many people with these disabilities to do things they couldn't before. Once a computer learns to recognize the speech of its user, more doors open. People who do not have the use of their hands, those *for who* computers were literally out of reach, and those with other disabilities as well can now walk through the same doors as those who are able-bodied. (COCA: MAG)

Here again, the innovative pattern is seen in the spoken register. It is intriguing to ask whether the

use of *for*, which is attested in all the cases, is a contributing factor in the appearance of *who*, particularly given the employment of *whom* after *against* in (12). The problem of whether the encroachment of *who* is more advanced after certain prepositions calls for further investigation.

As far as relative clauses are concerned, there is at least one more factor to be considered, that is, the distinction between restrictive and non-restrictive uses. De Haan (2002: 226), among others, predicts that the decline of relative *whom* will be earlier in restrictive use than in non-restrictive use. In order to test this hypothesis, we shall distinguish the two uses on the basis of the contemporary practice that non-restrictive clauses are preceded by a comma, whereas restrictive clauses are not.

Table 9. Personal relativizers *who* and *whom* preceded by a preposition in restrictive and non-restrictive clauses in COCA (absolute frequencies)

	who	whom
restrictive	3	2701
non-restrictive	0	113

Our evidence in Table 9 seems to lend support to de Haan's prediction (2002: 226), for *who* is unattested in non-restrictive clauses, unlike in restrictive clauses. That the frequency of *whom* is much lower in non-restrictive clauses may have to do with the fact that proper nouns are out of the scope of our analysis.

It has been reported in the literature on change in contemporary English that there is a decline in pied-piping and a rise in preposition stranding in relative clauses (see, e.g., Leech et al. 2009: 231-233; Bauer 1994: 74-77; Denison 1998: 220). This trend is adverse to *whom*, because in restrictive relative clauses *that* and zero relativizers are the preferred options when a preposition is stranded (Quirk et al. 1985: 1251; Biber et al. 1999: 614-615). However, pied-piping is still much more common than stranding in written texts (Leech et al. 2009: 233) and there is an indication that this is the case in spoken English as well. According to Iyeiri and Yaguchi's figures (2009: 185), of 61 relevant examples of relative *who/whom* in CSPAE, as many as 45 (73.8 percent) illustrate the phenomenon of preposition stranding, where the form is exclusively *whom*. Since *that* and zero are not available in non-restrictive clauses, it is quite likely that *whom* will remain the predominant option there, which our evidence quite convincingly suggests.

All in all, our data lend strong support to de Haan's prediction (2002: 226) that "whom is here to stay as a prepositional complement of a non-stranded preposition, particularly in non-restrictive clauses, where the relativizers *that* and *zero* are not available." Further, the results also back up Iyeiri and Yaguchi's claim (2009: 189) that the decline of *whom* is more advanced in

interrogative use than in relative use.

4.4 Partitive Constructions

Peters (2004: 579) notes that *whom* is required in some prepositional constructions, e.g. partitives such as *none/both/some/all of whom*, which occur across all genres. In this syntactic context, *whom* can only be avoided by radically changing the syntax of the whole sentence (Aarts and Aarts 2002: 129). Based on the Brown family of corpora and BNC, de Haan's study (2002: 226) finds that about one-fifth of all the instances of *whom* appear in this construction. We shall look at the situation in COCA below. Here, we are concerned with collocations in which *of who(m)* is preceded by numerals (cardinal and ordinal), *all, none, half, many, some, any, several, few, both, either* or *neither*.

	who	whom
numerals (cardinal) + of	10	1305
numerals (ordinal) + of	0	40
all of	3	1429
none of	0	239
half of	0	138
many of	3	2188
some of	6	1256
any of	0	15
several of	0	82
few of	1	76
both of	6	750
either of	0	6
neither of	0	95
Total	29	7619

Table 10. Who and whom in partitive constructions in COCA (absolute frequencies)

As is clearly seen from Table 10, *whom* is the prevailing choice in this context.¹³ This construction makes up over 17 percent of all the tokens of *whom* in COCA. *Whom* is the only viable option after some collocations; ordinal number + *of*, *none of*, *half of*, *any of*, *several of*, *either of* and *neither of*. A question that arises is in which register the collocation of *of who* is likely to occur. Not unexpectedly, it has turned out that spoken yields the highest number of instances of this kind, accounting for 34 percent of the relevant cases (10 instances out of 29). Fiction follows spoken with 7 instances. Some examples are shown below:

- (14) Yes. Basically, three lawyers are appointed, *two of who* had never handled a criminal case before and didn't want on this case either. (COCA: SPOK)
- (15) Senator John Kerry of Massachusetts, *both of who* have had, at one point in their lives, presidential ambitions and have put them aside at least for now. (COCA: SPOK)
- (16) But it's because of ZOG supporting gun control, miscegenation, nigger drug dealers, welfare cheats, and queers, *all of who* are eroding our original roots. (COCA: FIC)
- (17) Jamie has been trying to reach kids, *some of who* may be as unhappy and desperate as he once was.(COCA: SPOK)

Here is an indication that *who* has started to erode the most comfortable position for *whom*. Yet, given the predominant role of *whom*, the near future will not see *who* taking the place of *whom* here. Moreover, the fact that there is no alternative construction with a stranded preposition will contribute immensely to its long-term survival.

5. Conclusion

The present paper has examined the current status of *whom* in American English, with special reference to register and linguistic environment. It has demonstrated that *whom* has been steadily declining from 1990 onwards and that this change is most conspicuous in spoken English. The decline of *whom* has been taking place even after a preposition. This is especially the case with spoken English, whereas academic writing resists this trend robustly. A more detailed look at the situation revealed that *whom* has not lost popularity in its principal functions, i.e. as an object of a pied-piped preposition in interrogative and relative clauses, though the signs of the encroachment of *who* can be seen there in colloquial English. The supremacy of *whom* is firmly established in the partitive constructions (e.g. *all of whom*). The interrogative prepositional phrases formed with *whom* (e.g. *By whom?*), however, seem to have lost their prevalence facing fierce competition with the phrases composed of *who* (e.g. *By who?* and *Who by?*). As long as it does not lose its superiority over *who* in the prepositional constructions discussed in this paper and it continues to be employed in written language for stylistic effect, *whom* will not completely disappear from American English in the near future.

Notes

An earlier version of this paper was read at the 2011 annual meeting of the Komaba Association for Studies in the History of the English Language held at The University of Tokyo on 4 September 2011.

¹ For an overview of COCA, see Davies (2009).

- ² For further information on COHA, see Davies (2012).
- ³ Whether the data in the 1960s and the 1970s represent a temporal reversal of the long-term trend is worth examining. Similar fluctuation is reported in Mair (2006: 142), who finds that there is an increase in frequency of the use of *whom* from 144 instances in 1960 (Brown corpus) to 166 instances in 1992 (Frown corpus) in American English.
- ⁴ Aarts and Aarts (2002: 128) similarly note in spoken British English a decrease in frequency of *whom* by 50 percent over a period of 25-30 years (i.e. between the Svartvik and Quirk (roughly from the mid-sixties to mid-seventies) and ICE-GB corpora).
- ⁵ The following type of 'correct' usage is inevitably included in the overall statistics for *who*:
 - (i) The last thing she wanted to do was go with him, but she couldn't stand by while her father sailed off to sea with probably no idea *of who* he was or where he was going.
 (COCA: FIC)

The source of each citation is designated by the name of the corpus and the genre in which it occurs. Abbreviations used are as follows: SPOK for Spoken, FIC for Fiction, MAG for Magazine, NEWS for Newspaper and ACAD for Academic. Italics in the quotations in this paper are all mine.

- ⁶ Relevant cases of preposition stranding can be collected by searching for the sequence of a preposition plus a question mark and then manually excluding irrelevant cases. However, because in COCA there are as many as 32,664 cases in which such a sequence occurs, we limit the discussion to the case of pied-piping in the present paper. Of course, it would be possible to pinpoint relevant instances with the help of programming languages such as Perl, but this will be left for future study due to the author's limited knowledge about scripts.
- ⁷ All the tokens were collected by taking advantage of the following wildcards; [i*] for all prepositions, [vb*] for all the forms of *be*, [vd*] for all the forms of *do*, [vh*] for all the forms of *have* and [vm*] for all the forms of modal verbs. Any word following a period (.), question mark (?) or right double quotation mark (") is defined in this paper as standing at the beginning of a sentence.
- ⁸ All the tokens were carefully examined in order to exclude from the figure such irrelevant cases as the following:
 - (i) It had already been leaked to the press. *By whom was* anyone's guess. (COCA: FIC)
- ⁹ As the corpus size for the last period is smaller than that for the preceding periods because of the unavailability of the data for 2013 and 2014, the raw figure for the last period is not fully reliable. Figures 2 and 3 are not affected by this problem because they show respectively the normalized frequency (per million words) and the relative, rather than absolute, frequency.
- ¹⁰ See note above.
- ¹¹ The reason for the limitation of our analysis to the selected personal antecedents lies in the fact that searching for the collocation of "noun + preposition + who" yields many irrelevant cases such as the

following:

- (i) Mr. Obama has run into political problems before over the *question of who* should be considered a lobbyist under his ethics restrictions.
 (COCA: NEWS)
 (ii) I have a pretty good *idea of who* these visitors are.
 (COCA: SPOK)
- Thus, we focus on typical personal antecedents, following Biber et al. (1999: 614).
- ¹² Any string of words that matches a personal noun + a preposition + who(m) was retrieved from COCA. As for the instances of who, irrelevant cases are excluded from the data, because such irrelevant cases as the following abound:
 - (i) Others say fun can be fostered at all levels as long as the culture recognizes *people for who* they are, not just what they produce.
- ¹³ The following types of sentences found in the tokens of *all of who* and *half of who* are excluded from the table:
 - (i) In retrospect, I realize that many friends and boyfriends were never that close to me and could never appreciate me for *all of who* I am because I wasn't appreciating me for *all of who* I am.

(COCA: MAG)

 (ii) And one of the secret desires that's always been in my heart is that I would see my foster brothers or my foster sisters there at the door of my parents' place because I thought they only knew maybe less than *half of who* I really was.
 (COCA: SPOK)

Also excluded is the following obviously irrelevant instance collected in the tokens of *some of who*, resulting no doubt from a transcriptional error:

(iii) I'm -- well, no. You -- I'm saying that I do not believe that inviting people to spend the night with me in the White House, the overwhelming majority of whom were personal friends of mine of longstanding: family members, friends of family members, friends of my daughter's, dignitaries, public officials, former public officials -- but *some of who* m -- connection with me really did begin in 1991 when I started running for president, and it involved their willingness to give me money or to raise money to me. (COCA: SPOK)

References

- Aarts, Flor. 1993. "Who, Whom, That and Ø in Two Corpora of Spoken English." English Today 9: 19-21.
- Aarts, Flor. 1994. "Relative Who and Whom: Prescriptive Rules and Linguistic Reality." American Speech 69: 71-79.
- Aarts, Flor, and Bas Aarts. 2002. "Relative Whom: "A Mischief-Maker."" In Andreas Fischer, Gunnel Tottie, and Hans-Martin Lehmann, eds. *Text Types and Corpora*. Tübingen: Narr. 123-130.
- Bauer, Laurie. 1994. Watching English Change: An Introduction to the Study of Linguistic Change in Standard Englishes in the Twentieth Century. London: Longman.

- Biber, Douglas, Stig Johannson, Geoffrey Leech, Susan Conrad, and Edward Finegan. 1999. Longman Grammar of Spoken and Written English. London: Longman.
- Davies, Mark. 2008-. The Corpus of Contemporary American English: 450 Million Words, 1990-Present. Available online at http://corpus.byu.edu/coca/. (accessed April 15, 2013)
- Davies, Mark. 2009. "The 385+ Million Word Corpus of Contemporary American English (1990-2008+): Design, Architecture, and Linguistic Insights." International Journal of Corpus Linguistics 14: 159-90.
- Davies, Mark. 2010-. The Corpus of Historical American English: 400 Million Words, 1810-2009. Available online at http://corpus.byu.edu/coha/. (accessed April 15, 2013)
- Davies, Mark. 2012. "Some Methodological Issues Related to Corpus-Based Investigations of Recent Syntactic Changes in English." In Terttu Nevalainen and Elizabeth Closs Traugott, eds. *The Oxford Handbook of the History of English.* Oxford: Oxford University Press. 157-174.
- de Haan, Peter. 2002. "Whom is not Dead?" In Pam Peters, Peter Collins, and Adam Smith, eds. New Frontiers of Corpus Research: Papers from the Twenty First International Conference on English Language Research on Computerized Corpora, Sydney 2000. Amsterdam: Rodopi. 215-228.
- Denison, David. 1998. "Syntax." In Suzanne Romaine, ed. The Cambridge History of the English Language, IV: 1776-1997. Cambridge: Cambridge University Press. 92-329.
- Iyeiri, Yoko, and Michiko Yaguchi. 2009. "Relative and Interrogative Who/Whom in Contemporary Professional English." In John Ole Askedal, Ian Roberts, Tomonori Matsushita, and Hiroshi Hasegawa, eds. Germanic Languages and Linguistic Universals. Amsterdam: John Benjamins. 177-191.
- Leech, Geoffrey, Marianne Hundt, Christian Mair, and Nicholas Smith. 2009. *Change in Contemporary English.* Cambridge: Cambridge University Press.
- Mair, Christian. 2006. Twentieth-Century English: History, Variation and Standardization. Cambridge: Cambridge University Press.
- Mair, Christian and Geoffrey Leech. 2006. "Current Changes in English Syntax." In Bas Aarts and April McMahon, eds. *The Handbook of English Linguistics*. Oxford: Blackwell. 318-342.
- Otsuka, Takanobu. 1969. Writer's Guide to English Usage. Tokyo: Kenkyusha.
- Peters, Pam. 2004. The Cambridge Guide to English Usage. Cambridge: Cambridge University Press.
- Quirk, Randolph, Sidney Greenbaum, Geoffrey Leech, and Jan Svartvik. 1985. A Comprehensive Grammar of the English Language. London: Longman..
- Sapir, Edward. 1921. *Language: An Introduction to the Study of Speech*. New York/London: Harcourt Brace Jovanovich.
- Schneider, Edgar W. 1992. "Who(m)? Case Marking of Wh-pronouns in Written British and American English." In Gerhard Leitner, ed. New Directions in English Language Corpora: Methodology, Results, Software Developments. Berlin: Mouton de Gruyter. 231-245.
- Walsh, Thomas, and Natasha Walsh. 1989. "Patterns of Who/Whom Usage." American Speech 64: 284-286.