Changes affecting relative clauses in Late Modern English[*]

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Abstract

This paper presents the results of a corpus study comparing relative markers (relative complementisers and relative pronouns) in the King James Bible and its modernised version, focusing on subject and object relative clauses involving a human referent. The attested differences indicate changes affecting Standard (British) English during Late Modern English. The paper discusses three important aspects: in Early Modern English, (i) *which* was available for human subjects, (ii) *that*-relatives had a higher proportion, and (iii) the equative element *as* could introduce relative clauses as a complementiser. The paper argues that the disappearance or reduction of alternative forms to *who*/*whom* was driven both by internal and by external factors, and that significant differences can be observed between the standard variety and regional dialects.
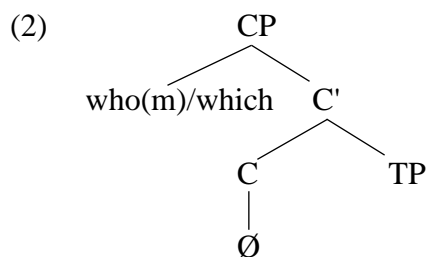
1   Introduction

This paper investigates some important changes affecting the left periphery of relative clauses during Late Modern English and their possible causes. Many traditional dialectal features that can be still detected in the dialects of England are known to have been more predominant in earlier stages of the language. While the present study naturally cannot provide a comprehensive study of all the relevant questions, it presents the results of a corpus study comparing the original version of the King James Bible (1611/1769) and its modernised version (1989), which offers a good contrast between two periods on the same set of data. In this section, I will briefly describe the most important patterns attested in relative clauses in Present-day English and their distribution across the standard variety and dialects.

Relative pronouns in present-day Standard English show partial case distinction and distinction with respect to human vs. non-human antecedents. This is illustrated in (1):

(1)   a.   I saw the woman *who* lives next door in the park.

       b.   The woman *who/whom* I saw in the park lives next door.

       c.   I saw the cat *which* lives next door in the park.

       d.   The cat *which* I saw in the park lives next door.

As can be seen, *who*/*whom* is used with human antecedents, as in (1a) and (1b); the form *who* can appear both as nominative and as accusative, while the form *whom* used for the accusative is restricted in its actual appearance (formal/marked). With non-human antecedents, such as (1c) and (1d), the pronoun *which* is used, which shows no case distinction. It should be mentioned that *who(m)* is possible with certain animals: these are the "sanctioned borderline cases" (see Herrmann 2005: 41, quoting Quirk et al. 1985).

The standard assumption in generative grammar is that the relative pronoun occupies a specifier position in the CP, as shown in (2):

(2)

```
                    CP
            ┌────────┴──────┐
      who(m)/which         C'
                    ┌───────┴──────┐
                    C             TP
                    │
                    Ø
```

The point is that in these cases a zero complementiser is inserted and it attracts the movement of the relative operator to the left periphery.

In addition to relative clauses formed with *wh*-based relative operators, Standard English allows *that*-relatives as well: in these cases, the operator is zero and the complementiser *that* is overt. Consider:

(3)   a.   I saw the woman *that* lives next door in the park.

      b.   The woman *that* I saw in the park lives next door.

      c.   I saw the cat *that* lives next door in the park.

      d.   The cat *that* I saw in the park lives next door.

As can be seen, *that* is not sensitive to case and to the human/non-human distinction, which follows from its status as a complementiser. The relevant structure is illustrated in (4):

(4)

```
              CP
            /    \
          Ø       C'
                 /  \
               C     TP
               |
              that
```
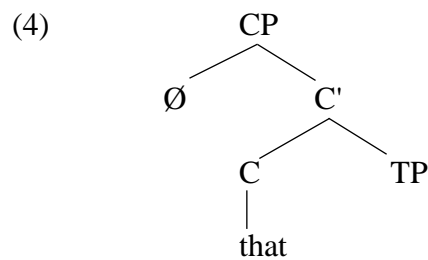
The structure is essentially the same as the one in (2): the difference lies in which element (the operator or the complementiser) is overt.

Apart from the two types of relative clauses mentioned above, zero relatives are also possible with object relative clauses in Standard English:

(5)   a.   *I saw the woman lives next door in the park.

      b.   The woman I saw in the park lives next door.

      c.   *I saw the cat lives next door in the park.

      d.   The cat I saw in the park lives next door.

As can be seen, the availability of zero relatives is not sensitive to the human/non-human distinction but it is sensitive to the function associated with the gap: while it is possible in (direct) object relative clauses[1] like (5b) and (5d), it is prohibited in subject relative clauses, like (5a) and (5c), at least as far as Standard English is concerned. In such constructions, both the operator and the complementiser are zero, as illustrated in (6):

(6)

```
              CP
            /    \
          Ø       C'
                /    \
              C       TP
              |
              Ø
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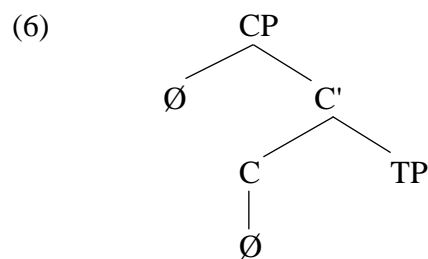
Again, the difference from (2) and (4) lies in the overtness of the elements, while the structure is actually the same: in all cases, a complementiser is merged with the TP, and a specifier element (the operator) is merged with the complementiser.

However, the standard pattern is not observed in dialects; in fact, it is unusual across dialects and languages. Some non-standard English configurations are given in (7):

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[1] The same configuration is not possible with indirect objects and with complements of prepositions (unless the preposition is stranded), at least in Standard English.

(7) a. […] And the boy *which* I was at school with […]

(Freiburg English Dialect Corpus Wes_019; Herrmann 2005: 42)

b. I haven't been to a party yet *that* I haven't got home the same night.

(Van Gelderen 2009: 161, citing Miller 1993: 112)

c. […] It was my grandmother owned this bit of land […]

(Northern Ireland Transcribed Corpus of Speech A13.3; Herrmann 2005: 64)

d. […] there's clean air is provided […]

(East Anglia, K69; Herrmann 2002: 11)

e. […] so all **as** he had to do were go round in a circle all the time […]

(Freiburg English Dialect Corpus Som_001; Herrmann 2005: 64)

All the patterns in (7) are historically attested, and therefore do not count as innovative (unlike *what* with nominal antecedents; cf. Kortmann & Wagner 2007). Without describing here the actual dialectal distribution, let me briefly summarise the major points where dialects may deviate from the standard pattern. First, as illustrated in (7a), the pronoun *which* is possible with human antecedents (see Herrmann 2005). Second, Van Gelderen (2009: 163)

mentions that English speakers prefer *that* over a *wh*-pronoun "by at least a 4:1 ratio" (cf. Romaine 1982, Montgomery & Bailey 1991, Van Gelderen 2004, Tagliamonte et al. 2005);[2] however, *wh*-pronouns are promoted by prescriptive rules.[3] In essence, dialects show a wider distribution of *that*, which is interchangeable even with PPs involving a *wh*-element, such as *from which* in (7b) above. Third, as shown in (7c) and (7d),[4] zero relatives are

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[2] While several studies point towards this conclusion, it should be noted that the exact formulation may differ considerably. For instance, Romaine (1982) originally made a very strong claim in suggesting that while *wh*-pronouns became established in the written language, they barely had an effect on the spoken language. As shown by Ball (1996), such a strong claim is not tenable since the *wh*-strategy has affected spoken language as well, though with considerable dialectal and sociolinguistic differences. The asymmetry between written and spoken language goes back to at least the 17th century: the preference for *that* over *wh*-pronouns is stronger in trials (Ball 1996) and in drama texts (Dekeyser 1984) than in prose, poetry and letters (see Johansson 2012: 778). In addition, a change in the preference during the 17th century can be detected in various genres, as shown by Lezcano (1996).

[3] As described by Austin (1985: 21, 24), this was already the case with 18th-century grammarians (including, for instance, Addison). Ball (1996: 247) points out that this trend was present in the 17th century as well, with writers like Dryden preferring *who* over *that*, but the sharp decline of *that* can be observed in the 18th century. It is worth mentioning that while *that*-relatives are already attested in Old English, *wh*-relatives involving *who* and *which* appeared as an innovation in Middle English only (see also Van Gelderen 2009, among others).

[4] Technically, (7c) is an *it*-cleft, unlike (7d). While clefts have their specific semantic properties, they display the same variation regarding the relative markers as ordinary relative

possible with subject relative clauses (see Herrmann 2005: 55–56); hence, (5a) and (5c) are possible dialectally.[5] Fourth, *as* is available as a relative complementiser (Herrmann 2005, Kortmann & Wagner 2007), as in (7e).

The changes responsible for the emergence of the standard pattern presumably took place in Late Modern English; in this respect, it should be identified what internal and external factors are responsible for these changes and how dialectal variation can be accounted for. In addition, the question arises what the status of *as* in relative clauses is.

In this paper, I will present the results of an ongoing corpus study that compares the King James Bible (1611/1769) and the New King James version (1989). The data set involves relative clauses introduced by *who* and *whom* in the newer version and their counterparts in the original version; this data set is complemented by a smaller set that also involves *which*-relatives and *that*-relatives in the newer version and their counterparts in the original version. The comparison between the Early Modern English text and modernised version offers a good basis for a contrastive analysis of the two language stages. The findings have important implications for the historical

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clauses, as already discussed by Ball (1996: 235–236). For the purposes of the present study, clefts will also be included in the corpus results.

[5] As shown by Rissanen (1991), the acceptability of the omission of the relative marker varies across the history of English. The present corpus study has not found zero subject relatives in the King James Bible (see section 2).

changes in question. First, it is shown that the traditional dialectal patterns mentioned above were even more frequent in the King James Bible than in present-day dialects, providing evidence for these patterns being on the retreat. Second, I will show that the differences between the original version and the norm-oriented new version are due to a complex interplay of factors. Regarding external factors, I will argue that the effect of prescriptive pressure and normalisation must be considered; however, this affects the standard variety only. Regarding internal factors, I examine the particular case of *as* in relative clauses. The corpus study shows that this pattern was reduced to "equative relative clauses" (see section 3); further, being a highly specific structure, it was not extended to ordinary relative clauses, where other, more general patterns occur.

2   Changes in Modern English

As described by Kortmann & Wagner (2007) and Herrmann (2005), the dialectal patterns in (7) are attested historically. The problem for any historical investigation is that it is difficult to compare data. First, the issue of optionality cannot be neglected: the choice of one strategy does not imply the impossibility of other strategies. Second, the context or the particular construction may influence the choice: comparing highly different sentences, even in a large corpus, is not conclusive. Third, register has an influence as

well: it is evidently difficult to compare texts from Early Modern English and ones from Late Modern English due to varying degrees of standardisation and/or differences in the influence of prescriptive rules, not to mention the different requirements of diverse registers.

2.1   Methods

The present paper compares the King James Bible (1611/1769) and New King James version (1989). The original version is from 1611, the standardised spelling by Benjamin Blayney dating from 1769. The new version essentially adheres to the original version, as far as the original construction is grammatical in present-day Standard English. This also implies that an analysis of the present-day patterns attested in relative clauses cannot be based solely on the new version, as this reflects a rather conservative pattern; the conclusions must be complemented by other studies on standard and dialectal patterns, as was established in section 1.

Still, the advantages of this comparison are quite straightforward. First, the same loci are compared, and hence the differences in relative markers cannot be due to the sentences or the context being different; this ultimately allows some quantitative comparison. Second, the same register is used in both texts. The differences from the original may thus reveal some differences between Early Modern and Present-day English, essentially indicating changes that took place in Late Modern English. Again, note that the new

version may include a higher frequency of patterns that are possible but otherwise rare; what matters for us is rather the instances where the original pattern had to be modernised.

Regarding the present study, the following methodology was applied. The hits for "who" and "whom" in the New King James version were taken as the basis of the data set. In each case, the corresponding element in the original version was examined. There are various reasons for applying this methodology. First, this design allows for gaining a large number of data for the various options (including zero relatives) in the original by relying on a simple search in the new version. Second, the search for the specific forms "who" and "whom" in the new version automatically restricts the hits to relative clauses with human referents, which is the focus of the present study; again, the automated search allows for this restriction on a large number of data. Third, given that there is a preference for the relative pronoun strategy with *who(m)* with human referents in present-day Standard English, it is expected that many of these occurrences have different equivalents in the original, whereas changes in the other direction are likely to have been rare. It should be noted that the New King James version is strongly norm-oriented: *who* is consistently used for subjects, while objects (and complements of prepositions) invariably appear in the form *whom*. This strict split does not truly reflect the actual standard language (see the discussion in section 1), but it certainly facilitates the corpus study.

Naturally, the results had to be counterchecked against representative samples based on searches for all the relevant forms ("who", "whom", "which", "that" and "as") in the new version and their counterparts in the new version. The results of this additional analysis will be addressed in section 2.2.

2.2   The results of the corpus study

There are altogether 5606 hits for *who* and 704 hits for *whom* in relative clauses in the new version:[6] the corresponding positions in the original King James version may involve constructions other than relative clauses. Subject relatives are clearly more frequent than (direct) object relatives,[7] in line with the Noun Phrase Accessibility Hierarchy of Keenan & Comrie (1977: 66–67). Before turning to the detailed frequency data, let us first consider some examples that show the relevant parallels.

First, *who* can have the equivalent *who* in the original version, and *whom* can have the equivalent *whom* in the original version:

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[6] The hits were manually checked, so the figures above include relative clauses only and do not include interrogative uses.

[7] Note that *whom* is also possible as an indirect object and as a complement of a preposition. These instances will also be briefly discussed in the paper, but otherwise I will concentrate on subjects and direct objects. The notion "object", unless indicated otherwise, will accordingly be used for direct objects only.

(8)   a.   And the LORD appeared unto Abram, and said, Unto thy seed will I give this land: and there builded he an altar unto the LORD, *who* appeared unto him.

(King James Bible; Genesis 12:7)

b.   Then the Lord appeared to Abram and said, "To your descendants I will give this land." And there he built an altar to the Lord, *who* had appeared to him.

(New King James version; Genesis 12:7)

c.   And I have also heard the groaning of the children of Israel, *whom* the Egyptians keep in bondage; and I have remembered my covenant.

(King James Bible; Exodus 6:5)

d.   And I have also heard the groaning of the children of Israel *whom* the Egyptians keep in bondage, and I have remembered My covenant.

(New King James version; Exodus 6:5)

Second, *who/whom* can have the equivalent *which* in the original version:

(9)   a.   And the vessel of earth, that he toucheth *which* hath the

issue, shall be broken: and every vessel of wood shall be

rinsed in water.

(King James Bible; Leviticus 15:12)

        b.   The vessel of earth that he *who* has the discharge touches

shall be broken, and every vessel of wood shall be rinsed in

water.

(New King James version; Leviticus 15:12)

        c.   These are those that were numbered, *which* Moses and

Aaron numbered, and the princes of Israel, being twelve

men: each one was for the house of his fathers.

(King James Bible; Numbers 1:44)

        d.   These are the ones who were numbered, *whom* Moses and

Aaron numbered, with the leaders of Israel, twelve men,

each one representing his father's house.

(New King James version; Numbers 1:44)

Third, *who/whom* can have the equivalent *that* in the original version:

(10) a. And I charged your judges at that time, saying, Hear the causes between your brethren, and judge righteously between every man and his brother, and the stranger *that* is with him.

(King James Bible; Deuteronomy 1:16)

b. Then I commanded your judges at that time, saying, 'Hear the cases between your brethren, and judge righteously between a man and his brother or the stranger *who* is with him.

(New King James version; Deuteronomy 1:16)

c. Then said Zebul unto him, Where is now thy mouth, wherewith thou saidst, Who is Abimelech, that we should serve him? is not this the people *that* thou hast despised? go out, I pray now, and fight with them.

(King James Bible; Judges 9:38)

d. Then Zebul said to him, "Where indeed is your mouth now, with which you said, 'Who is Abimelech, that we should serve him?' Are not these the people *whom* you despised? Go out, if you will, and fight with them now."

(New King James version; Judges 9:38)

Fourth, *who* can have the equivalent *as* in the original version:

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(11) a.   And she looked, and, behold, the king stood at his pillar at the entering in, and the princes and the trumpets by the king: and all the people of the land rejoiced, and sounded with trumpets, also the singers with instruments of musick, and such *as* taught to sing praise. Then Athaliah rent her clothes, and said, Treason, Treason.

(King James Bible; 2 Chronicles 23:13)

      b.   When she looked, there was the king standing by his pillar at the entrance; and the leaders and the trumpeters were by the king. All the people of the land were rejoicing and blowing trumpets, also the singers with musical instruments, and those *who* led in praise. So Athaliah tore her clothes and said, "Treason! Treason!"

(New King James version; 2 Chronicles 23:13)

Such examples were found only in the case of subject relatives but not in the case of object relatives. Note that in the case of *as*-relatives in the King James Bible, the element *such* is always present, as in (11a); I will return to this issue in section 3.

Interestingly, *who/whom* has no genuine zero relative equivalents in the original version: in all the instances where there is no overt relative marker (descriptively subsumed under "zero" in Table 1 and Table 2), there is a coordinated construction, which also allows the omission of the second

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relative marker in Present-day Standard English.[8] These instances do not provide good evidence for the availability of true zero relatives, as the omission of an overt element (either the operator or the complementiser) in coordinated constructions can be licensed by an appropriate antecedent in the preceding relative clause (compare the true zero subject relatives in (7c) and

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[8] An example of this is shown in (i) from the King James Bible, indicating a *that*-relative and a coordinated relative clause with no overt marker:

(i)   And whosoever lieth carnally with a woman, *that* is a bondmaid, betrothed to an husband, and not at all redeemed, nor freedom given her; she shall be scourged; they shall not be put to death, because she was not free.

(King James Bible; Leviticus 19:20)

The new version includes an overt *wh*-pronoun in both cases:

(ii)   Whoever lies carnally with a woman *who* is betrothed to a man as a concubine, and *who* has not at all been redeemed nor given her freedom, for this there shall be scourging; but they shall not be put to death, because she was not free.

(New King James version; Leviticus 19:20)

This is also possible in modern Standard English:

(iii)   This is the student *(*who*) ate the cheese and (*who*) drank the wine.

As indicated, in the first subject relative clause in (iii) above, the relative pronoun *who* cannot be left out, while in the second subject relative clause its presence is optional.

(7d) above). Since the behaviour of present-day Standard English does not differ from what can be observed in the King James Bible as well, zero relatives will not be discussed in the present paper.

Let us now turn to the distribution of the various patterns. Table 1 shows the distribution of the elements corresponding to *who* in the Old Testament.[9] The cases subsumed under "other" refer to instances where either the role of the relative pronoun is not a subject in the original or the original text contains no relative clause in the given position.

Table 1. The elements corresponding to *who* (Old Testament)

Role in KJB	Element in KJB	Number of occurrences
subject (3569)	*who*	238 (6.67%)
	which	620 (17.31%)
	that	2664 (74.64%)
	as	23 (0.64%)
	zero	17 (0.48%)
	whoso	6 (0.16%)
	whosoever	1 (0.03%)
other	–	160
TOTAL		3729

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[9] According to the first count of the data, there are 5606 hits for "who" that count as relative clauses in the new version, out of which there are 5391 instances of subject relatives in the original version. Out of these, there are 483 instances of *who* (8.96%), 1197 instances of *which* (22.20%), 3662 instances of *that* (67.93%), 28 instances of *as* (0.52%), 17 instances of zero (0.32%), 10 instances of *whoso* (0.19%), and 2 instances of *whosoever* (0.04%). The results of the first count need to be counterchecked for the New Testament and the results are therefore not yet included in Table 1.

Table 2 shows the distribution of the elements corresponding to *whom* in the original King James Bible. The cases subsumed under "other" refer to instances where either the role of the relative pronoun in the original does not match the one in the new version or the original text contains no relative clause in the given position.

Table 2. The elements corresponding to *whom*

Role in KJB	Element in KJB	Number of occurrences
direct object (398)	*whom*	**312** (78.39%)
	which	**76** (19.10%)
	that	**10** (2.51%)
	as	0
	zero	0
indirect object (2)	*whom*	**2** (100%)
PP complement (265)	P + *whom*	**256** (96.60%)
	P + *which*	**7** (2.64%)
	that	**2** (0.75%)
other	–	39
TOTAL		704

The data indicate clearly that the present-day dialectal patterns discussed in section 1 are attested and in fact quite predominant in the King James Bible (except for zero relatives). This applies especially to the case of *that*, while the pattern with *as* is clearly a minority pattern. The proportion of *that* is especially high in the case of subject relatives (66.94%), while it is considerably lower in the case of direct object relatives (2.51%) and the

complements of prepositions (0.75%).[10] Note that the total number of indirect object relative clauses is very low: the Noun Phrase Accessibility Hierarchy (Keenan & Comrie 1977) would predict that they are between direct objects and prepositional complements. The low number of indirect object relative clauses is not a peculiar property of the King James Bible: as Fleischer (2004) points out, relative clauses with indirect object relatives are generally very rare in corpora. The proportion of *which* is about the same in both subject relatives (22.91%) and in direct object relatives (19.10%), though not in prepositional complements (2.64%).

There is hence an asymmetry in the results: the question is whether this is necessarily a difference to be attributed to the King James Bible or whether it is rather due to the new translation. Note that in the case of *which*-relatives with human referents, all cases had to be altered in the new version since *which* is not possible in these cases in modern Standard English. The fact that the proportion of *which* is about the same in subject and object relatives indicates that this element was probably not sensitive to the subject/object asymmetry. Herrmann (2005: 48–59) shows that the Noun Phrase Accessibility Hierarchy of Keenan & Comrie (1977: 66–67) is relevant to the

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[10] Naturally, the data set behind Table 2 includes only cases where the new version contains *whom*: as will be discussed below, the asymmetry is less striking when considering cases where the new version retains *that*, but there is still a very clear subject/object asymmetry in the original version.

distribution of the relative complementisers *that* and *as*: subjects are more accessible than objects, which predicts not only that subject relative clauses should be more frequent but also that relative complementisers should be more frequent in subject relative clauses than in object relative clauses (which is ultimately related to processing reasons). This may indeed be the reason behind the fact that *that*-relatives are more frequent in subject relatives than in object relatives in the King James Bible, and that *as*-relatives are attested in subject relatives but not in object relatives.

In the case of *that*-relatives, however, it is perfectly possible that not all instances were changed to *who/whom* in the new version, and as *that*-relatives were not included in the search results for the new version in Table 1 and Table 2, the proportion of *that*-relatives may be different when considering all relative clauses (see the discussion of further results below). Consider the following examples:

(12) a.   And Abram took Sarai his wife, and Lot his brother's son, and all their substance that they had gathered, and the souls *that* they had gotten in Haran; and they went forth to go into the land of Canaan; and into the land of Canaan they came. (King James Bible; Genesis 12:5)

b.	Then Abram took Sarai his wife and Lot his brother's son, and all their possessions that they had gathered, and the people *whom* they had acquired in Haran, and they departed to go to the land of Canaan. So they came to the land of Canaan.

(New King James version; Genesis 12:5)

c.	Then Jacob was greatly afraid and distressed: and he divided the people *that* was with him, and the flocks, and herds, and the camels, into two bands;

(King James Bible; Genesis 32:7)

d.	So Jacob was greatly afraid and distressed; and he divided the people *that* were with him, and the flocks and herds and camels, into two companies.

(New King James version; Genesis 32:7)

In both of the loci given in (12), the head noun is *people* (or its synonym *souls*): the relative clause is introduced by *that* in the original version both in (12a) and in (12c). The new version, however, uses a *wh*-pronoun only in the case of the object relative, as in (12b), but not in the case of the subject relative, as in (12d), which contains the complementiser *that*. The asymmetry between subject and object relative clauses in (12) is attested in the newer version and not in the original. Hence, in order to achieve reliable conclusions in this respect, all the occurrences of *that* should be considered as well.

While the entire text of the King James Bible should be examined in future investigations, at this point we can still gain at least some insight into this question by considering the distribution of relative elements in a smaller part of the King James Bible. Accordingly, I also considered the hits for "which" and "that" in Genesis in the new version and examined the equivalents in the original.

Table 3 shows the distribution of the elements corresponding to *which* in Genesis in the original King James Bible. The cases subsumed under "other" refer to instances where either the role of the relative pronoun in the original does not match the one in the new version or the original text contains no relative clause in the given position.

Table 3. The elements corresponding to *which* (Genesis)

Role in KJB	Element in KJB	Number of occurrences
subject (52)	*which*	**7** (13.46%)
	that	**45** (86.54%)
direct object (62)	*which*	**62** (100%)
PP complement (4)	P + *which*	**4** (100%)
other	–	28
TOTAL		146

As can be seen, the distribution of relative clauses with non-human antecedents is very similar to that of relative clauses with human antecedents. The prediction that relative clauses with *which* in the new version do nt correspond to relative clauses with *who*/*whom* in the original version is also borne out. In subject relative clauses, the predominant pattern is *that* in the

original version, while *that*-relatives are not even attested in this data set in direct object relatives and in the few relative clauses where the relative pronoun is the complement of a preposition. This indicates that as far as the subject/object asymmetry is concerned, the human/non-human distinction does not seem to play a decisive role.

Table 4 shows the distribution of the elements corresponding to *that* in Genesis in the original King James Bible. As in Table 3, the cases subsumed under "other" are those where either the role of the relative pronoun in the original does not match the one in the new version or the original text contains no relative clause in the given position.

Table 4. The elements corresponding to *that* (Genesis)

Role in KJB	Element in KJB	Number of occurrences
subject (68)	*which*	**3** (4.41%)
	that	**65** (95.59%)
direct object (35)	*which*	**1** (2.86%)
	that	**34** (97.14%)
PP complement (6)	*that*	**6** (100%)
other	–	4
TOTAL		113

As indicated, there are indeed very few exceptions where an original *wh*-element was changed into *that* in the new version. The few instances of PP-relatives with *that* in the new version may seem surprising at first since this pattern (unless with preposition stranding) is not normally attested in Standard English (see section 1). However, all the occurrences appear with

set phrases involving either *the day that* or *the time that*, where the *that-relative* is a lexicalised part of the set phrase. By looking at Table 4, there seems to be no particular asymmetry regarding subjects and objects regarding the frequency of *that*-relatives: *that*-relatives occur in the new version almost exclusively in cases where the original version also contained *that*-relatives. Note that Table 4 includes relative clauses with both human and non-human referents, but as we saw above, the human/non-human distinction does not seem to be relevant regarding the subject/object asymmetry.

In order to present a more direct comparison between the two versions, Table 5 summarises the distribution of the various relative markers across subtypes in Genesis in the original version.

Table 5. The distribution of relative markers in the King James Bible (Genesis)

Role	*who*	*whom*	*which*	*that*	*as*
subject (226)	14 (6.19%)	–	41 (18.14%)	169 (74.78%)	2 (2.21%)
direct object (127)	–	14 (11.02%)	78 (61.42%)	35 (27.56%)	–
PP complement (21)	–	11 (52.38%)	4 (19.05%)	6 (28.57%)	–

The data indicate a clear preference for *that*-relatives in subject relative clauses, while *wh*-relatives are preferred in direct object relative clauses and in relative clauses where the relative pronoun corresponds to the complement of a preposition. This is in line with the prediction made by the Noun Phrase

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Accessibility Hierarchy. The same holds for the fact that *as*-relatives are attested only in subject relative clauses (where they also form a minority pattern; see section 3 for further discussion). As mentioned above, indirect object relative clauses are rare in corpora.

Table 6 summarises the distribution of the various relative markers across subtypes in Genesis in the new version.

Table 6. The distribution of relative markers in the new version (Genesis)

Role	*who*	*whom*	*which*	*that*
subject (226)	106 (46.90%)	–	52 (23.01%)	68 (30.09%)
direct object (127)	–	30 (23.62%)	62 (48.82%)	35 (27.56%)
PP complement (21)	–	11 (52.38%)	4 (19.05%)	6 (28.57%)

Table 6 includes the same set of data as Table 5 (that is, the mismatches subsumed under "other" in Tables 1–4 are disregarded). As can be seen, no changes occur in the case of PP complements, but there are considerable changes affecting subject and direct object relative clauses. The proportion of *that*-relatives remains the same in object relatives; however, *which*-relatives decrease in favour of *whom*-relatives, which can be attributed to the fact that *which* is no longer possible with human referents in the standard language. In subject relatives, there are two major changes, both resulting in an increase of the proportion of *who*-relatives. On the one hand, the proportion of *that*-relatives decreases in favour of *wh*-relatives, though it remains slightly higher

than in object relatives, in line with the prediction of the Noun Phrase Accessibility Hierarchy. On the other hand, just as in object relatives, original *which*-relatives with a human referent were changed to *who*-relatives: still, due to the general decrease in the use of *that*-relatives, the proportion of *which*-relatives in subject relatives is actually higher than in the original version.

2.3 Discussion

The differences between the two texts reflect the changes that took place in Late Modern English, though it must be mentioned that the reasons behind the changes in the individual cases differ, as do changes in the standard languages and changes in dialects. In addition, it should be kept in mind that the New King James version is highly conservative and norm-oriented, for instance regarding the strict distinction between *who* for subjects and *whom* for objects and complements of prepositions.

The use of *which* with human referents was evidently possible in Early Modern English, as also confirmed by the results from the King James Bible; Austin (1985) reports essentially the same findings based on data from 18th-century letters. In the standard variety, the difference between *who(m)* and *which* is grammaticalised with respect to the [±human] feature: *who(m)* is

specified as [+human] and *which* is specified as [–human],[11] and hence the use of *which* with human referents is ungrammatical in the standard variety. This restriction is fully represented in the New King James version.

The situation is somewhat different in dialects, however. Herrmann (2005: 41) reports that while *who* is restricted to human referents just like in Standard English (the "sanctioned borderline cases" being likewise allowed), *which* can generally be used with human referents in dialects: this pattern occurs in five of the six dialect areas she examined (Central Southwest, East Anglia, Central Midlands, Central North, Scotland). In the sixth dialect area, Northern Ireland, there were only very few instances of *which* occurring with human referents, but these dialects hardly use *wh*-pronouns in relative clauses (Herrmann 2005: 41). It appears that the occurrence of *which* with human referents in dialects is not regionally bound, but altogether not very frequent. The data given by Herrmann (2005: 41, Table 3) show that out of all occurrences of *who* as a relative pronoun, the referent is human in 96.4% of the cases and non-human in 3.6% of the cases (the latter being all "sanctioned borderline cases"), while in the case of *which* as a relative pronoun, the

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[11] Naturally, the semantic distinction is in reality not as binary as the idealised formalisation above implies. As discussed in section 1, there are so-called "sanctioned borderline cases" when *who(m)* can be used for certain animals in the standard variety as well: these are personalised animals and things (e.g. a dog is considered to be a member of the family, etc.). The actual distribution of the features among lexical elements hence shows a certain flexibility and variation among speakers.

referent is human in 4.2% of the cases and non-human in 95.8% of the cases. It should be clear that the use of *which* with human referents is in fact very restricted in dialects as well and altogether much less attested than in the King James Bible.

As Herrmann (2005: 41) points out, *which* was possible with human referents in Middle English (cf. Mossé 1991) and the grammaticalisation of *which* as [–human] started in the 16th century (cf. Nevalainen & Raumolin-Brunberg 2002). According to Austin (1985: 18), the use of *which* with human antecedents gradually came to be marginalised during the 18th century and several grammarians of this period already saw it as an archaic feature; its availability also correlates with social status (the higher the social status, the less likely it is to appear with human referents).[12] Essentially the same point is made by Ball (1996: 246–247). It appears that while the process is evidently completed in the standard variety, there are still exceptions in regional dialects; at the same time, the dialectal pattern suggests that *which* strongly tends towards [–human] and hence the process has affected regional dialects as well, albeit not to the same degree as the standard variety. Naturally, the gradual change that can be observed in dialects is in line with

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[12] Naturally, there was considerable variation concerning this change. Austin (1985: 18) reports that while *which* survived longer in restrictive relative clauses than in non-restrictive relative clauses in general, this is not reflected in the Cleft letters examined by her, where the distribution is exactly the opposite.

the assumption that language change (and variation) is gradual (see Traugott & Trousdale 2010).

Considering the differences between the King James Bible and the New King James version, then, the changes that took place in Late Modern English are well-represented. On the one hand, there is of course an external factor to be considered: the newer version adheres strictly to the standard variety, in which *who* is specified as [+human] and *which* is specified as [–human]. On the other hand, this is in fact attested in substandard varieties as well: *who* is [+human] is dialects as well, while *which* is overwhelmingly, though not exclusively, [–human]. In this process, a language-internal factor can be detected: given the specification of *who* as [+human], the morphological system makes an underspecified *which* a natural candidate for a specified [–human] *wh*-pronoun.

Let us now turn to the instances of *that*-relatives. As was established in section 1, the use of *that* in relative clauses is part of the standard variety, though its distribution is somewhat different from nonstandard varieties. In subject and object relative clauses, as the ones examined in the corpus study presented above, the use of *that* is in line with the standard pattern, and hence the restrictedness of *that* in the new version (see especially Table 6 compared to Table 5) can be attributed to a strongly norm-oriented use that goes beyond

mere standardisation.[13] This is naturally an external factor that must be considered when evaluating the data.

Regarding the distribution of *that* in dialects, Herrmann (2005: 27, Table 1) shows that this strategy is much more dominant in the North (its share is above 40% in the areas of Northern Ireland, Scotland, Central North, and Central Midlands), while it is less frequent in the South (below 30% in the areas of East Anglia and Central Southwest). Nevertheless, this is overall the most typical strategy in dialects (Herrmann 2005: 24). As noted also by Kortmann & Wagner (2007: 291–292), traditional forms in relative clauses seem to be on the retreat (as opposed to the spread of innovative *what* in dialects). The results of the present corpus study indicate that the proportion

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[13] In fact, this has its historical origins as well: at least from the 17th century onwards, *that* for human referents has often been considered as impolite or inappropriate by prescriptive grammarians (see Ball 1996: 249–250). The same is not attested in the case of non-human referents, but *which* was often considered to be more explicit in terms of reference than *that* (Rissanen 1984). Rissanen (1984: 420) even assumes that the increase in the *wh*-strategy is due to the high functional load (and potential ambiguity) associated with *that*. However, it should be kept in mind that the *wh*-strategy appeared already in Middle English but the decline of *that* in written texts (much more than in spoken language) started rather in the 17th century, in line with the fact that prescriptive grammarians started to advocate the *wh*-strategy. In other words, there is no reason to assume that the decrease in the frequency of *that* should be attributed to some language-internal pressure; rather, as far as written and/or norm-oriented language use are concerned, the observed changes reflect conscious considerations.

of *that* (out of all relative clauses) was indeed higher than today in Early Modern English subject relative clauses, but the same is not yet confirmed for object relative clauses. There was already an asymmetry in the original version, in line with the Noun Phrase Accessibility Hierarchy of Keenan & Comrie (1977: 66–67), which Herrmann (2005: 48–59) claims to be operative in the spread of the relative markers *that*, *what* and *as*. If so, changes in the frequency of *that* in relative clauses can not only be observed in standard, norm-oriented language but it occurs independently in other varieties as well, due to language-internal changes that are in line with presumably universal mechanisms.

Finally, let us turn to the particular case of *as*-relatives. This option is, as was discussed in section 1, altogether absent from the standard variety. As opposed to the case of *that*-relatives, where a norm-oriented context may lead to the avoidance of otherwise possible patterns, *as*-relatives are simply not part of the grammar of Standard English.

Interestingly, the dialectal situation is quite special in this case as well. This option is absent from many areas altogether and it is not a dominant strategy in any of the dialectal regions, as shown by Herrmann (2005: 27, Figure 1). Essentially rather a southern feature, it occurs especially in the Central Midlands (2.4%) and to a lesser degree in the Central North (1.4%) and in Northern Ireland (0.5%). Just like other traditional features, it is on the retreat (cf. Kortmann & Wagner 2007). Compared to the low frequencies attested in the King James Bible, its retreat does not seem to be very

substantial and there is no reason to assume that *as*-relatives constituted a dominant pattern in Early Modern English at all.[14]

The availability of *as*-relatives is regionally bound, and it apparently did not spread to become a generally available option. This can be the case for various dialectal features, though there are examples of the contrary as well. More interestingly, however, it appears from the data given by Herrmann (2005) and also by the data in the King James Bible that *as*-relatives constitute a very specific minority pattern that is available only if there is an appropriate element in the matrix clause (*such* in the King James Bible, *all* in present-day dialects), as will be discussed in detail in the next section. That is, the retreat of this particular construction is not only due to its being regionally bound but also to the fact that its occurrence was syntactically restricted anyway, which is undoubtedly an important language-internal factor.

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[14] As shown in Table 1, Table 2 and Table 5, *as*-relatives are apparently restricted to subject relative clauses with a human referent.

3   Equative relative clauses

In relative clauses with *as* in the King James Bible, the matrix element *such* is always present. This is shown by (11a) above, as well as by the following examples in (13):

(13)   a.   Now therefore let us make a covenant with our God to put away all the wives, and *such as* are born of them, according to the counsel of my lord, and of those that tremble at the commandment of our God; and let it be done according to the law.

(King James Bible; Ezra 10:3)

   b.   Open thy mouth for the dumb in the cause of *all such as* are appointed to destruction.

(King James Bible; Proverbs 31:8)

Of the data given in Table 1, 11 instances contain the sequence *such as*, illustrated in (11a) and (13a), and 3 instances contain the sequence *all such as*, illustrated in (13b). In essence, the presence of *all* in is not obligatory in *as*-relatives in the King James Bible. The element *such* is an

equative/similative element that is otherwise found in comparative constructions in English.[15]

Similarly, in present-day English dialects, the matrix element *all* appears (see the data of Herrmann 2005). Consider the example in (7e), repeated here for the sake of convenience as (14a), and (14b):

(14) a. […] so *all as* he had to do were go round in a circle all the time […]

(Freiburg English Dialect Corpus Som_001; Herrmann 2005: 64)

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[15] Consider the example in (i):

(i) There is no **such** thing **as** a free lunch.

The element *such* establishes an equative relationship: the *thing* that does not exist is specified by the *as*-clause. The use of *such* is similar to degree elements like *so* and *as*:

(ii) Peter is *so* tall *that* he will hit his head.
(iii) Peter is *as* tall *as* Paul.

In (ii), the degree of Peter's tallness is compared to the notion expressed by the *that*-clause, while in (iii), it is equal to the degree to which Paul is tall.

b.   We haven't got anything. *All as* I used to live for was my
house to have my house nice and clean you know to have
nice things in it.

(ukspok/04. Text: S9000001271; Kjellmer 2008: 71)

It appears that while the presence of *all* originally had to do with a typical group-defining character of the sentence, this element later grammaticalised as a matrix marker.[16] Crucially, some matrix equative-like element is present, and in this way the *as*-relative differs from ordinary relative complementisers (such as *that* or German *wo*, cf. Brandner & Bräuning 2013). Essentially, *as* did not grammaticalise into a proper relative complementiser in English and is thus restricted in its distribution. In addition, like many other traditional patterns, it is on the retreat.

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[16] As shown by Kjellmer (2008), a further grammaticalisation process may result in the form *alls*, which is a contracted form of *all* and *as*. The availability of this form suggests that the constellation *all as* in present-day dialectal English is not contingent upon a given context, as was the case in the King James Bible, but it rather occurs normally as a grammaticalised sequence. Note that the very form as derived from a very similar combination: *as* derives from *eallswa* (*all* + *so*), whereby the forms *swelce* (*swilce*, *such*) and *so* (*swa*) are also possible historically in *as*-constructions (see Kortmann 1997: 315–317; see also López-Couso & Méndez-Naya 2014: 312–314 and references there).

That this is not necessarily so cross-linguistically is indicated also by German, where *so* 'so, as' was available as a grammaticalised relative complementiser. Consider:

(15) a. *sulike* gesidoe *so* he im selbo gecos
          such companions so he him self chose
          'such companions that he chose for himself'
          (*Heliand* 1280; Brandner & Bräuning 2013: 138)

      b. *So* war *so* ich cherte minen zoum…
          so where so I guided my rein
          'Wherever I guided my rein…'
          (*Bairischer Psalm* 138; Brandner & Bräuning 2013: 143, quoting Lühr 1998)

      c. hier das Geld *so* ich neulich nicht habe
          here the.M money so I recently not have
          mitschicken können
          with.send.INF can
          'Here the money that I recently could not send.'
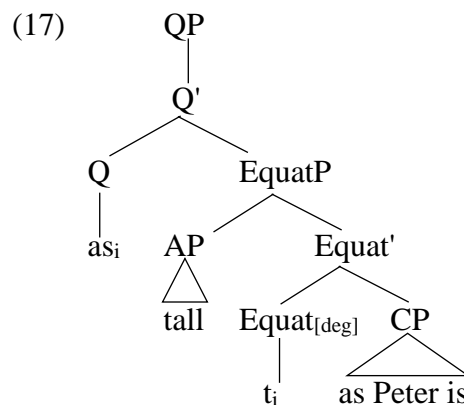   (Schiller to Goethe 127; Brandner & Bräuning 2013: 132, quoting Paul 1920)

The example in (15a) is from Old Saxon and the one in (15b) is from Old High German. In both cases, a matrix *so* can be observed. This differs from

the Early New High German pattern given in (15c), where the *so*-relative is
fully grammaticalised and can appear without a matrix equative-like element.

Regarding the equative relative patterns given in (13), as well as (14)
and (15a)/(15b), the idea is that these constructions have a syntactic structure
similar to ordinary equatives. Degree equatives are illustrated in (16) below:


(16)   Mary is **as** *tall as* Peter (is).

Following the analysis of Lechner (2004) and Bacskai-Atkari (2014, 2018)
for degree comparatives, the structure of degree equatives can be
schematically represented as follows:

(17)

```
            QP
            |
            Q'
         ／    ＼
        Q       EquatP
        |      ／    ＼
       asᵢ   AP      Equat'
            △      ／    ＼
           tall  Equat[deg]  CP
                   |         △
                   tᵢ     as Peter is
```

The EquatP is analogous to DegP in comparatives; the particular label is
primarily intended as a descriptive designator. The AP and the CP are
arguments of the equative degree head (cf. Lechner 2004 and Bacskai-Atkari
2014, 2018). A QP is generated above the DegP, and the element in Deg

moves to Q (cf. Bresnan 1973 and Corver 1997 on Q elements; see also Lechner 1999).[17] The details of the analysis are not immediately relevant here; what matters to us is that there is a gradable predicate (here: *tall*) in the structure and a further functional layer (QP) is generated, both making the construction a degree equative.

Given that there is no gradable predicate and no degree in equative relatives, the structure can be schematised as follows:

(18)   EquatP
             |
           Equat
           ╱   ╲
      Equat   CP
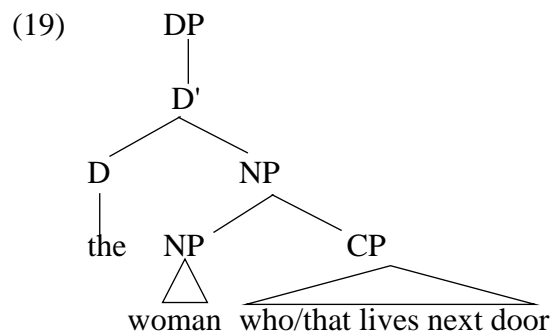 | ╱   ╲
      such   as are born of them
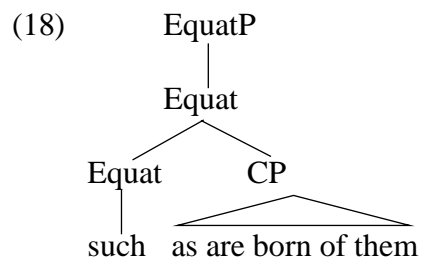
The difference from (17) lies primarily in the argument-taking abilities of the equative head: in (18), there is no gradable predicate argument. However, the CP is still the complement of the equative head (*such* in the King James Bible

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[17] Modifiers like *extremely*, *exactly* and *far* show agreement with the particular degree, e.g. *far taller* is possible but **exactly taller* is not. For this reason, such modifiers were already located in [Spec,QP] by Corver (1997: 154–161), albeit the relative position of his QP in the entire degree expression differs from that of Lechner (1999: 25) and Bacskai-Atkari (2018a: 32). Another argument in favour of the QP goes back to Bresnan (1973): the Q head is the locus where a dummy *much* is inserted (resulting in *more* in comparatives following the upward movement of -*er*).

and *all* in modern dialects). The representation in (18) applies to equative relative constructions but importantly not to ordinary relatives, which can occur without the presence of a matrix equative-like head. Ordinary relative clauses (*wh*-relatives, *that*-relatives and zero relatives, see section 1 and 2) are directly attached to a matrix lexical noun, schematically given for a string like *the woman who lives next door* (see the examples in (1) and (3) above) in (19):

(19)
```
          DP
          |
          D'
         /  \
        D    NP
        |   /  \
      the  NP   CP
          /\   /  \
     woman  who/that lives next door
```

As indicated, *wh*-relatives and *that*-relatives are alike in their syntax regarding the position of the CP with respect to the matrix head noun; they differ in their internal syntax only in terms of which element (the relative pronoun or the relative complementiser) is overt (see the representations in (2) and (4) in section 1).

Turning back to equative relatives, the equative relative head crucially did not complete a grammaticalisation process either in Early Modern English or in Late Modern English but it remained contingent upon the matrix equative element. This restricts the possibilities of occurrence of *as*-relatives,

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and in essence they cannot compete with ordinary relatives that have a far wider distribution. This not only applies to the standard variety, which has eradicated this construction completely, but also to regional dialects that still have it to a limited degree.

4   Conclusion

This paper examined changes affecting relative clauses in Modern English based on a contrastive corpus study of the King James Bible and the New King James version. The differences between the two texts reflect the changes that took place in Late Modern English quite well: the earlier variation in elements corresponding to *who*/*whom* is confined to dialects in present-day English. In particular, the paper discussed three important aspects: in Early Modern English, (i) *which* was available for human subjects, (ii) *that*-relatives had a higher proportion, and (iii) *as* could introduce relative clauses as a complementiser. I argued that the changes leading to the disappearance or the reduction of alternative forms to *who*/*whom* were driven both by internal and by external factors, whereby significant differences can be observed between the standard variety and regional dialects.

Regarding external factors, the effect of prescriptive pressure and normalisation must be considered: however, this affects the standard variety only. In the standard variety, this is responsible for the eradication of *which-*

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relatives with human referents and for the disappearance of *as*-relatives. Further, the preference for *wh*-relatives over *that*-relatives can be observed in norm-oriented contexts. On the other hand, all the relevant forms can be found in regional dialects, though to varying degrees and increasingly on the retreat, in favour of innovative forms.

Regarding internal factors, I examined the particular case of *as* in relative clauses. The corpus study showed that this pattern was available only in "equative relatives": these constructions are syntactically free relatives, where the *as*-clause is the complement of an equative element (*such*) in the matrix clause, and the relative clause expresses a definition of the group. The complementiser *as* did not grammaticalise into a proper relative complementiser in English. Due to the lack of grammaticalisation, this construction has preserved its equative character and it is not available for all kinds of relative clauses.

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