

Causal clauses in written and speech-related genres in Early Modern English

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1 Introduction

The purpose of this quantitative corpus-based study is to examine the use and distribution of causal clauses, both finite and non-finite, across genre and time (1640–1740). Previous research (see section 2 for details) has shown that there were genre differences regarding the use of causal clauses in the Early Modern period prior to 1640, while in Present-day English there is a clear distinction between spoken and written English in how causality is expressed. This study aims therefore at determining whether similar genre differences can be found after 1640, and also whether there are differences between speech-related and other written texts comparable to differences found between Present-day spoken and written English. To this end, we have selected trials (supposed records of spoken language) and sermons (presumed as written to be spoken) to contrast with laws and religious treatises (written to be read). These texts are taken from the *Lampeter Corpus of Early Modern English Tracts* and *A Corpus of English Dialogues 1560–1760*. In what follows, we first outline previous research (section 2), and describe our material and methodology (section 3). Our quantitative results relating to genre and medium (ie speech-related or non-speech-related) are then described (section 4.1), and the findings are compared with those of previous studies. This is followed by a primarily qualitative discussion of the syntax and semantics of causal clauses in our Early Modern English data (section 4.2). We then compare our findings regarding the information structure of causal clauses in our data with both Early Modern English and Present-day usage in general (section 4.3), before looking at the diachronic development of causal clauses during the period 1640–1740 (section 5).

2 Previous research

Research on present-day English has shown that written and spoken language pattern differently with regard to the use and expression of causal relationships. According to Biber et al (1999: 821) causal clauses are common only in conversation, not in the written genres investigated (fiction, news, academic prose). Altenberg (1984: 39ff) also found a greater overall use of causal expressions in spoken data from the London-Lund Corpus as compared with written data from the Lancaster-Oslo/Bergen Corpus. Moreover, he shows that writing generally makes use of a much greater range of causal expressions. Non-finite clauses were found to be especially rare in spoken English (Altenberg 1984: 41; Biber et al 1999: 826). Regarding individual subordinators, *because* (especially the abbreviated form *cos*) overwhelmingly dominates in conversation, while the conjunction *for* is only found in written texts, where it is almost as common as *because*. The other subordinators, *since* and *as*, are more frequent in written texts than in the spoken data (Altenberg 1984: 41). On the whole Altenberg (1984: 39) sees ‘a clear stylistic patterning (...) which can be related to the situational constraints differentiating the two varieties’.

Amongst the research carried out on the historical development of causal expressions, Rissanen (1989), (1998), and (1999) are studies of particular relevance to the current investigation. He has found genre differences in the use of causal conjunctions in Early Modern English (1998: 397f): in sermons the ratio of *because* to *for* was 1:1.8 in the period 1500 to 1640, whereas in laws *because* was not attested at all, while the number of occurrences of *for* was negligible. In his corpora taken as a whole, Rissanen shows that *for* is the most frequently used causal conjunction in Early Modern English, and argues that, from late Middle English, *for that* was used as a subordinating conjunction (in a similar way as *because* is used today), whereas the simple form *for* acted more as a co-ordinating conjunction (Rissanen 1989: 7f; 1999: 306). *For* could therefore begin a new sentence that was linked with the preceding clause by only a loose causal connection. Moreover, *for that* increased in the period 1570–1640 when other combinations with *that* were disappearing, although it too became obsolete by 1700 (Rissanen 1989: 9f).¹ The rise of *because* at the expense of *for* (from a ratio of 1:15 in 1420–1500 to 1:3 in the period 1500–1640) is suggested to be either the cause or the result of the gradual shift of *for* from clear subordinator to a more co-ordinating function (Rissanen 1999: 307). Concerning the conjunction *as*, few occurrences with a clearly causal meaning were found in the Early Modern English part of the Helsinki Corpus (Rissanen 1999: 307). In the present investigation, as well as comparing our findings with these previous studies, we are also able to look at the development of the relationship of *for* and *because* after 1640.

3 Methodological considerations

For this paper, in order to concentrate on possible differences between the speech-related and non-speech-related texts, we selected the latter (religious treatises and laws) from the same two domains as the speech-related texts (sermons and trials), ie religion and law respectively. Representing the spoken dimension in Early Modern English is of course a problem, if not impossible: we naturally have no access to sound recordings, and we can never be sure of the reliability of even those texts claimed to be ‘faithful’ records of a speech event. Therefore we would like to make clear here that the speech-related material chosen for this study is just that: it is related but not equivalent to the spoken language of the period. However, the relationship between the texts and the spoken language requires some further comment. Trial texts are especially interesting for linguistic study as they record proceedings involving people from different walks of life (though the professional and upper ranks are often over-represented in our data). However, it is hard to know to what extent the stages of production might affect the authenticity of the dialogue recorded in these printed texts. For example, there may be attempts to ‘improve’ the language used by making it conform more closely to written standards. The printed record of the trial of Charles I included in this study may be a case in point.² Moreover, it should be kept in mind that courtroom dialogue is also highly constrained by the particular case, courtroom procedures and generally the formality of the occasion. The other speech-related genre, sermons, has been called a genre of ‘oral literature’ (Ellison 1998:14), a description which highlights their intermediate position between the poles of orality and literacy. Sermons can be completely oral (ie spontaneous, unscripted preaching), completely written (ie fully prepared texts to be delivered orally) or fall somewhere between these extremes. Unfortunately, there is no knowing from the printed versions of the sermons which type of preaching the sermon originally represented. As with the trials, one has to reckon with a certain amount of editing of the text for publication. In contrast to trial records, sermons are monologic and non-interactive, although they need to have a clear audience-orientation. As to our ‘written’ texts, we of course do not claim these represent the written language as a whole either, but only the respective genres. It could rightly be argued that both our domains, religion and law, are linguistically very conservative, even formulaic in nature, but the intended audience of the particular corpus texts is important to consider. The texts were written about religious and legal topics for a more general public and are thus as a rule more accessible or down-to-earth than liturgical or statutory texts. The text types chosen for this study can perhaps be distributed along a cline of orality/literacy, with the laws and treatises clearly at the ‘written’ end,

trials more towards the opposite end, and sermons somewhere in the middle, but with a tendency towards orality.

Our corpus is constructed out of sub-corpora taken from the *Lampeter Corpus of Early Modern English Tracts* (LC)³, which covers the period 1640–1740, and *A Corpus of English Dialogues 1560–1760* (CED)⁴. The whole of the LC domain entitled ‘Religion’ has been used, with RelA-texts representing sermons and RelB-texts comprising various religious tracts and pamphlets (which we have labelled ‘treatises’). The non-speech-related legal texts are also LC texts, which were sampled with a view to getting close to the word count of the religious texts. The trial records are taken from the CED. For each decade in the period 1640–1740, we have selected approximately 10,000 words from each of the four genres. Table 1 summarises the composition and size of the corpus:

Table 1: The corpus (for details see Appendix 1)

| | ‘written’ texts | speech-related texts | total |
|----------|-----------------|----------------------|---------|
| religion | 97,798 | 105,307 | 203,105 |
| law | 91,307 | 93,772 | 185,079 |
| total | 189,105 | 199,079 | 388,184 |

Causality in language is not a clear-cut, unified concept, but includes several relationships between the causal clause and its reference clause, which are closely related and often hard to distinguish precisely, such as cause and effect, reason and consequence, motivation and result, and circumstance and consequence (Quirk et al 1985: 1103f). In addition to the above, there are also indirect cause relationships, where the causal clause supplies the motivation for the speech act contained in the main clause or for the conclusion expressed by the main clause (epistemic use) (Quirk et al 1985: 1104; Sweetser 1990: 76). All of these types are accepted here as instances of causality and included in the data. However, as semantics is not the main focus of this paper, we have not categorised our examples along these lines.

Just as causality is a semantically rather disparate concept, it can also be realised linguistically in various ways. Altenberg (1984: 22) lists and investigates four basic types of causal expressions: (a) adverbial linkage (*so, hence, therefore*, etc), (b) prepositional linkage (*because of, on account of*, etc), (c) subordination (*because, as, since*, etc), and (d) clause-integrated linkage (*that’s why, the*

result was, etc). There are also the cases of juxtaposition without overt causal linking devices, which are often interpreted as causal, whether the speaker/writer meant it as such or not (Altenberg 1984: 21; Meyer 2000: 25). However, for the purposes of this paper we concentrate on only one type of linkage, namely adverbial clauses with a causal force. Clauses are not only the most common realisations of causality and contingency today, according to the findings of Altenberg (1984: 40ff) and Biber et al (1999: 787) respectively, but are also the most versatile causal expressions.

To find finite clauses we searched for the conjunctions *as*, *because*, *for*, *since* (which thus also included combinations with eg *that*) and *in that*. For non-finite clauses, we collected *-ing* and *-ed* forms, the latter supplemented by a search list of irregular past participles. As a by-product of the search for *-ing* forms, *seeing* (*that*) as a conjunction was added to the list of finite examples. Ambiguous cases are included where the causal interpretation is at least as likely as the alternative interpretation, as the majority of forms used to express causality have other possible meanings. The corpus search yielded a total of 1,364 causal clauses, spread as follows (in descending frequency): 668 *for*, 343 *because*, 156 non-finite clauses, 115 *since*, 60 *as*, 11 *in that* and 11 *seeing*.

In the following section, we present the overall quantitative results relating to genre and medium differences, as well as the results for each type of causal expression. In accordance with the findings of previous research, we should find a difference between the four genres, and also between the non-speech-related genres and the speech-related genres, in the frequency and range of causal expressions.

4 Causal clauses in the Early Modern English data

4.1 Genre and medium: A quantitative comparison

The 1,364 examples of causal clauses are distributed across the four genres as shown in Table 2:

Table 2: Causal clauses across genres (all types)

(*without RelB1687: see below)

| ‘written’ texts | | speech-related texts | |
|-------------------------------------|-----------|----------------------|-----------|
| treatises | law | sermons | trials |
| 456 / 4.7 ^a (*327 / 3.3) | 299 / 3.3 | 357 / 3.4 | 252 / 2.7 |

a. Note that all normalised frequencies given in this paper are per thousand words.

What is immediately striking here is the high figure for religious treatises, which is caused by an abnormally high frequency of the conjunction *for* in one particular text, RelB1687, with 129 instances or a frequency of 17.7 per thousand.⁵ If one re-calculates the value for that cell without those 129 occurrences, the result is a frequency of 3.3 for treatises, placing these texts on a similar level as laws and sermons. It is interesting that sermons behave like ‘written’ texts with regard to the overall frequency of causal clauses, leaving the speech-related trial texts as the genre with a significantly lower figure compared with the other genres.⁶ This might be a reflection of the relative closeness of sermons to the literacy end of the cline compared with trials texts.

In accordance with the findings of Biber et al and Altenberg described above, one might have expected a higher frequency of causal clauses for the speech-related genres rather than a similar figure (sermons) or a lower figure (trials) when compared with the non-speech-related texts. However, a high amount of causality might just be a characteristic typical of conversation, which is not reflected in speech-related genres.

Rissanen (1998) gives two explanations for the difference he found between the sermons and the law texts, with sermons making the most use of *because* plus a high number of examples of *for*, and laws making the least use of these conjunctions. Firstly, he points to Tyndale’s preference for *because* in the Bible, and the influence this would have on sermons.⁷ Secondly, he argues that the law texts rely on condition-consequence rather than reason-consequence relationships in the *Helsinki Corpus* (1998: 398). However, we searched for the conjunction *if* in our material as a probable indication of any prevalence of this type of argumentation and found that *if*-constructions are not significantly more common in the law texts than in the other domains of the LC, though much less common in the CED trial texts, which are once again the odd man out.⁸ As mentioned earlier, Altenberg found that written texts used a greater range of causal expressions in Present-day English, which differentiated these from his spoken data. Therefore, to understand more clearly the differences between the genres, and between the ‘written’ and speech-related texts, we need to look at how causality is expressed in the four genres (shown in Table 3):

Table 3: Causal clauses by type across genres

(*without RelB1687: see above)

| | written texts | | speech-related texts | |
|----------------|---------------------------|-----------|----------------------|-----------|
| | treatises | law | sermons | trials |
| <i>as</i> | 11 / 0.1 | 15 / 0.2 | 27 / 0.3 | 7 / 0.1 |
| <i>because</i> | 104 / 1.1 | 89 / 1.0 | 95 / 0.9 | 55 / 0.6 |
| <i>for</i> | 272 / 2.8 (*143 / 1.5) | 129 / 1.4 | 138 / 1.3 | 129 / 1.4 |
| <i>since</i> | 22 / 0.2 | 24 / 0.3 | 57 / 0.5 | 12 / 0.1 |
| <i>in that</i> | 1 / 0.01 | 6 / 0.06 | 4 / 0.04 | – |
| <i>seeing</i> | 9 / 0.1 | 1 / 0.01 | – | 1 / 0.01 |
| <i>-ing</i> | 37 / 0.4 | 35 / 0.4 | 35 / 0.3 | 47 / 0.5 |
| <i>-ed</i> | – | – | 1 / 0.01 | 1 / 0.01 |

As can be seen from the table, *for* is clearly the most common conjunction in causal clauses in all four genres, which is not surprising, as previous research shows that it is in general the most common causal conjunction in Early Modern English (Rissanen 1999: 305), and also the longest established of all the conjunctions under investigation here. Included in the figure for *for* are 13 examples of *for that*, of which 11 occur in the ‘written’ texts (three in RelB and eight in the law texts), but only two in the trials, and none in the sermons. This might indicate that ‘written’ language is more conservative in that it uses an obsolescent item (see section 2 above), but clearly the number of instances is too small to base any conclusions on.

The second most common conjunction *because*, shown by Rissanen to be gaining in frequency at the expense of *for* between 1420 and 1640, occurs in our period, 1640–1740, at a ratio of 1:1.4 in relation to *for* in all genres (again excluding the RelB1687 text) except trials, where the ratio is 1:2.3⁹. In this way, trials seem to be more conservative in the use of *because*, in that the ratio of *because* to *for* is much closer to that found for the previous period (1:3 for the period 1500–1640) by Rissanen (1999:307). The low frequency of *because* in trials is also in contrast to Present-day spoken English (but not written English), where it is by far the most dominant conjunction (Altenberg 1984: 39; Biber et

al 1999: 842f). Moreover, in Early Modern English writing *because* seems to be more common than in modern writing, if one compares with Breul's (1997: 155, 181ff) results from LOB (0.63 per thousand), although the figures of Biber et al (1999: 842) do not show quite such a difference. However, usage today and in Early Modern English in the two different mediums, written and spoken (or in the case of our data 'written' and 'written to be spoken' versus the supposedly 'recorded' speech of the trials) may be comparable if we consider *for* and *because* as having effectively switched roles since the seventeenth century. The conjunction *for* is not found in Altenberg's modern spoken data at all, but is common in written English, whereas *because* is the most common conjunction in both spoken and written but especially so in spoken English. Conversely, in Early Modern English, *for* is the most common in 'written' texts (ranging from 1.5 to 1.4) and speech-related texts (ranging from 1.3 to 1.4), but *because* is more common in the 'written' or 'written to be spoken' texts (ranging from 1.1 to 0.9) than in the 'recorded' speech in trials (0.6). Thus, as mentioned above, in Early Modern English *for* was still the preferred alternative, although the use of *because* was on the increase. It is arguable therefore that *for* was the stylistically unmarked causal conjunction, similar to *because* in Present-day English, while *because* was a stylistically marked choice, as is *for* today.¹⁰

Clauses with *since* are the third most common type of causal clause in sermons, unlike the other genres which prefer non-finite *-ing* clauses. As suggested below (Section 4.2), *since* appears to have a rhetorical function in both the sermons and the 'written' texts, which might explain the lower frequency in the trials. According to Rissanen (1999: 305) *since* introduces clauses containing given information (for a detailed discussion see section 4.3 below), which might be an influencing factor here. Religious discourse, and perhaps also written law, certainly depends to a large degree on presupposed knowledge (eg a range of beliefs which are taken for granted), and sermons as a persuasive oral genre rely on a certain amount of repetition to drive home their message. Both these facts will increase the presence of given information and thus perhaps contribute to the use of *since*.

The conjunction *as* is less common than *since* in all genres but the trials, where the conjunctions share the same low frequency (0.1). The genre with the highest frequency for *as*, the sermons, once again seems to use the conjunction as a rhetorical device (see section 4.2 below). The relative rarity of *as* and *since* in our data is comparable to modern data (Altenberg 1984:41; Breul 1997: 155), where *as* and *since* have a frequency of 0.26 per thousand and 0.21 respectively in LOB (written) and 0.07 and 0.05 respectively in LLC (spoken). The fact that *since* and *as* are almost restricted to formal written English today may have to

do with the ambiguity inherent in both these conjunctions, which perhaps makes them less suitable for speakers' argumentative purposes, and this might also be true of the Early Modern English period, and thus explain why the speech 'recorded' in trial texts has the lowest incidence of these conjunctions.

Non-finite *-ing* clauses are relatively well represented in both the LC and the CED. They share the same frequency in our 'written' data (0.4), but the lowest frequency is in the 'written to be spoken' data (0.3). Most interesting is that *-ing* clauses are most common (0.5) in the 'recorded' speech of the trials¹¹, which is not what one would intuitively predict. In contrast, although not directly comparable of course, in Present-day English *-ing* clauses have been found to be 'extremely rare in conversation' (Biber et al 1999: 826), with a frequency of only 0.12 in Altenberg's data (Altenberg 1984: 41). One explanation for the low frequency of non-finite constructions in conversation is that they are said to represent greater syntactic integration, and more informational compactness, both of which are more typical of written language, as they take more planning, and thus time, to produce (Altenberg 1984: 47f). Clearly, the real-time conditions for spoken language production are no different today than in the past, so the relatively high frequency of *-ing* clauses in our trials data needs further comment. First, these constructions might have found their way into the data in greater numbers by scribal and/or editorial emendation (mentioned in section 3 above) and never have been produced by the participants in the original speech event themselves. Secondly, it is reasonable to assume that not all of the speech in the courtroom would be wholly spontaneous. Lawyers' speeches would be prepared in advance (though as such these are usually omitted from the CED), testimony would, one might expect, have been discussed between lawyers and witnesses, and lawyers and defendant. Moreover, some statements would have been taken down earlier in the form of depositions, which were frequently referred to as evidence, for example when a witness might claim that his memory failed him. Although it would be too much to suggest that the actual wording of courtroom statements had been pre-planned, if the content of the speech had been partly prepared, this might enable a speaker to construct more syntactically-complex and information-dense language, which might be further encouraged by the formal courtroom situation, where precision would be required. This does not explain why *-ing* clauses are more frequent in the trial texts than in the other genres. However, the non-finite clauses in the trials also differ from those in the other genres in that they are more frequently found in initial position (61%), whereas today, and in the other genres, final position is preferred (see section 4.3 below).

The conjunctions *in that* and *seeing* as well as non-finite *-ed* clauses¹² are rare in our data. The ‘written’ texts, laws and treatises, are similar in that they both contain examples of *seeing* (especially in treatises) and *in that* (especially in laws), but no *-ed* clauses. The speech-related texts have examples (one each) of the latter, but *in that* only occurs in sermons, while *seeing* only occurs once, in trials.

In sum, the quantitative study suggests that there is a difference between the speech-related texts and the ‘written’ texts, at least as far as the trial texts are concerned, in that the latter have a significantly lower frequency of causal clauses, and apparently exploit the available range of causal expressions to a lesser extent than do the other genres. As the sermons and the trials thus differ, it suggests genre has a stronger influence than medium. In order to investigate this further, we now discuss the syntax and semantics of causal clauses in more depth, and examine qualitative differences in the four genres, using examples from our corpora.

4.2 The syntax and semantics of causal constructions

We have seen that the use of causal clauses differs to a certain extent between the genres investigated here, in particular between the trials on the one hand and the LC texts on the other. To what extent is this a reflection of their different contexts and production circumstances? There may be a contrast here between the pragmatic and the rhetorical use of causal clauses: causality could be used more for giving immediate reasons or motivations for people’s actions in the trial texts, while ‘written’ law and the genres in the domain of religion employ it more often for amplification and for providing stepping-stones within a larger argumentation (where the precise nature of the causality need not always be clear). In this section, we look at each of the causal expressions in turn with reference to how they are used in the four genres in terms of both semantics and syntax.

Both *as* and *since*, besides occurring in non-conjunction uses, are ambiguous conjunctions, with *as* being the more problematic case¹³. Expressing reason appears to be a minor use of *as* today (Biber et al 1999: 846), which is also true for our Early Modern English data, where only 1.8 per cent of all *as* instances have a causal interpretation. The ratio for *since* shows this conjunction to be less ambiguous, with almost 70 per cent of all instances being used in a causal sense. Thus, *since* is the better choice of the two for clarity. With *as*, finding unambiguous causal examples is not easy.¹⁴ It is especially difficult to clearly distinguish the causal use from the comparative use of *as* when linked with a correlative element in the main clause, primarily *so*, in particular as *so* is also a consequence

conjunct which may be used to repeat or reinforce the causal meaning. Example (1) represents one example of the 21 *as...so* structures which have been analysed as at least partly causal and therefore retained in the data:

- (1) And as the Primitive Christians did constantly urge the Necessity of Abstaining from these Plays; so such, as owned themselves Christians, did as conscientiously follow their Advice. (RelA 1730)

Interestingly, all but three of these examples occur in sermons (one in law, two in treatises, none in trials), indicating that this construction might have been a popular rhetorical feature of public oratory. If the *so* is a causal reinforcement, there are also other structures used in this way. For example, *therefore* often occurs in the vicinity of causal conjunctions, as in (2), where it introduces the following main clause. As the utterance represents not a logical causal connection, but an inferred hypothetical reason/motivation, the reinforcement by a causal adverbial might have been deemed appropriate. The phrase *in consequence of* in (3) also serves the function of making the causal relationship more explicit. This reinforcement strategy is less common in the trial texts.

- (2) Because the State had an ill opinion of them, therefore you had a good opinion of them. (D3T LOVE 42)
- (3) And as each one may be supposed to have a Share in the Choice of such Person or Persons as by publick Consent are authorized to Govern; as he trusts them with his Power, and contributes to their Support; he has, in Consequence of that, while he behaves well, a Claim not only to Protection and Defence, and to be secured from Injury, Violence and Oppression; (LawA 1732)

It is not unusual, as in the following example (4), for causal constructions to cluster somewhat in the 'written' texts and in the sermons. This might be a conscious rhetorical device used for the purposes of emphasis and persuasion. For example, the two *since* clauses in (4), which both refer to the same main clause, are rather different in their semantic relation to that clause: while the first encodes a reason or circumstance/consequence relationship, the second serves more the purpose of amplification, as it partly repeats the main clause content.

- (4) yet reason must force this confession, that since it is not the letter, but the sence, of Scripture that is the proper Guide of life; there must be allowed some Interpretation, since our demands to one another may be the same with the Eunuch to St. Philip, how shall we Read without some Interpreter? (RelA 1682)

In contrast to all the other constructions investigated, *because* clauses are the only unambiguously causal ones. In (5), the causal clause states the motivation for the person's behaviour, while the whole causal construction in (6), illustrat-

ing an inferred logical connection, serves as an explanation of the preceding Latin phrase, with semantics like the first being more typical of speech-related contexts.

- (5) ... and into the Coach he went, but I did not go in because there was no room, but rid behind it; (D4T SWENDSEN 7)
- (6) I observe they Argued only upon Generals, without any other Application to this Case than by the Topick of concluding a *Minori ad Majus*, because Actions lay in Cases of Inferiour Nature, therefore it will lye in this; which Rules hold not in diverse Cases where there are particular Reasons to the contrary, as I shall by and by shew to be in this. (LawB1704)

On the whole, the *because* clauses in the LC (both ‘written’ and sermons) have a tendency to be shorter and less syntactically complex than clauses introduced by other conjunctions, a tendency which does not seem as pronounced in the trial texts.

For is a very complex case, both syntactically and semantically. In Present-day English *for* is classified as a subordinator, but one which is a less typical case than eg *because*, as it shares some co-ordinator features (Quirk et al 1985: 927), whereas in Middle English *for* exhibited more subordinator features (Jucker 1991: 218). According to Rissanen (see section 2 above), *for* had taken on clearer co-ordinator functions, with occasional subordinator uses in Early Modern English, usually employing the combination *for that*. In our Early Modern English data (see section 4.1 above), there are very few *for that* instances (13 in all). Not all of these instances are qualitatively different from simple *for* clauses; (7) could just as well be introduced by *for* only (note the semi-colon and the loose causal connection, as well as the *tho*’; cf Rissanen 1989 and 1999), while (8) exhibits the greater semantic and syntactic integration typical of subordinate structures:

- (7) he told Layer, (...) he would settle a Correspondence with him; for that tho' he had followed the Fortunes of the late King James and his Family, ever since the Revolution; and had always been faithful to the Pretender, and for many Years his Cashier, ... (LawA 1723)
- (8) Suppose an Action should be brought in time of Prorogation against a Member of Parliament, for that he falsly and maliciously did exhibit a Complaint of Breach of privilege to the Parliament, whereby the Party was sent for in Custody, and lost his Liberty, ... (LawB 1704)

In fact, many *for* clauses in our data exhibit a rather loose connection to their reference clause. One indicator in this respect is the kind of punctuation preceding the conjunction, where a heavy punctuation mark (; : . ? !) tends to mark a

weak link (cf Rissanen 1989: 13). More than half (58%) of the *for* clauses are preceded by such heavy punctuation, of which 34 per cent (20% of all) have to be definitely interpreted as an independent sentence (ie where *for* follows a full-stop). There is a difference between the LC and the trial texts in this respect: while 62 per cent of *for* examples in the LC occur with heavy punctuation, this figure is only 41 per cent in trials, and independent *for* sentences only make up three per cent of the *for* examples in trials compared with 24 per cent in the LC.¹⁵ Although, in the ‘written’ texts and also in the sermons, a trace of causality, however small, is usually present, *for* often seems to serve predominantly a linking, cohesion-creating function, as in example (9). The greater independence of *for* clauses may also be signalled syntactically, for example when the *for* clause is a question, as in example (9), underlining the rhetorical use of *for*.¹⁶ In the trial texts the causal semantic bond of *for* appears to be much stronger, and neither the rhetorical nor the linking function is prevalent there (see example 10 below).

- (9) Therefore I will always Admire and Adore the God of Heaven, that doth prevent the Wicked Intentions of Evil Men. For how hath God preserv'd His Anointed from the Spite and Malice of Men and Devils, and from the Raging of the Seas? (RelB 1687)
- (10) He said again, They did not deserve it, for there was no Plot at all. (D4T GILES 28)

The behaviour of *for* clauses raises the more general question of coordination versus subordination or rather parataxis vs hypotaxis.¹⁷ With regard to our data, the majority of all *for* clauses are in fact paratactic, as they are of equal status with, or sometimes even lack, the reference clause, and as they are syntactically and semantically complete in themselves (cf Halliday 1994: 221), as shown in example (9) above. This statement is certainly true for the LC data, ie the ‘written’ and ‘written to be spoken’ texts. In the trial texts, however, *for* is more often employed in a hypotactic manner, as in (10) above, where the causal clause is interpreted as the dependent element. Clauses with *as*, *since* and *seeing* (when used as a conjunction) are as a rule hypotactic, as examples (11–13) show:

- (11) And I would particularly Consider his Life and Example, as it may Enforce what I have been Explaining, and Pressing in the foregoing Discourse. (RelA 1711)
- (12) for that, in the Nature of Things, is not possible; or if it were it might sometimes be imprudent, since Honesty alone is not a sufficient Qualification; and since it is not material to a Society, whether a Man through Indolence or Design mismanages a Trust, providing in Reality he does not manage it. (LawA 1732)

- (13) Sir, You have propounded a Question, and have been answered: seeing you will not answer, the *Court* will consider how to proceed; (D3T CHARLES 22)

Example (12) also illustrates a clear subordinator feature, namely the ability of subordinators to be preceded by another conjunction (cf Quirk et al 1985: 927), which is also found with *as* and *because*. Conversely, *for* never follows another conjunction in our data, whereas it often precedes one. None of the clause types mentioned so far have been found in embedding constructions, but with *because* and *in that* this is possible. Of all *because* instances, 74 (22%) have been classified as cases of embedding, of which only three occur in the trial texts. Greater clause integration requires more planning, which may account for its higher frequency in the ‘written’ and ‘written to be spoken’ genres. The examples below (14–15) are the most common embedding types, with the clause functioning as subject complement or as the post-modification of *reason*, respectively:

- (14) know that he made any Difficulty of signing it, but I am sure it could not be because he was refus’d to read it. (D4T FRANCIA 16)
- (15) the Hebrews in Rabot mention a tradition, that the reason why Mordochai would not bow to Haman, was, because there was woven in his garment the image of a false God. (RelB 1644)

Non-finite clauses are by definition dependent, as a non-finite verb form cannot carry a complete proposition, and are thus hypotactic (see example 16):

- (16) Being upon my oath, I desire to be cautious, for I must be tender in speaking the truth in this (D3T LOVE 35)

Semantically, the majority of the *-ing* clauses in the trials are ambiguous, having either temporal or relative clause meaning as well as a causal interpretation. This is not true of the other genres to the same extent, although ambiguous cases are not uncommon (see example 17). Non-finite *-ing* clauses have been classified by Biber et al (1999: 820) as ‘supplementive clauses’ instead of including them in the semantic classification of adverbial clauses, precisely because their relationship to the main clause is too indeterminate in Present-day English. Below are examples from our data containing two possible readings, both relative and causal (17), and temporal and causal (18). This ambiguity might be in part intended by the producers.

- (17) The Devil scattering Heretical Seeds in the Church of Christ, and seeing them cut off at the Root by the Sword of the Spirit, has pitcht on another Method, and endeavours to divide the Body of Christ, by the Madness of Schismaticks: (RelB 1692)

- (18) that one Gentleman at Supper went home with a Gentlewoman in *Leaden-hall-street*, and hearing there was such a Robbery in *Lime-street*, I run with a great fright, ... (D3T TURNER 27)

A typical feature of non-finite clauses today is that they do not contain subjects of their own, which can further add to their semantic ambiguity. In our data, however, more than half of all non-finite clauses (54%) are absolute clauses, that is, feature an expressed subject, as in (19):

- (19) In like manner He having commissioned the Apostles to be his Deputies, in constituting his Church, they must necessarily have been capacitated for that Office; (RelA 1708)

Absolute clauses are most common in treatises (54%), but also frequent in sermons (49%) and to a lesser extent in trial texts (39%), whereas they are very rare in the ‘written’ law texts (2.8%). As this construction has been attributed to Latin influence (Rissanen 1999: 322), this may account for its frequent use in the religious domain, but if so, the low frequency in law is unexpected.

This qualitative section of the study also shows that the use of causal clauses in trials differs from usage in the other genres. The ‘written’ texts and sermons show a tendency to use rhetorical devices (such as the use of the structure *as...so*, which is found especially in sermons, and the clustering of *since* clauses), which are lacking in the trial texts. In the trials, *for* is used less as a linking device and tends to have a clearer causal meaning, while embedded *because* clauses are rare, all of which might be said to point to a less planned, or more ‘spontaneous’ argumentation in these texts, in contrast to the carefully developed argumentation of ‘written’ or ‘written to be spoken’ texts. Our earlier discussion of non-finite *-ing* clauses (see section 4.1) suggested that whether a causal clause presents given or new information might help explain usage in the different genres, and thus the next section examines information structure in our Early Modern English data.

4.3 Causal clauses and information structure

According to Rissanen (1999: 305), *for*, *because* and to a lesser extent *as* commonly introduce clauses containing new information, whereas *since* favours clauses with given. The question of information structure is connected to the position of the clause in relation to its reference clause, as in unmarked word order given information tends to occur in sentence-initial position, whereas new information is found later in the sentence. The following two tables (Tables 4 and 5) present the overall situation as to position and information in all text types in our data taken together:

Table 4: Position of causal clause in relation to its reference clause¹⁸

| | initial | medial | final | answer |
|----------------|---------|--------|-------|--------|
| <i>as</i> | 47 | 1 | 12 | – |
| <i>because</i> | 43 | 6 | 279 | 14 |
| <i>for</i> | – | – | 665 | – |
| <i>since</i> | 59 | 2 | 54 | – |
| <i>in that</i> | 1 | – | 10 | – |
| <i>seeing</i> | 2 | – | 9 | – |
| non-finite | 66 | 12 | 78 | – |
| total | 218 | 21 | 1107 | 14 |

Table 5: Type of information given in the causal clause¹⁹

| | given | new |
|----------------|-------|-----|
| <i>as</i> | 42 | 17 |
| <i>because</i> | 127 | 209 |
| <i>for</i> | 141 | 509 |
| <i>since</i> | 66 | 48 |
| <i>in that</i> | 2 | 9 |
| <i>seeing</i> | 4 | 7 |
| non-finite | 57 | 99 |
| total | 439 | 898 |

For causal clauses as a whole, there is clearly a preference for taking final position (82%) and also for encoding new information (66%). Research on Present-day English has also shown that final position is the dominant one (Altenberg 1984: 53; Biber et al 1999: 831, 833). However, there are differences with regard to genre and the clause-type used. Today, conversation has a clear final

preference (90%), while academic and news writing only have approximately 60 per cent in that position. Our trials data show 79 per cent for final position, but it is exceeded in that respect by 'written' law (81%) and treatises (88%). While for non-finite clauses final position is the unmarked choice today (Biber et al 1999: 831), in our data they occur quite often in initial position, especially in the trial texts (ie 61%, compared with 50% in sermons, 35% in treatises, but only 17% in law). The prevalence of non-finite *-ing* clauses in trials might be explained as a tendency for *-ing* clauses in initial position which contain information already given in the context to have a cohesive function, linking the content of the previous sentence with that of the matrix clause of the causal clause (see example 20).

- (20) If that which strangled him had been taken away while his Body was warm, the Vessels would have been less, and his Face would have been very Pale: Therefore it's evident that that which *strangled* him, was not removed till his Body was cold, which was the occasion of that blackness; for the Knot remaining, the Blood could not run away: (D4T THOMPSON 10–11)

The conjunctions *as* and (to a lesser extent) *since* also show a preference for initial position at least in three out of four genres (*as*: sermons 93%, law 80%, treatises 64%, but trials 43%; *since*: trials 58%, treatises 55%, sermons 53%, but law 42%). The conjunction *because* clearly favours final position to more or less the same extent in all genres, while *for*, as today, only ever occurs in final position. Some instances of *because* occur as answers to questions (21), which could have been interpreted as final, but these were kept separate as being of especial interest:

- (21) But still their calling is Antichristian. Why so? Because they are sent by men have Academical Degrees and Ecclesiastical Ordinations; whereas the true Ministers of the Gospel of Christ are immediately sent by God, & their Function is not of their own seeking. (RelA1653)

It might have been expected that this use of *because* would occur fairly frequently in trials, due to the nature of the situation, but while six occurrences were indeed found there, it only accounts for 11 per cent of all *because* instances in trials. However, four examples were also found in both sermons and treatises, where they can be interpreted as conscious rhetorical markers of a more lively, interactive style, in contrast to the down-to-earth nature of the speech examples.

Medial position is clearly a minority choice. As it tends to separate syntactic units by the intrusion of the causal construction, it can be a processing problem, which may account for its even greater rarity (only two instances) in the trials data illustrated in (22):

- (22) Sir, I must let you know from the Court, That they are very sensible of these delays of yours, and that they ought not, being thus Authorized by the *supream Court of England*, to be thus trifled withal, ... (D3T CHARLES 36)

According to Biber et al (1999: 835ff), the following factors are relevant when adverbial clauses appear in initial position: given information, cohesive functions, setting up a frame for the following statements, and the length of the adverbial clause. As the following table (Table 6) shows, there is indeed a tendency in our data for given information to surface in initial position and for new information to be encoded in final position, with the exception of the non-finite *-ed* and *-ing* clauses in initial position, which are fairly evenly divided between clauses containing given and those with new information:

Table 6: Position and information

| | initial/given | initial/new | final/given | final/new |
|----------------|---------------|-------------|-------------|-----------|
| <i>as</i> | 35 | 11 | 7 | 5 |
| <i>because</i> | 28 | 14 | 95 | 178 |
| <i>for</i> | – | – | 140 | 508 |
| <i>since</i> | 49 | 9 | 16 | 38 |
| <i>in that</i> | – | 1 | 2 | 8 |
| <i>seeing</i> | 1 | 1 | 3 | 6 |
| non-finite | 33 | 34 | 18 | 59 |

The following instance (23) illustrates all the above factors in favour of initial position: it contains given information, serves a cohesive function, sets up the basis for the following statement, and is short:

- (23) I have two more Reasons to add, upon which I lay great Weight, tho' they depend not upon any Particular Circumstances of this Case, but the general Consideration of it. 1. That it is a New Invention. 2. That it Relates to the Parliament. I. As it is a New Invention it ought to be Examin'd very strictly, and have no Allowance of Favour at the End, and it will have the same Fortune that many other Novelties heretofore attempted in our Law, have had. (LawB1704)

The first three factors certainly play a role in our data. However, length does not seem to be as great a concern in Early Modern English, as there are a consider-

able number of instances (in the LC but not in the CED) with long initial clauses; the following example (24) is an extreme case with two initial *because* constructions:

- (24) Yet because Saint Augustine may perhaps meane the incompleate and not perfect act of the will, (which though we yeild to be lesse then the outward act, yet the compleate act of the will, wanting nothing but opportunity of execution, may still be as great,) Or however, because there are not such demonstrable grounds of resolution, as to yeild cleare conviction to all in this matter, and too assure the Christian that such an Addition of any outward act of sinne shall make the punishment the heavier to the habituall sinner, and so the absence of that outward act alleviate it; therefore, although I said I thinke he should do well to abstaine, I dare not yet affirme that he is bound in charity to do so; (RelB1644)

While on the whole new information dominates in causal clauses, as mentioned above, this also differs to a certain extent between the four genres. Three of the genres have a fairly similar amount of new information: law (74%) is followed by treatises (71%), and trials (67%), while sermons have only 52 per cent. The greater reliance on given information in sermons is probably due to a conglomeration of factors: the truth (givenness) of doctrinal facts (see example 25), clearly expressed cohesive links in order to make allowance for the processing limits of listeners, as well as emphasis through repetition for the sake of greater persuasiveness.

- (25) Since He is Supreme over all Human Power, and the absolute Lord of the whole Universe; his Will is that Law, and that only that ought to take place, and claims our Obedience before any Human Commands whatsoever. (RelA1708)

Thus, *for* and *because*, the most common causal expressions used in our data, tend to present new information, and occur in final position, as expected, while *as* and *since* in general present given information (and thus our findings for *as* are contrary to Rissanen's description, mentioned above), in initial position. More interesting is the variation between the genres: sermons showing a preference for given information, while trials (and, to a lesser extent, also sermons) show an unusually high frequency of *-ing* clauses in initial position compared with today. We suggest that the former is due to the underlying set of beliefs that forms the basis and very nature of sermons, while the latter might be a result of these clauses being used as a linking device.

5 Diachronic development

In this section, we consider what changes can be seen in the use of particular causal expressions over the ten decades from 1640 to 1740 and compare our results to the findings of previous researchers. Of particular interest is whether there is a discernible increase in the use of *because* in relation to *for*, and whether there are different patterns of development according to genre and/or medium.

Table 7: The most common causal types by decade
 (*figures for this decade excluding treatise RelB1687 are 38/1.7)

| | 1640 | 1650 | 1660 | 1670 | 1680 | 1690 | 1700 | 1710 | 1720 | 1730 |
|----------------|--------|--------|--------|--------|----------|--------|--------|--------|--------|--------|
| <i>for</i> | 41/0.9 | 48/1.2 | 43/1.2 | 51/1.2 | 167/5.6* | 76/1.9 | 97/2.7 | 59/1.4 | 46/1.0 | 40/1.5 |
| <i>because</i> | 46/1.0 | 27/0.7 | 9/0.2 | 16/0.4 | 48/1.6 | 27/0.7 | 45/1.2 | 44/1.0 | 42/0.9 | 39/1.4 |
| non-finite | 14/0.3 | 18/0.4 | 16/0.4 | 18/0.4 | 8/0.3 | 13/0.3 | 28/0.8 | 11/0.3 | 20/0.4 | 10/0.4 |

Of the 1,364 examples of causal clauses found in our material, only three types were sufficiently numerous across the century studied to allow an investigation of change over time. These are the conjunctions *for* and *because*, and non-finite clauses. The figures for these three different causal types in each of the ten decades, from 1640 to 1740, are shown above (Table 7).

If we compare the use of *for* and *because* over the period 1640 to 1740, when all genres are taken together, we can see that the number of *for* examples is consistently higher than the number of *because* examples (except in the first decade investigated in this study; see Table 7 above). However, there is nevertheless a very slow but fairly steady decrease in the use of *for* in relation to *because* from the 1660s to 1740, which is illustrated below (Table 8). Thus, the increase of *because* at the expense of *for* from 1420 to 1640 recorded by Rissanen (see section 2 above) continues, and by the 1740s *because* is on the verge of overtaking *for* to become the most common causal conjunction, as it is today. The relationship between *for* and *because* in the different genres over the period is however not as clear, with no genre exhibiting consistency in usage (see Table 8 below). This shows the effect one text, ie one writer, can have on the data

when subdivided into small (c 10,000 word) samples. It is interesting that the trials, which supposedly represent the usage of several speakers in each text, have the smallest range of variation over the decades (ranging from 1:1.1 to 1:5.5). Thus, idiosyncratic use of a particular form may have less influence in this genre. However, despite this apparent lack of consistency in the use of *because* relative to *for* in each genre, it is interesting to note that sermons prefer *because* to *for* in four of the last six decades, and thus seem to lead the way in the promotion of *because*, as in Rissanen's 1998 study (see section 2 above). In contrast, the religious treatises, and trials, show a consistent preference for *for* (with the exception of treatises in the 1700s). The examples of *for* and *because* in the law texts are very few in the early decades, and in the later decades usage is very erratic.

Table 8: Ratio by decade and genre of *because: for*

(*figures for this decade excluding treatise RelB1687 are treatises n/a, all 1:0.8)

| | 1640 | 1650 | 1660 | 1670 | 1680 | 1690 | 1700 | 1710 | 1720 | 1730 |
|-----------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| treatises | 1:1.1 | 1:3.3 | 1:7.7 | 1:1.2 | 1:6.5* | 1:3.7 | 1:0.8 | 1:1.2 | 1:1.5 | 1:1.7 |
| laws | – | 1:0.8 | – | – | 1:1.5 | 1:0.8 | 1:3 | 1:0.8 | 1:6 | 1:0.3 |
| sermons | 1:0.3 | 1:1.5 | 1:6 | 1:7 | 1:0.9 | 1:6.8 | 1:0.8 | 1:3 | 1:0.7 | 1:0.9 |
| trials | 1: 4 | 1:2.6 | 1:1.8 | 1:5.5 | 1:3 | 1:2.3 | 1:3 | 1:1.5 | 1:1.1 | 1:5.5 |
| total | 1:0.9 | 1:1.8 | 1:4.8 | 1:3.2 | 1:3.5* | 1:2.8 | 1:2.2 | 1:1.3 | 1:1.1 | 1:1.0 |

The conjunction *for* in combination with *that* is described by Rissanen as obsolete by 1700 according to the *Helsinki Corpus* data, as he found only two examples in the period 1640 to 1710 (1989: 9).²⁰ However, in our data, this combination is actually found more frequently after 1700 (nine instances) than before (four instances), although these are only isolated examples. Interestingly, *for that* occurs in both domains, on both poles of the oral/literacy cline, and in all genres but sermons, both before and after 1700. As discussed above (section 4.2), *for that* does not seem to be distinguished semantically or syntactically from *for* in our data.

To return to Table 7, unlike the findings for the two conjunctions *for* and *because*, the non-finite clauses do not display much variation in the period 1640 to 1740. These clauses are used more or less to the same extent throughout the century. The frequency of these clauses in all genres together is consistently between 0.3 and 0.4 per thousand words (with the exception of the first decade

of the 18th century). Even where variation is greatest, in the treatises, the range is only 0.1 to 1.7 (see Appendix 2, Table 12).

Overall, there is an increase in the use of causal clauses between 1640 and 1740. However, this is not a steady increase (see Table 9 below). In the first four decades the frequency of causal clauses is between 2.1 and 2.6, and from the 1680s the frequency increases, ranging between 2.9 and 5.3 (if, as in section 4, we disregard the use of *for* in the 1687 treatise). This overall pattern seems to reflect usage in the laws and sermons, which also increases in the latter part of our period. The law texts vary greatly in the frequency of causal clauses, and in the first four decades expressions of causality are extremely rare (none in the first decade, and only 0.5 in the 1660s and 1670s), whereas between 1680 and 1740 the range is between 4.7 and 8.0 per thousand words. The sermons differ from the law texts in that the increase in causal clauses is a relatively steady one, with no major fluctuations. Altenberg (see above sections 2 and 4.1) has shown how causal clauses today are more common in conversation than in written English. So might it be that the sermons are tending further towards ‘orality’ over the period 1640 to 1740?²¹ On the other hand, the trial texts, which we have assumed to be closer to the spoken language than the sermons, do not display an increase over time in the expression of causality. Variation in frequency ranges only from 1.8 to 3.5 (until the last decade when the frequency rises to 5.1) and is thus fairly steady, as well as relatively low, between 1640 and 1730. Similarly, the treatises vary little across time (with a range of 2.4 to 4.9, again with the exclusion of *for* from the 1687 text) and show no tendency towards an increasing use of causal clauses.

Table 9: All causal types by genre and decade

(*figures for this decade excluding treatise RelB1687 are treatises 25/3.4, all 124/4.2)

| | 1640 | 1650 | 1660 | 1670 | 1680 | 1690 | 1700 | 1710 | 1720 | 1730 |
|-----------|---------|---------|--------|--------|-----------|---------|---------|---------|---------|---------|
| treatises | 54/4.0 | 28/4.3 | 35/3.1 | 30/2.4 | 154/21.1* | 39/2.7 | 30/4.9 | 31/3.8 | 35/3.2 | 20/3.0 |
| laws | — | 34/2.2 | 6/0.5 | 4/0.5 | 43/4.7 | 19/3.2 | 104/8.0 | 38/3.9 | 12/1.2 | 39/7.9 |
| sermons | 33/1.8 | 15/1.6 | 16/3.5 | 44/2.7 | 45/5.8 | 39/4.8 | 26/3.9 | 32/3.5 | 57/4.2 | 50/4.2 |
| trials | 26/3.1 | 30/2.9 | 20/2.0 | 13/1.8 | 11/2.1 | 38/3.5 | 32/3.1 | 35/2.3 | 26/2.1 | 21/5.1 |
| total | 113/2.6 | 107/2.6 | 77/2.1 | 91/2.1 | 253/8.6* | 135/3.4 | 192/5.3 | 136/3.2 | 130/2.9 | 130/4.8 |

The genre patterns described above show trials and treatises, and laws and sermons respectively to pattern in a fairly similar way, despite their sharing both a different domain and a different medium. However, there is a similarity between

the two genres in the domain of law, and between the two genres in the domain of religion, in that, with the exception of the 1700s and 1730s, there is a consistently lower frequency of causal clauses in the former domain, as shown in Table 10:

Table 10: All causal types by domain and decade

(*figures for this decade excluding treatise RelB1687 are religion 70/4.7)

| | 1640 | 1650 | 1660 | 1670 | 1680 | 1690 | 1700 | 1710 | 1720 | 1730 |
|----------|--------|--------|--------|--------|-----------|--------|---------|--------|--------|--------|
| law | 26/2.0 | 64/2.5 | 26/1.2 | 17/1.1 | 54/3.7 | 57/3.4 | 136/5.8 | 73/2.9 | 38/1.7 | 60/6.7 |
| religion | 87/2.8 | 43/2.7 | 51/3.2 | 74/2.5 | 199/13.2* | 78/3.4 | 56/4.4 | 63/3.6 | 92/3.8 | 70/3.8 |

Table 11: All causal types by medium and decade

(*figures for this decade excluding treatise RelB1687 are written 68/4.1)

| | 1640 | 1650 | 1660 | 1670 | 1680 | 1690 | 1700 | 1710 | 1720 | 1730 |
|----------------|--------|--------|--------|--------|-----------|--------|---------|--------|--------|--------|
| written | 54/3.0 | 62/2.8 | 41/1.8 | 34/1.7 | 197/11.9* | 58/2.8 | 134/7.0 | 69/3.8 | 47/2.3 | 59/5.1 |
| speech-related | 59/2.2 | 45/2.3 | 36/2.5 | 57/2.4 | 56/4.3 | 77/4.1 | 58/3.4 | 67/2.7 | 83/3.2 | 71/4.5 |

Finally, if we look for possible differences between the ‘written’ and the speech-related texts regarding diachronic developments, the results do not show this division to be particularly useful (see Table 11 above). There is no great variation between the two groupings in any decade other than the 1680s and the 1700s (which is caused by one law text and one treatise respectively).

We have seen that in the period 1640 to 1740 *because* increased in frequency but had not overtaken *for*, except perhaps in sermons, thus continuing if not completing the process described by Rissanen for the period 1420 to 1640. Non-finite *-ing* clauses remained on a similar level throughout the period. The apparent increase in causal clauses between 1640 and 1740 is actually a result of the steady increase in sermons, combined with the erratic variation found in the law texts, as there seems to be no real increase in the use of causal expressions in either the trials or the treatises.

6 Conclusion

The above results relating to developments over time, thus, by and large agree with the findings of Rissanen. Regarding the comparison between the use of causal expressions in our data with findings of research into Present-day English usage, we found that the speech-related texts did not attest a higher frequency of causal clauses, but rather the contrary. It could perhaps be argued that the trial texts make use of a smaller range of causal expressions than do the other genres, as does conversation today. However, it must be stressed that the data are not strictly comparable.

This study has also revealed that the division into speech-related texts and ‘written’ texts is not the most relevant distinction regarding our Early Modern English data. The *binary* groups of domain and medium also do not account sufficiently for the variation found in our material. Instead it is more helpful to look at the four genres individually.

The trials tend to differ most from the other genres. Arguably, this is due to the different production circumstances: despite any efforts of the scribe and the editor to embellish or improve the text, it is nevertheless *based* on input from a range of speakers, thus limiting the nature and length of the argumentation. Causality is primarily expressed by *for*, *because*, and *-ing* clauses, and structures which require a greater degree of pre-planning are rare.

The sermons, which we have also considered to be speech-related, differ from trials not only in that they are delivered by only one person, thus enabling a line of argumentation to run through the whole text, but also in that they tend to be persuasive. These texts clearly make use of rhetorical devices, such as the formulation *as...so*, repeating and emphasising points for the benefit of the audience. The sermons also stand out in that much of the information in the causal clauses is given, based on Christian dogma.

Neither the treatises nor the law texts use rhetorical features to the same degree, but the former clearly have a carefully planned argumentation. Law texts seem less homogeneous as a genre regarding argumentation; the use of both conditional and cause-consequence reasoning is found to a great degree in some texts, but barely at all in others: our understanding of argumentation in this genre would benefit from further investigation.

Judging by their similarities and differences described in this paper, it seems the four genres examined in this study might indeed be placed on an oral/literacy cline: treatises and the law texts belonging towards the literacy pole, sermons tending towards some central point, and trials inclining towards the oral pole. In order to define these positions more exactly, we would of course need to investigate a greater range of linguistic features than has been possible in this study.

Notes

1. Markus (2000: 225) argues that this subordinator use of *for that* was by no means the predominant one in Middle English, as it accounts for only 15 per cent of *for that* occurrences in his data, and thus objects to Rissanen's hypothesis regarding the development of different functions for *for that* and *for*. However, Markus' figures are for the entire Middle English period, and he does not investigate the Early Modern period, which perhaps weakens his argument.
2. For a detailed discussion of this, see Kytö and Walker (forthcoming).
3. Cf the corpus manual.
4. As the CED is still under compilation, the 1999 working version of the corpus was used for this study.
5. The author of this text is Elinor James, who the DNB describes as a 'religious enthusiast', an 'intolerant champion of the Church of England' and self-styled defender of several kings. In this text she argues against one particular opponent of her views in a highly polemic way. Her use of *for* is causal and clearly intended to support the argumentation, but it is also rhetorically interesting (10 of our 29 *for*-questions appear here; cf 4.2). The causal argumentation is also apparent, eg, in the high use of *therefore* (3.9 per thousand vs the corpus average of 1.0).
6. The difference between trials on the one hand, and the 'written' texts (ie not including sermons) on the other, (again excluding the figures for *for* in the 1687 treatise) is statistically significant ($\chi^2=7.82$, $p=0.005$, $d.f.=1$).
7. It should also be mentioned here that direct biblical quotes account for some *for* and *because* instances (22 and 8, respectively) in sermons. The diachronic spread is as follows (*for/because*): 1640s 5/-, 1660s 5/-, 1670s 2/3, 1690s 2/1, 1710s 7/1, 1720s -/2, 1730s 1/1. These biblical instances are included in the figures in our tables.
8. LC laws: 370/4.1, and CED trials: 320/3.4, all others LC domains: 3,641/3.9. There may, however, be a preference for conditionals in individual texts, which is the case in our two earliest law texts.
9. The trials figure is statistically significant compared to the 'written' material taken together (7.51, $p=0.006$, $d.f.=1$) and also compared to sermons (6.08, $p=0.01$, $d.f.=1$).
10. Perhaps worth mentioning here is that none of the causal expressions attested in trial texts are restricted to or preferred by speakers of a particular rank, gender or courtroom role: the forms seem to be distributed fairly evenly between different speakers (although in general women and mem-

bers of the lower ranks are only found in the latter half of the period studied); ie there are no clearly observable sociolinguistic effects.

11. The trials result is statistically significant compared to 'written' law texts (4.68, $p=0.03$, $d.f.=1$) and compared to sermons (7.51, $p=0.006$, $d.f.=1$). It is important to note here that ten non-finite clauses which occurred in the narrative rather in the dialogic part of the texts were excluded from the data.
12. Of the 156 non-finite causal clauses found, only two were *-ed* clauses, both occurring in the 'speech-related' texts. Incidentally, the same verb form, *not satisfied*, is used in both examples, cf *but not satisfied with that, he laid on me with his Stick as hard as he could*: (D5T GREENWOOD). Nowadays also, *-ed* clauses are rare in both written and spoken English (Biber et al 1999: 826).
13. The conjunction *as* can express manner, time, reason, comparison etc, while *since* can only express time as well as reason.
14. According to Rissanen (1999: 307), 'there are no unambiguous instances in Shakespeare (Franz 1939: §578), and not many in the Early Modern English section of the Helsinki Corpus'.
15. It needs to be emphasised here that punctuation certainly has a different status in the LC and CED data. While one might assume that LC punctuation largely reflects the practices of the authors, the speakers in the CED had no influence on how their speech was punctuated by the scribe or the printer.
16. There are 29 cases of *for* clauses which are rhetorical questions, all in the LC.
17. While causal clauses are normally treated under subordination, they are probably better dealt with in a wider framework of clause combining, such as Hopper and Traugott's (1993: 170) cline of clause combining, extending from parataxis (-dependent, -embedded), via hypotaxis (+dependent, -embedded) to subordination (+dependent, +embedded). Halliday (1994: 236f) classifies *for* (and some uses of *because*) as paratactic, and *because*, *as*, *since*, *seeing that* as hypotactic. In the case of clear embedding, the causal clause functions as a constituent within a clause (cf Halliday 1994: 248; Breul 1997: 33, 42).
18. The four instances missing to the total of 1,364 are due to instances of *for* in Biblical quotes not closely linked to the surrounding text, so that a reference clause was not present.
19. 27 instances, all from treatises (2) and sermons (25), could not be clearly classified and thus do not appear in this table.

20. A scan of this section of the *Helsinki Corpus* revealed that these two examples, from the late 17th century, were not from any of the three genres which are also represented in our data, ie sermons, trials and laws.
21. Claridge and Wilson (forthcoming) have shown that sermons increase over time in involvement on Biber's Dimension 1 (which can tentatively be linked to orality). The LC sermons included in this study showed a clear correlation between time of writing and amount of involvement, ie the later, the more involved.

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Appendix 1

The corpus texts

CED Texts:

Trials

| file name | date | word count | text title |
|-----------|--------|------------|--|
| D3tcharl | 1648 | 8,356 | <i>King Charls his Tryal</i> |
| D3tlove | 1651/2 | 10,499 | <i>The Whole Trial of Mr Love</i> |
| D3tturne | 1663 | 9,760 | <i>A True and Impartial Account of the Arraignment, Tryal, Examination, Confession and Condemnation of Col. James Turner</i> |
| D4tgiles | 1680 | 7,227 | <i>The Tryal of John Giles</i> |
| D4ttthomp | 1682 | 5,324 | <i>The Tryal of Nathanael Thompson, Iohn Farewell, William Pain</i> |
| D4trookw | 1696 | 10,706 | <i>The Arraignment, Tryal, and Condemnation of Ambrose Rookwood</i> |
| D4tswend | 1702 | 10,384 | <i>The Tryals of Haagen Swendsen, Sarah Baynton, John Hartwell, and John Spurr</i> |
| D4tfranc | 1716 | 15,313 | <i>The Tryal of Francis Francia</i> |
| D5tlayer | 1722 | 12,109 | <i>The Whole Proceeding upon the Arraignment, Tryal, Conviction and Attainder of Christopher Layer, Esq.</i> |
| D5tgreen | 1740 | 4,094 | <i>The Trial of Mr. Bartholomew Greenwood</i> |

LC texts:

Sermons

| file name/ date | word count | author | text title |
|--------------------|---------------|------------------|--|
| RelA1642 | 18,845 | Thomas Hill | <i>The Trade of Truth Advanced in a Sermon Preached to the Honourable House of Commons</i> |
| RelA1653 | 9,464 | Joseph Sedgwick | <i>A sermon, preached at St. Marie's in the University of Cambridge May 1st, 1653</i> |
| RelA1669 | 4,719 | Richard Sherlock | <i>A sermon preached at a visitation, held at Warrington in Lancashire May 11, 1669</i> |
| RelA1679 | 16,991 | Henry Jones | <i>A sermon of Antichrist</i> |
| RelA1682 | 8,016 | Thomas Pittis | <i>An old way of ending new controversies</i> |
| RelA1696 | 8,389 | John Piggott | <i>A good king and his people, the special care of heaven. A sermon preached the 16th of April, 1696</i> |
| RelA1708 | 6,793 | John Waller | <i>Religion and loyalty, or the reverence due both to Church and state</i> |
| RelA1711 | 9,337 | Samuel Wright | <i>A funeral sermon, upon the sudden and much lamented death of Dr. Francis Upton</i> |
| RelA1721 | 13,853 | Joseph Trapp | <i>The dignity, and benefit, of the priesthood; the lawfulness of marriage in the clergy</i> |
| RelA1730 | 12,133 | Arthur Bedford | <i>A sermon preached in the parish-church of St. Butholf's Aldgate</i> |

Treatises

| file name/ date | word count | author | text title |
|--------------------|---------------|--------------------|--|
| RelB1644 | 13,447 | Henry Ham- mond | <i>Of Scandall</i> |
| RelB1650 | 6,557 | John Cook | <i>A true relation of Mr. Iohn Cook's passage by sea from Wexford to Kinsale</i> |
| RelB1667 | 11,255 | John Owen | <i>Indulgence and toleration considered</i> |
| RelB1674 | 12,562 | William Penn | <i>A just rebuke to one & twenty learned and reverend Divines</i> |
| RelB1687 | 7,286 | Elinor James | <i>Mrs. James's Vindication of the Church of England</i> |
| RelB1692 | 14,675 | Humphry Hody | <i>A letter from Mr. Humphrey Hody to a friend, concerning a collection of canons</i> |
| RelB1701 | 6,166 | William Higden | <i>The case of sureties in baptism</i> |
| RelB1718 | 8,216 | Anne Roberts | <i>The Flying Post posted</i> |
| RelB1721 | 11,021 | Francis Hare | <i>Scripture vindicated from the misinterpreta- tions of the Lord Bishop of Bangor</i> |
| RelB1730 | 6,613 | John Henley | <i>Light in a candlestick, to all that are in the House</i> |

Written Law

| file name/ date | word count | author | text title |
|--------------------|---------------|---|--|
| LawA1643 | 4,432 | Robert Devereux | <i>Laws and Ordinances of Warre, Established for the better Conduct of the Army</i> |
| LawA1653 | 15,323 | Henry Robin- son | <i>Certaine proposals in order to a new model- ling of the lawes, and law-proceedings</i> |
| LawB1661 | 11,366 | Thomas Violet (et al) | <i>Two petitions of Thomas Violet of London goldsmith, to the Kings Majestie</i> |
| LawA1673 | 7,602 | E. W. | <i>The Continuation of the Case between Sir William Courten, his heyres and assignes, and the East India Company of the Nether- lands</i> |
| LawB1688 | 9,240 | Sir Edward Herbert | <i>A short account of the authorities in law, upon which judgement was given in Sir Edw. Hales his case</i> |
| LawA1694 | 5,968 | Sir Matthew Harte | <i>A treatise, showing how usefull, safe, reason- able and beneficial, the inrolling & regis- tring of all conveyances of lands, may be to the inhabitants of this kingdom</i> |
| LawB1704 | 13,004 | Francis North | <i>An Argument of a Learned Judge in the Exchequer-Chamber upon a Writ of Error out of the King's-Bench</i> |
| LawB1715 | 9,744 | William Fleet- wood | <i>The counsellor's plea for the divorce of Sir G[eorge] D[owning] and Mrs. F[orrester]</i> |
| LawA1723 | 9,719 | anon. Great Britain. Parliament. House of Lords. | <i>A report from the Lords Committees to whom the report and original papers delivered by the House of Commons at several confer- ences were referred, and who were impow- ered by the House of Lords to examine Christopher Layer</i> |
| LawA1732 | 4,909 | anon. | <i>The RIGHTS and liberties of subjects vind- icated</i> |

Appendix 2

Table 12: Raw figures/normalised frequencies for most common causal types by decade and genre

(*figures for this decade excluding treatise RelB1687 are: treatises 0, all 38/1.7)

| | | 1640 | 1650 | 1660 | 1670 | 1680 | 1690 | 1700 | 1710 | 1720 | 1730 |
|-------------------|-----------|--------|--------|--------|--------|-----------|--------|--------|--------|--------|--------|
| <i>for</i> | treatises | 23/1.7 | 13/1.9 | 23/2.0 | 12/0.9 | 129/17.7* | 22/1.5 | 11/1.8 | 12/1.5 | 15/1.4 | 12/1.8 |
| | laws | – | 8/0.5 | 1/0.1 | – | 22/2.5 | 6/1.0 | 68/5.3 | 14/1.4 | 6/0.6 | 4/0.8 |
| | sermons | 6/0.3 | 9/1.0 | 12/2.6 | 28/1.7 | 10/1.3 | 27/3.3 | 3/0.5 | 15/1.6 | 15/1.1 | 13/1.1 |
| | trials | 12/1.4 | 18/1.7 | 7/0.7 | 11/1.5 | 6/1.1 | 21/2.0 | 15/1.4 | 18/1.2 | 10/0.8 | 11/2.7 |
| | total | 41/0.9 | 48/1.2 | 43/1.2 | 51/1.2 | 167/5.6* | 76/1.9 | 97/2.7 | 59/1.4 | 46/1.0 | 40/1.5 |
| <i>because</i> | treatises | 21/1.5 | 4/0.6 | 3/0.3 | 10/0.8 | 20/2.7 | 6/0.4 | 13/2.1 | 10/1.2 | 10/0.9 | 7/1.0 |
| | laws | – | 10/0.6 | – | – | 15/1.7 | 8/1.3 | 23/1.8 | 17/1.8 | 1/0.1 | 15/3.0 |
| | sermons | 22/1.2 | 6/0.6 | 2/0.4 | 4/0.2 | 11/1.4 | 4/0.5 | 4/0.6 | 5/0.5 | 22/1.6 | 15/1.3 |
| | trials | 3/0.4 | 7/0.7 | 4/0.4 | 2/0.3 | 2/0.4 | 9/0.8 | 5/0.5 | 12/0.8 | 9/0.7 | 2/0.5 |
| | total | 46/1.0 | 27/0.7 | 9/0.2 | 16/0.4 | 48/1.6 | 27/0.7 | 45/1.2 | 44/1.0 | 42/0.9 | 39/1.4 |
| <i>non-finite</i> | treatises | 6/0.4 | 11/1.7 | – | 3/0.2 | – | 5/0.3 | 2/0.3 | 3/0.4 | 6/0.5 | 1/0.1 |
| | laws | – | 3/0.2 | 5/0.4 | 4/0.5 | 2/0.2 | 2/0.3 | 10/0.8 | 2/0.2 | 5/0.5 | 2/0.4 |
| | sermons | 4/0.2 | – | 2/0.4 | 11/0.7 | 4/0.5 | 2/0.2 | 5/0.7 | 2/0.2 | 5/0.4 | 1/0.1 |
| | trials | 4/0.5 | 4/0.4 | 9/0.9 | – | 2/0.4 | 4/0.4 | 11/1.1 | 4/0.3 | 4/0.3 | 6/1.5 |
| | total | 14/0.3 | 18/0.4 | 16/0.4 | 18/0.4 | 8/0.3 | 13/0.3 | 28/0.8 | 11/0.3 | 20/0.4 | 10/0.4 |

