

Shall and *shan't* in contemporary English – a case of functional condensation*

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1. Introduction

This article deals with the gradual deconstruction and eventual loss of morphosyntactic constructions from a Construction Grammar point of view. The exemplary case study is the development of *shall* and its related forms *shall not* and *shan't*. This article offers new ideas insofar as it particularly focuses on the special role of the latter two forms, which have often been neglected in previous studies. Moreover, while the phenomenon of erosion and loss is not new in historical linguistics and language change theory, the present article tries to evaluate the advantages of couching it in a Construction Grammar framework. On the basis of empirical data it will be shown that *shall* and its corresponding forms are no longer used productively¹ in contemporary English. It will be suggested that in the case of such deconstruction and eventual loss, constructions are often not simply eliminated and dropped from the constructional inventory; rather, they are gradually reduced in their paradigmatic forms and functions. This process can be characterized as the functional condensation of a construction. In the case of *shall*, *shall not* and *shan't* this process also interacts in a complex way with extralinguistic factors such as folk linguistic ideas, stylistic stigmatization and prescriptivism.

2. *Will* and *shall*: Prescriptive and descriptive perspectives

In the following, we will first look at some prescriptive approaches, both past and present, to the “correct” use of *shall* and *will* and their corresponding negative forms *will not*, *won't* and *shall not*, *shan't*.² After that, we will turn to actual language use, and describe, on the basis of empirical data culled from major corpora of contemporary British and American English, the actual distribution and frequency of these elements.

2.1. The prescriptive perspective

"The 'correct' use of *shall* and *will* has long confused English speakers. Codified by eighteenth-century prescriptivists, rules for the use of these auxiliaries – rightly or wrongly – have continued to appear in modern handbooks and grammars of the English language" (Arnovick 1997: 135). In contemporary English both *will* and *shall* can be used for the expression of futurity. Huddleston and Pullum (2002: 195) point out that "there is a well-known prescriptive rule that treats *shall* and *will* as complementary" and that, according to this rule, *shall* is used for futurity in the first person, whereas the second and third person take *will*. Some advocates of this rule (in more or less strong forms) include *The Oxford Dictionary and Usage Guide to the English Language* (1995), Murphy's *English Grammar in Use* (1994: 44), Alexander's *Longman English Grammar Practice for Intermediate Students* (1990: 134), the notorious Fowler's *Modern English Usage* (1983), s.v. *shall*, and the recent *Cambridge Grammar of English* (2006: 649, 880). Statements range from clear and simple rules to semi-descriptive rules couched in variationist pep-talk: "When we are referring to the future, we use *will* with all persons ... but in British English, we *often* use *shall* with *I/we* Negative short forms are: 'I'll not, won't (= will not) or shan't (= shall not) In American English, *shall* and *shan't* with future reference are rare" (Alexander 1990: 134, emphasis added).³ The history of this prescriptive rule, which dates back at least to the sixteenth century, has been the subject of many publications (e.g. Poutsma 1924: 222; Joos 1968: 161; Facchinetti 2000; Fries 1925; Tiekens-Boon van Ostade 1985; Sundby, Bjørge and Haugland 1991: 190–191, 392; Arnovick 1997), so there is no need to rehearse this in greater detail at this point. As with most other modals, *shall* and *will* also have free (i.e. full) and contracted negative forms: *will* – *will not* – *won't* and *shall* – *shall not* – *shan't*.

Eventually, this means that, from a prescriptive point of view, the use of *shall* / *shall not* / *shan't* and *will* / *will not* / *won't* is actually quite clear and can even be outlined in two simple matrices (tables 1 and 2).

Table 1. The morphological paradigm of WILL/SHALL

	Positive		Negative full form		Negative contracted/inflected form	
	WILL	SHALL	Will not	Shall not	Won't	Shan't

Table 2. WILL/SHALL differentiated by function (in declarative clauses)

	1st person		2nd and 3rd person	
	WILL	SHALL	Volition Prediction	Prediction Command

The "correct" use, according to these rules, is illustrated in examples (1)–(12) below.

- (1) *I will give you two thousands dollars worth of silver pesos.* (FROWN) [1st person, volition, *will*⁴]
- (2) *I hope I shall see you again quite soon.* (FLOB) [1st person, prediction, *shall*]
- (3) *You have [my] word – nothing will go wrong* (FROWN) [3rd person, prediction, *will*]
- (4) *Microsoft shall pay Inktoni for all Inktoni's services hereunder relating to the development and delivery of the Derivative Technology as follows:* (<http://cobrands.contracts.findlaw.com/agreements/inktoni/microsoftsoftwaredev.html>) [3rd person, command, *shall*]
- (5) "We will not say that!" Cameron's voice shouted back. (BNC, *King Cameron*. Craig, David. Manchester: Carcanet Press, 1991, pp. 15–113.) [1st person, volition, *will not*]
- (6) *I won't excuse or explain my conduct.* (BNC, *Authors*. Miller, Karl. Oxford: OUP, 1989, pp. 60–163) [1st person, volition, *won't*]
- (7) "I promise," he told them, "that I shall not fail your trust and that I shall lead the country to free elections." (BNC, *Guardian*, elect. edn. of 1989. Foreign material) [1st person, prediction, *shall not*]
- (8) *We shan't be having Fru Blicher's buffet until well after nine.* (BNC, *Tomorrow*. Taylor, Elizabeth Russell. London: Peter Owen Pubs, 1991, pp. 52–137) [1st person, prediction, *shan't*]
- (9) 'As I said earlier this year, there will not be enough of any one crop to give self-sufficiency, [but the contribution this small plot has made to the good budget has ten times repaid the outlay on seeds and materials.]' (BNC, *Gardeners' World*. London: Redwood Pub., 1991) [3rd person, prediction, *will not*]
- (10) *It probably won't get us very far, but you never know, one of them might come up with something.* (BNC, *Part of the furniture*. Falk, Michael. London: Bellew Pub. Ltd, 1991, pp. 1–146) [3rd person, prediction, *won't*]

- (11) *Moustaches shall not extend below the vermilion border of the upper lip or the corners of the mouth and may not extend to the side more than one-quarter inch beyond the corners of the mouth ...* (BNC, *An inside job: policing and police culture in Britain*. Young, Malcolm. Oxford: OUP, 1991, pp. 2–106) [3rd person, command, shall not]
- (12) *But he shan't stay! Make no mistake about it, he shan't stay!* (BNC, *Ruth Appleby*. Rhodes, Elvi. London: Corgi Books, 1992, pp. 109–226) [3rd person, command, shan't]

As can be seen in the examples, *shall* indeed signifies a wide range of meanings including prediction and determination/intention on the part of the speaker, mainly with first-person subjects, and permission or prohibition for the hearer (not) to do something, mainly with second- and third-person subjects. Note also that *shall* can express the speaker's wish to certify that something will be the case (e.g. "You shall receive..."). *Will*, on the other hand, can signal volition on the part of the speaker with first-person subjects, and fairly neutral prediction with all other subjects. (For a comprehensive discussion, see, e.g., Huddleston and Pullum 2002: 188–196.)

2.2. The descriptive perspective

In this section we will now turn to actual language use regarding *will*, *shall* and their corresponding forms. Apparently, modern usage no longer follows the rules and paradigms outlined in section 2.1, and the examples in (1) to (12) are rather the exception than the rule. Examples like (13) where *will* together with a first-person subject can only be interpreted as simple prediction ("I will have to") are in fact the norm.

- (13) *I will have office hours next week. unfortunately as of this week i will have to leave a little early, next week probably, by twenty to four.* (MICASE SEM495SU111)

In terms of sheer frequency, *will*, for example, is in general much more common, as table 3 shows.⁵ Here we see the number of occurrences of *shall* and *will* in the British National Corpus (BNC⁶) with pronominal subjects (irrespective of their interpretation as markers of volition or prediction⁷).

Table 3. *Will* and *shall* with pronominal subjects (in declarative clauses) in the BNC, per million words

	I	We	Other	Total
WILL	67.35	79.97	454.02	601.34
SHALL	54.90	50.30	8.87	114.07

As can be seen in table 3, *we will* is the most common combination in the British National Corpus (ca. 80 occurrences per million words), followed by *I will* (ca. 67 occurrences per million words). *Shall* is clearly lagging behind with only 50 (*we shall*) and 55 (*I shall*) occurrences per million words. With all other persons, the result is even clearer: ca. 455 occurrences of *will* clearly outweigh *shall* with only ca. 9 occurrences per million words. This leads to a distribution of about 600 occurrences of *will* versus 114 occurrences of *shall* per million words of running text in total. Also note that with first-person singular pronoun subjects, the difference between *will* and *shall* is actually smallest, with only 67 versus 55 occurrences per million words, respectively. In American English we find yet another situation. Here, according to most grammars, *shall* is used only rarely, if ever, for futurity (cf. Huddleston and Pullum 2002: 195; Carter and McCarthy 2006: 880) and almost exclusively carries permissive and prohibitive meaning. This can be seen in the frequencies of *will* and *shall* with pronominal subjects in the Michigan Corpus of Academic Spoken English (MICASE⁸) in table 4.

Table 4. *Will* and *shall* with pronominal subjects (in declarative clauses) in MICASE, per million words

	I	We	Other	Total
WILL	133.63	88.19	297.56	519.38
SHALL	2.77	2.77	0.54	6.08

In table 4 we can see that *will* outweighs *shall* almost 30 times in the first person plural, almost fifty times in the first person singular and more than 500 times in all other subject types. In fact, there is only one occurrence of *shall* with a pronominal subject that is not in the first person, a quotation from the Bible (Gen 3:16) during a lecture, which is given in example (14).⁹

- (14) ...um, in in th- Genesis in the Adam and Eve story when God punishes or curses Eve and says *um* you shall desire your husband and he will *um*, be your master. (MICASE, LES605SU080, Women in the Bible Lecture, Speaker 6)

In total, we find ca. 520 occurrences of *will* versus only 6 of *shall* per million words of running text in MICASE. None of the six clearly signals futurity. This is of course partly due to the nature of the corpus. Here we are dealing with academic spoken English only, whereas the BNC offers a much more representative sample of registers and genres. Nevertheless, even in academic spoken US English a much higher frequency of *shall* could be expected if *shall* and *will* were still on par. In fact, the figures given in tables 3 and 4 above clearly show that *shall* is generally less frequent than *will* and practically non-existent in American English academic discourse. A better comparison between British and American English can be made on the basis of FROWN and FLOB.¹⁰ These offer comparable text type differentiation. The results are presented in tables 5 and 6.

Table 5. *Will* and *shall* with pronominal subjects (in declarative clauses) in FLOB, per million words

	I	We	Other	Total
WILL	58	64	425	547
SHALL	65	61	5	131

Table 6. *Will* and *shall* with pronominal subjects (in declarative clauses) in FROWN, per million words

	I	We	Other	Total
WILL	77	73	231	381
SHALL	27	28	6	61

Tables 5 and 6, derived from comparable corpora, essentially confirm what has been said before. In both varieties, *shall* and *will* are not on a par. In terms of sheer frequency, *will* is about five times more common than *shall*. The clearest differences, however, appear in the context of first-person subjects. This is also where the most surprising results can be found. In British English (FLOB), *shall* is still used frequently here, in fact even more often than *will*. In American English (FROWN), *will* is about three times more common in this context. How can this be explained? It can be argued that this difference is partly due to the fact that FLOB is comparatively small compared to the BNC, and that it only contains writ-

ten genres, which, of course, has some bearing on the forms that are used. If *shall* is actually associated with formal, written genres then these results are to be expected. FLOB only contains written genres and thus shows a higher proportion of *shall* than the BNC, which also contains spoken, informal genres, which have a higher proportion of *will*. This is also confirmed by the general distribution of the forms, which is different for the two corpora. *Shall* is generally more common in FLOB than in the BNC. The bottom line thus remains. There are clear, discernible differences between BrE and AmE regarding the use of *will* and *shall*. BrE has a much higher proportion of the latter with first-person subjects, especially in the singular.

2.2.1. A historical excursus

The development and distribution of *will* and *shall* was also the topic of Fries's (1925) investigation. Here it was shown on the basis of data from American and English plays that the proportion of *will* and *shall* with first-person subjects remained almost stable until the early twentieth century (at a level of ca. 8:2, see figure 1), while there was a clear split with a dramatic increase of *will* with second-person subjects beginning in the middle of the eighteenth century (see figure 2), and with third-person subjects beginning in the middle of the nineteenth century (see figure 3).

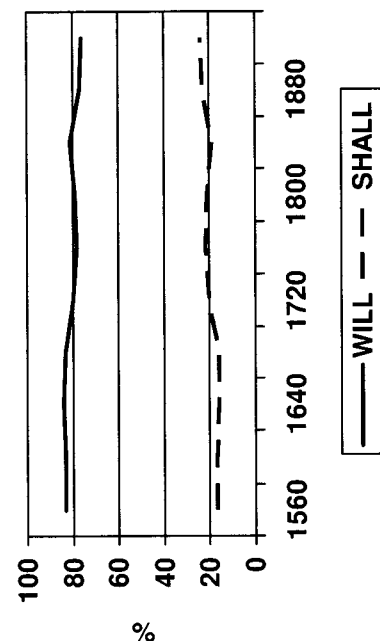


Figure 1. *Shall* and *will* (in %) in English and American plays (1560–c.1915), first-person subjects (Fries 1925: 995)¹¹

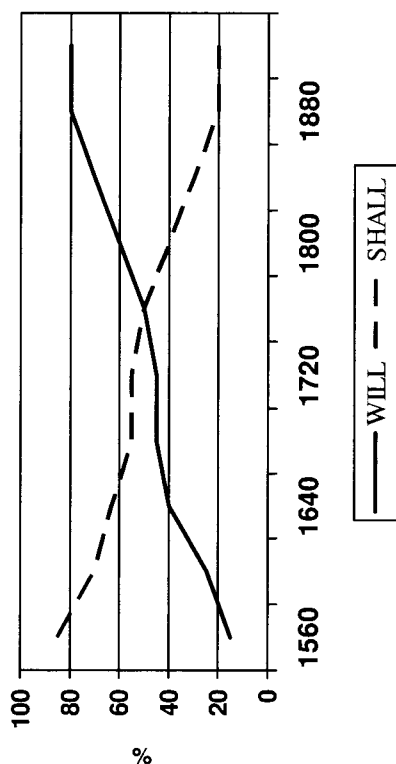


Figure 2. *Shall* and *will* (in %) in English and American plays (1560–c.1915), second-person subjects (Fries 1925: 996)

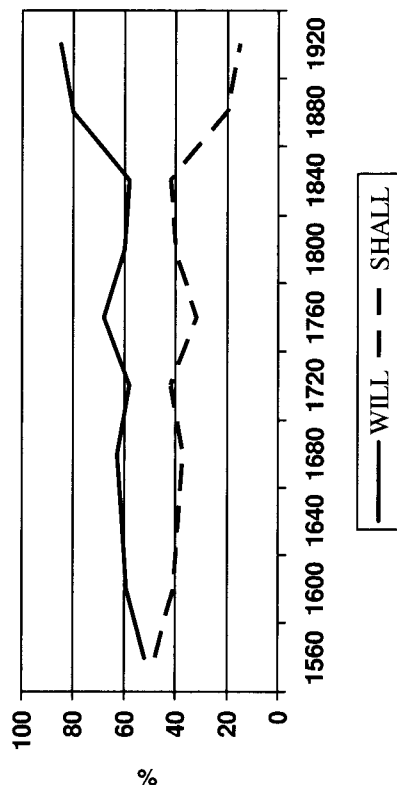


Figure 3. *Shall* and *will* (in %) in English and American plays (1560–c.1915), third-person subjects (Fries 1925: 997)

How do Fries's findings relate to the present-day situation as it was described above? On the basis of the data presented in figures 1–3 it can be concluded that the present-day situation is actually the third step in a multiple level process that seems to have begun with second-person subjects. Here we see the earliest differentiation and the beginning erosion of *shall*. As a second step, we see the reduction of *shall* with third-person subjects, about one hundred years later. According to Fries, first-person subjects retained a *shall/will* ratio of about 1:4 until about 1915. This can, of

course, be explained by the fact that with first-person subjects *shall* is very often used in interrogative contexts: *shall I/we?* Compensation strategies for this function – apart from *should* – seem to be particularly complicated (see section 3.4. below). Interestingly, the data presented in tables 3 and 4 above show different results for contemporary English. The BNC has a ratio with first-person subjects of about 5:7, the MICASE of about 1:37. In other words: in contemporary mixed genres we find a higher frequency of *shall* than in early twentieth-century drama; in contemporary academic spoken discourse we find a much lower proportion of *shall*. These differences could certainly be due to genre or register factors. Also note that tables 3 and 4 exclusively show occurrences in main clauses with pronoun subjects. So the truth probably lies somewhere in between. In contemporary informal spoken American English we can expect a very low frequency of future *shall* and very few occurrences of *shall* with deontic (i.e. permissive/prohibitive) readings. This is, of course, due to register factors. On the other hand, a mixed register/genre corpus like the BNC also brings with it a frequency of deontic *shall*s that is perhaps higher than the average in a specific genre like drama.

A more recent and more comprehensive study than Fries's is Nesselhauf (2007). She investigates *shall* and *will* and their related forms in a nineteenth-century subcorpus of ARCHER and in a compilation of literary texts (WebFict) from the same period. In both ARCHER and WebFict she finds a modest decrease in *shall* (from about 25% to 20%) at the expense of *will*. At the same time, there is also a remarkable increase in *shall* with first-person singular pronoun subjects in declarative clauses (from 31% to 45%), and a decrease in all other persons, except for first-person plural subjects, which remain more or less stable. Quite interestingly, the increase in *shall* does not happen at the expense of *will* – which remains more or less stable at 33% – but at that of *'il*, which drops in frequency in this context from 36% to 20%. Roughly the same results can be seen in WebFict, although here we see a drop in frequency of *will* with first person singular subjects, and a more moderate increase in both *shall* (from 30% to 35%) and *'il* (from 27% to 32%). These findings support the results of the present study in so far, as we see the sharpest decrease in second-person subjects, followed by third-person subjects. First-person subjects tend to retain *shall* for the longest time, and can even show an increase in the nineteenth century. In how far the latter is due to the nature of the corpora investigated and/or influences from prescriptivism remains to be seen.

2.2.2. Negative forms

One further complicating factor which has often been overlooked is that, being modal auxiliaries in terms of form, *will* and *shall* can be realized in full and reduced negative form: *will not*, *shall not*, *won't* and *shan't*. These, interestingly, again show quite different distributions. While *will not* and *won't* are common, *shall not* and in particular *shan't* are practically non-existent in most functional varieties of both contemporary American and British English. MICASE, for instance, contains 45 occurrences of *will not* per one million words and only 2 of *shall not* versus 196 *won't* and not a single *shan't*. In the BNC we find 108 *will not* per one million words of running text, 12 *shall not*, 154 *won't* and 12 *shan't*. The spoken section of the BNC leads to an interesting shift in proportions: here we find 49 occurrences of *will not* per one million words of running text, only 2 of *shall not*, 553 of *won't* and 14 *shan't*. By way of comparison, FROWN and FLOB give 124 *won't* per one million words, 208 *will not*, 2 *shan't* and 8 *shall not*. These results are summarized in table 7 below.

Table 7. Occurrences of *will not*, *shall not*, *won't*, *shan't* in three major corpora of contemporary English (per million words of running text)

	MICASE	BNC total	BNC spoken	FROWN & FLOB
<i>Will not</i>	45	108	49	208
<i>Shall not</i>	2	12	2	8
<i>Won't</i>	196	154	553	124
<i>Shan't</i>	---	12	14	2

The distribution of the different forms is quite illuminating, but hardly surprising. *Won't* is the preferred form in the spoken corpora, *will not* in the written ones. *Shall not* does exist, but it occurs mostly in the written section and in very special contexts. In MICASE, for example, one *shall not* comes from a quotation of a written text, and two from legal texts that are read out. In the spoken BNC, however, the contexts are more diverse and range from transcripts of legal texts, historical texts and quotations, to religious and literary texts. However, it practically does not occur in informal spoken discourse, even in British English. *Shan't* is again different. It is non-existent in academic spoken US English as represented in MICASE, and it is very rare in FROWN and FLOB. We find some occurrences in the BNC, with a strong bias towards the spoken section, where

fourteen occurrences in one million words of running text can be found. These are distributed across virtually all spoken genres, from political debate through classroom discourse and broadcast to informal conversation. Still, this should not distract us from the fact that even here in spoken English, *won't* outnumbered *shan't* by almost 40 to 1. This might lead to the idea that *shan't* is actually an artefact of modern prescriptive grammars and that it was never actually used as a regular grammatical form. This, however, is not the case. The UVA (University of Virginia Text Archives) with English literary texts since 1500 contain 1,389 *won't* and a surprising 294 *shan't*.¹² Table 8 lists a few examples.

Table 8. *Shan't* in literary works of the nineteenth and early twentieth century (based on the UVA database)

Author, Title (Year)	<i>Shan't</i>
Anthony Trollope, <i>Can you Forgive her?</i> (1845)	34
D. H. Lawrence, <i>Sons and Lovers</i> (1913)	19
Charles Dickens, <i>Pickwick Papers</i> (1836)	11
Jane Austen, <i>Sense and Sensibility</i> (1811)	3

The *Oxford English Dictionary* (OED) cites example (15), from 1664, as the first written occurrence of *shan't*, next to Dryden's line from 1667, given in (16).

- (15) *My life and I sha'nt part* (1664, S. Crossman in Palmer Bk. Praise 1865, 167, OED s.v. *shall*).
- (16) *By this leg but you shan't not* (1667, Dryden *Secret Love*, I, ii, OED, s.v. *shall*)

Similarly, Mindt (1992: 232) in his study of mid-twentieth century English and American drama and conversation mentions an unusually high number of occurrences of *shall* and *shan't*. Apparently, *shall* and particularly *shan't* were used productively at one point, albeit mostly in literary discourse. Even in American English literature, a significant number of *shants* can be found. Harriet Beecher Stowe's *Uncle Tom's Cabin* (1852) contains a surprising 11 instances. Nesselhauf's recent study (2007) also convincingly shows that both *shall not* and *shan't* are still part of nineteenth-century English. She finds 43 occurrences of *will not*, 20 of *won't*, but only 16 of *shall not* and 5 of *shan't* in her 1800–1849 part of ARCHER, in contrast to 28 *will not*, 29 *won't*, 12 *shall not* and 7 *shan't* in the 1850–1899 part. So there is even a slight increase here. This may be

statistically insignificant, but it shows that *shan't* certainly was part of nineteenth-century English. In her nineteenth-century WebFict corpus Nesselhauf comes to quite surprising results. Both *will not* and *shall not* show a significant decrease in frequency, whereas both *won't* and *shan't* show a significant increase, with the latter rising from 3 occurrences in 1800–1849 to 16 in 1850–1899. Obviously, Nesselhauf's results are in line with those presented here. *Shall* and *shan't* clearly seem to be part of literary style and discourse of the nineteenth and probably also the early twentieth century. The fact that *won't* also gained in frequency hints at the possibility that literary writers at the time deliberately tried to include seemingly "natural" spoken language and "informal" style in their works. However, whether their representation is actually accurate, remains an open question.

So, how can these findings be interpreted? Apparently, neither *shall* nor *shan't* nor its full counterpart *shall not* have completely died out. Both *shall* and *shall not* can be found in specific genres such as legal English, the language of religion and philosophy, and most of all literature. *Shall not* rarely, if ever, occurs in spoken discourse. A non-representative sample study of the BNC shows that *shall* (in a simple search including *shall not*) occurs with the following proportions per million words:

Written Miscellaneous: average 195 per million words

- Admin: 1,232
- Advert: 82
- Biography: 132
- Commerce: 341
- Email: 42
- Essay (school): 184
- Essay (university): 53
- Hansard: 1,088
- Institutional: 155
- Instructional: 18
- Personal letter: 705
- Professional letter: 196

Apparently, *shall* is most common in administrative, legal genres, in commerce and, surprisingly, in personal letters. While the latter remains to be explained, the other functions are confirmed by the findings in Coates's study (1983: 186) which shows that 77 occurrences (34%) of *shall* in the (written) Lancaster Corpus (N=225) are used with second- and third-person subjects in written "quasi legal contexts", signalling obligation. In the spo-

ken Survey Corpus, only 4 occurrences (2%) were used in the same function. The fact that in these functions *shall not* (and also *will not*) occur proportionally more frequently is due to the fact that written, formal language still does not allow contracted forms, which are generally considered more informal, spoken forms. However, this leads to an interesting dilemma. *Shall* is generally seen as a very formal, written form, as Joos has already pointed out:

These nine are all the first-person uses of *shall* in *Trial*, and we have seen that this is even less of a "future" than *will*. This point is likely to be hard to grasp by people who, like Americans generally, have been taught to think that *shall* is a particularly solemn, impressive, and therefore presumably *forceful* word: they are apt to associate it with the proverbial "an Englishman's word is his bond" or with its archaic use in the drafting of documents and ordinances. (Joos 1968: 161)

Thus, *shall* is associated with written, formal genres, where only the full form *shall not* is possible. This in turn means that the contracted form, which is associated – qua being a contracted form – with informal, spoken language, has no place in the linguistic system. This is in fact reflected in the data presented above: *shan't* is practically nowhere to be found, except maybe for certain literary genres and styles.

2.3. Interrogatives

Another particularly interesting problem has not been discussed yet. As modals, *will* and *shall* and all of their forms can also be used in interrogative inversion, as in (17)–(21):

- (17) *Mm. A nig-nog! Um Will I get in the er if I sell them back?*
(BNC)
- (18) *I'll keep you to that. Will it just be the two of us or will your harem be coming along?* (FLOB)
- (19) *"Shall I collect the key?" she offered.* (FLOB)
- (20) *Shall I still be the Me I've become and know better...?* (FLOB)
- (21) *But where shall the master himself go to sleep?* (BNC)

Shall in interrogatives usually asks for the addressee's volition or permission, as in (19) and (20). Example (21) shows that in some cases this

reading might not be very strong, though, since in (21) the question could ask for general future events. *Will* in interrogatives can ask for general future events and state of affairs, as in (17) and (18). With first-person subjects, however, *will* can also be associated with the speaker's volition, resulting in somewhat awkward questions concerning the speaker's own thoughts and wishes. *Will I...?* could then be paraphrased as *Do I wish to...?* The latter is of course highly unusual in daily discourse, and would only be possible in contexts with speakers who do not possess full mental capabilities and free will. Consequently, in English Standard English, *will* with first-person subjects does not allow agentive verbs, since these would underline the (lack of) speaker's will and intention in this context (cf. Coates 1983: 188). Note, however, that *will*-questions with first-person subjects are not completely ruled out, but overall extremely rare; (17) shows an example with a non-agentive verb, which essentially asks for general predictions. In the BNC we only find 9.61 occurrences per million words (41% of which are plural subjects), FROWN only contains one instance (no plural), BROWN has six (66% of which are plural), FLOB shows four (75% plural), and LOB only three (66% plural). MICASE has 5.56 questions with *will* in the first person per million words (70% of which have plural subjects). The unusually high number of plural subjects might be due to the fact that with plural subjects the volitional reading is even further backgrounded and the question rather aims at some general future reading. On the other hand, certain complex phrases seem to be rather fixed, phrasal residues of *shall*. In MICASE, five out of 35 occurrences of *shall* are in the context of "shall we say (...)", another two in the context of "shall we say (?)". Note that the former apparently functions more like a discourse marker than an actual interrogative while the latter still has some interrogative flavour. Three occurrences are in "as we shall see", and three occur in the context of "shall we move on/begin". This means that at least fourteen out of 35, i.e. 40% of the occurrences, are in rather fixed contexts. Carter and McCarthy (2006: 880) note in a similar vein: "AmE does allow *shall* in first-person interrogatives, especially those functioning as suggestions and in **semi-fixed expressions** such as *How shall I say it?*" (my emphasis).

This situation has some important consequences for the linguistic system. If *shall* is dispreferred because of its association with formal registers and its lack of negative (contracted) forms, a compensation strategy needs to be developed. Some S-less varieties, like American English, turn to similar modals like *should* (which is also preferred because of its greater modal remoteness), or more complex constructions like *do you want me to V*.

Some other S-less varieties, like Scots for example, actually allow for *will* in first-person interrogatives, even with agentive verbs, as in (22).

(22) SADIE: *Right. Will I fix her somethin'?*

MAGGIE: *Sadie's asking if you'd like something to eat, Beth?*

SADIE: *Will I fix her somethin'?*

(Janet Paisley, *Refuge* (1997), *Scottish Corpus of Text and Speech*, SCOTS, www.scottishcorpus.ac.uk)

Summing up so far, a brief survey of the Corpus of London Teenage Speech (COLT) shows the distribution of declarative, negative, and interrogative constructions with *will* and *shall* in contemporary English (table 9).

Table 9. *SHALL/WILL* in COLT (Corpus of London Teenage Speech)

D(eclarative) Q(uestion) Neg(ation)	Person (P): total (Percentage of plural)	Examples
D: <i>will</i>	1st P: 89 (17% plural) 2nd, 3rd P: 412	<i>I will look like I'm scraping my knee...</i> <i>My dad will fuck with my head</i>
D: <i>shall</i>	1st P: 15 (20% plural) 2nd, 3rd P: 0	<i>I shall be getting the,</i> <i>I shall be getting the erm stolen goods, by the end of next week</i>
Q: 1st person <i>Will</i> <i>Shall</i>	8 (13) – (75% plural) 124 (48% plural)	<i>What will we do in the test?</i> <i>Mum! Shall I hit him?</i> <i>I won't be able to have my pizza.</i> <i>[belch] cauliflower won't take long.</i>
Neg: <i>won't</i>	1st P: 120 (13% plural) 2nd, 3rd P: 209	<i>I will not express my true feelings for you.</i> <i>If you work hard you will not be in that situation.</i>
Neg: <i>will not</i>	1st P: 3 2nd, 3rd P: 2	<i>I shan't put the next one in the test I don't think</i>
Neg: <i>shan't</i>	1st P: 1 2nd, 3rd P: 0	
Neg: <i>shall not</i>	1st P: 0, 2nd, 3rd P: 0	

Table 9 shows that in contemporary spoken English (especially in English English), *shall* still exists, but that it is largely restricted to first-person interrogatives. In simple declarative clauses, *shall* is still possible with first-person subjects, in a proportion roughly similar to that found by Fries (1925). In negative constructions, the full form *shall not* is practically nonexistent in informal spoken language (just as *will not*, which shows that this is due to genre conventions). Interestingly, however, the contracted (and technically informal) form *shan't* is also not possible in informal, teenage language, and *won't* is the clearly preferred form here.

3. Functional condensation and the loss of *shall*

In this section we will look at one possible route and explanation for the gradual loss of *shall* and *shan't* over time, in particular from a construction grammar point of view. It will be argued that the loss of *shall* in some of its functions and forms is a case of *functional condensation* which reduces the applicability of constructions in certain forms and functions, and thus gradually removes them from the constructional inventory of the language.

3.1. Construction Grammar: A very brief sketch

(Vanilla) Construction Grammar (henceforth CG) assumes that language is essentially a structured inventory of constructions, i.e. conventionalized form-meaning pairings at all levels of linguistic structure. These form-meaning pairings, or constructions, may or may not be non-compositional or sufficiently frequent.¹³ Constructions encapsulate both language-internal (semantic) and language-external (pragmatic, discourse-contextual) information. A schematic representation of constructions is given in figure 4.

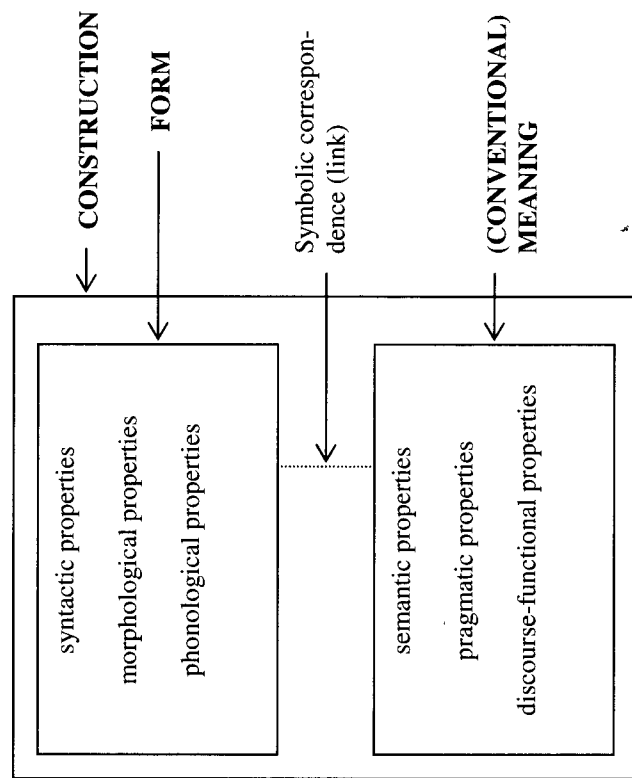


Figure 4. The symbolic structure of constructions (Croft and Cruse 2004: 258)

Constructions are to be found on different levels of granularity, both in terms of their complexity and abstractness. This means that we find at least a two-by-two matrix. There are very specific and simple constructions such as single lexical words, specific and complex constructions (e.g. complex idioms like *when push comes to shove*), abstract and simple constructions (e.g. word classes such as "noun") and abstract complex constructions such as the subject-predicate construction. At the same time, following Östman and Fried (2004), we also need to distinguish between constructions (abstract mental units, much like the traditional phoneme) and constructs (the concrete realization of constructions, comparable to allophones). Other current approaches distinguish between constructions and allostructions (Cappelle 2006, 2008) and micro-, meso- and macro-constructions (Traugott 2008; see also Trousdale this volume). "Macro-constructions" are defined as higher-level, more abstract functional constructions, "meso-constructions", encountered on the next level, are seen as groupings of similarly-behaving constructions, and finally, we find single, basic constructions ("micro-constructions") in which all elements are more or less fixed. This means that the traditional idiom just mentioned would be clas-

sified as a micro-construction, the subject-predicate construction, on the other hand, as a macro-construction. Meso-constructions are groups of constructions that behave in similar ways and thus, for example, contrast with other groups of similarly behaving constructions. As an example, Traugott (2008) mentions the (a) *kind of* set versus the *a bit (of)* versus the *a shred (of)* set of similar looking but notably different groups of (meso)-constructions. Traugott points out that all three levels are to be interpreted as abstractions, as types.

This raises the question what kind of construction(s) we have to deal with in the case of *shall*, *shall not*, *shan't*, *will*, *will not*, *won't* and how the granularity models just mentioned play a role in the loss of certain forms. It could certainly be argued, following Hilpert (2007), that *shall* + V, i.e. the modal verb followed by a bare infinitive, constitutes one particular semi-schematic construction, and so does *will* + V. However, the multitude of meanings associated with *shall* + V and *will* + V are difficult to capture in this case. The present article refers instead to another feature of CG, namely the explicit inclusion of co-textual and contextual information in constructions: "by construction I intend a conventional association of any or all of the following kinds of grammatical information: syntactic, semantic – including 'pragmatic', lexical and phonological" (Kay 2002: 1). Goldberg is even more explicit on this point: "Another notion rejected by Construction Grammar is that of a strict division between semantics and pragmatics. Information about focused constituents, topicality, and register is presented in constructions alongside semantic information" (Goldberg 1995: 7). Since English does not have a strictly grammaticalized element for futurity like Latin {– b –} or Turkish {– eceg –}, for example, expressions of futurity are heavily dependent on co- and context (see Bergs 2008a, b). Co-textual factors include intralinguistic information (e.g. syntagmatic alignment), contextual factors include extralinguistic information (e.g. style, register, encyclopaedic world-knowledge). It is, for example, not just *shall* + V which conveys the meaning 'futurity', it is *shall* + V in a specific morphosyntactic co-text or even, in some cases, extralinguistic context. Whilst with third-person subjects, for example, it has a deontic function in the sense of *have to*. So the actual constructions this article is concerned with are not just simple semi-abstract patterns with empty slots, but often much more complex configurations of various elements whose specific meaning in many cases is quite holistic. *Shall* with first-person subjects usually signals futurity, but with third-person subjects it conveys deontic aspects – where exactly should this meaning lie? With the verb or with the pronoun? And why is this quite different with *will*? The answer

can only be that both readings are holistic functions on individual constructions. While this is not the place to enter into a fully fledged discussion of the issue, it should at least be mentioned here that from this perspective, a number of constructions apparently share the same job, e.g. the expression of futurity (albeit in different nuances, perhaps). It could be argued that these constructions form a constructional family, united by similarity in function, but not necessarily in form (as in Michaelis 1998, for example). In so far, this approach somehow resembles Traugott's model with micro-constructions (here: the individual constructions with their specific configurations) and meso-constructions (here: groups, networks, and families of constructions united by form, function, or both). This might lead to two different networks of constructions: one based on meaning and one based on form. Both networks are, of course, susceptible to change. In CG, language is treated as the structured inventory of constructions. If we assume that the constructional inventory of a given language is essentially open, but finite (not unlike the lexicon), it follows that new constructions can be added or deleted from this inventory (again, not unlike the lexicon). On the questions of how new constructions may be added and thus enter the language, see the articles in Bergs and Diewald (2008a, b). In this article, we deal with how (micro-)constructions are deleted from the inventory, and how this loss of micro-constructions could eventually lead to the loss, or at least the re-organization of constructions on the meso-level. Note that the question of erosion and loss of linguistic forms is not new in historical linguistics (see below), but that it has never been couched in Construction Grammar terms before. This article is concerned with the details and consequences of modelling these processes in a Construction Grammar framework.

3.2. Functional elaboration and condensation

Functional elaboration is a term coined by Einar Haugen in his 1972 paper on standardization. Haugen claimed that standardization processes typically consist of four individual steps: selection, elaboration, codification and acceptance. In order for a standard to develop, this new standard variety first needs to be selected from a number of possible alternatives. The selected variety needs to be functionally elaborated, i.e. it should be possible to use this variety in all language "functions" or domains: formal, informal, spoken, written, religion, law, music, sports, philosophy and academia, etc. A linguistic standard also needs to be codified, i.e. it needs

dictionaries, grammar books and pronunciation guides which define what is part of the standard and what is not. Finally, the new standard needs to be accepted by the speakers of the language. This article argues that there is also something like the reversal of functional elaboration. This process could be called functional condensation. Whereas in functional elaboration certain forms and structures are used in more and more contexts (domains, functions), functional condensation is the gradual reduction of possible contexts (domains, functions). In other words, a given form or structure first becomes marked in a given context in which it was unmarked before, and then eventually is no longer possible in that particular context. This means that the construction receives a more and more restrictive set of functional and grammatical constraints. The development of the English lexicon offers plenty of textbook examples: what we call a *dog* today used to be called a *hound* in the Old English period. At that time, the word *dog* meant a special type of dog, perhaps something like a boarhound or a mastiff. Today, the situation is reversed and *hound* is restricted in its use; it almost exclusively refers to foxhounds and harriers. The use of *hound* for dogs in general is deemed archaic or poetic by the *OED* (s.v. *hound*). Here we can see how the word *dog* underwent some kind of functional elaboration (i.e. expansion in its possible referents with concomitant use in a greater variety of contexts), while *hound* underwent exactly the opposite process, functional condensation, and is very limited in its applicability today.

Functional condensation is in a way very similar to functional elaboration, but there are also some important differences between the two concepts. Obviously, functional condensation, in contrast to Haugen's elaboration, is not involved in any straightforward way in standardization processes (though standardization, prescriptivism and linguistic stigmatization may play a role here, see below). Moreover, functional condensation also applies to grammatical items and structures. In such cases, it not only refers to the reduction of possible contexts in which the item or structure can be used, it can also mean that the associated grammatical forms are gradually limited and constrained. This can mean that the element in question gradually "fossilizes" and appears more and more often in a fixed form and in a fixed context, like the "how shall we say" construction mentioned above. When the two components of functional condensation move in tandem the end result of this process is very often – but not always – the marginalization and eventual deletion of the construction from the constructional inventory. Note that in historical linguistics, the phenomenon as such is not new. There are two alternative views on linguistic change. One states

that change proceeds quite simply as $A > B$ (read: "A turns into B"). This means that at $t1$ we find some item A , at $t2$ we find some item B for the same function. A disappears once B is introduced. Alternatively, change is seen as $A > A/B > B$ (read: "A is supplemented by B , finally A is lost"). This means that we have an intermediary stage (sometimes referred to as "layering") during which the old and the new forms co-exist. The new form can eventually win out over the old one. In many cases, however, old forms somehow survive in the linguistic system, either in their original form and function (e.g. *to go* still refers to physical movement from place A to place B despite the development of *gonna* as a grammatical marker of futurity), or as residues or exceptions (e.g. noun-adjective ordering, such as in *Lion Rampant* or *Secretary General*). Sometimes old forms end up as "linguistic junk" and are reused (in a process referred to as exaptation) for the different purposes (see Lass 1990; Hopper 1994). In some other cases, structures and rules actually disappear (e.g. the dual *wit* etc. in English). The present article does not deal with this basic principle of erosion and loss as such. Rather, it seeks to offer an account of how these fairly well-established phenomena could be described and accounted for in a construction grammar framework, where we do not operate with items and rules, as in mainstream generative syntax (for an early account of syntactic change in mainstream generativism, see, e.g., King 1969), but with constructions organized in a constructional inventory. In other words, we do not reorder rules, add them or delete them in Construction Grammar, nor do we simply add and delete items from the lexicon. Rather, we need to ask ourselves how exactly constructions move around in the inventory, how they are added and deleted from it, and how the inventory deals with these additions and losses, if at all. One mechanism that helps us to account for loss-related phenomena appears to be functional condensation. It will be suggested in the following that functional condensation leads to the marginalization (i.e. a lower degree of abstractness and generality, and possibly also lower token frequency), and thus eventually also to the loss of a construction in the constructional inventory.

3.3. The development of *shall*: a case of functional condensation?

The current use of *shall* and *will* and their respective forms heavily depends both on co- and contextual factors, which can all be included in the constructional information. Today, *shall* and its forms are mostly restricted to rather specific form-function pairings (not unlike formulaic language

and idioms; cf. Wray 2002) and genres. The latter include legal English, the language of religion and philosophy, and certain forms of literature. The construction can be marked specifically for these functions. *Shall* also occurs in some interrogative contexts, and in the discourse-marker-like form *shall we say*. The negative form with full *not* is essentially restricted to legal language and the language of religion, where it mostly expresses laws, rules and commands. The reduced form *shan't* is practically nonexistent. In CG, these facts can be described as the inclusion of contextual factors in the individual construction or as constraints on particular unifications with other constructions. Register, genre and style are also added as constructional information, i.e. constraints on the use for the construction. This means that we see the development of new constructions in some sense (or perhaps a functional shift in the construction), as the form is associated with new meaning. Moreover, the atomic, specific construction *shall*, and with it some of its more complex micro-constructions, also gradually cease to unify with other, more schematic constructions such as negatives and subject-predicate. This, of course, lowers its general frequency. Moreover, if it does unify with the negative construction, the fusion of forms does not seem to be possible in the same way as it is possible with *will*. How could that be captured? Again we can assume that the negative construction in English comes in at least two different forms, which can be treated as two related but technically independent constructions, one with a free negative form *not* and one with a fused form *n't*. The latter receives features such as *spoken*, *informal*, the former rather *written*, *formal*, *focal*. Note that these features do not necessarily mean that the constructions exclusively appear in these contexts. We do find *won't* in written and *will not* in spoken language. Nevertheless, they carry these features with them, so that *won't* in this case would be marked for *informal style* (and would therefore perhaps be changed by an editor at a publishing house), while *will not* is either very formal or expresses focus on the negation. Apparently, *shall* already carries the features *formal* and *written*. It thus cannot easily unify with the short negative construction since this is marked for *informal*.

The process which led to the current situation can be described as functional condensation on the functional and grammatical level as it was outlined above. Obviously, the range of genres and registers in which *shall* (and its forms) can be used was reduced. At the same time, within certain registers, *shall* is strongly preferred in certain syntactic configurations. In informal spoken language it almost exclusively occurs in interrogatives with a deontic reading. Moreover, *shall* also lost one of its forms, *shan't*.

completely; the full form *shall not* is reduced even further context-wise. The result is the marginalization and eventual loss of this construction. It may be speculated that a similar process can be expected in other rare or obsolete constructions, like the subjunctive.

What makes *shall* a particularly interesting case study is that apparently functional condensation in this case is in a feed-and-bleed relationship with the varietal stigmatization of *shall* and *shan't* on the basis of folklinguistic half-knowledge (for this concept, see Niedzielski and Preston 2000) and the confusion of forms and rules concerning deontic versus epistemic *shall/shan't* (cf. Joos 1968: 161, quoted above). Almost one hundred years ago, Poutsma (1924: 222) already pointed out that:

It may also be doubted that the "true-born Englishman", even when he constantly moves in educated circles, strictly observes the rules ... On the face of it, it seems incredible that he should be privileged, so to speak, with a sixth organ enabling him to tread unerringly in the maze of this bewildering problem [of *shall* and *will*; ATB] (Poutsma 1924: 222)

This means that speakers could never be sure what the "correct" form actually is. They seem to have opted for one quick and simple rule: when in doubt, *shall* is the formal, prestige form. Consequently, *shall* was the preferred form in writing, where *shan't* was not an option. So *shan't* was lost out of sight, which in turn advanced the special status of *shall* even further. Thus, linguistic stigmatization led to functional condensation, while functional condensation furthered linguistic stigmatization. Linguistically, functional condensation thus results in the reduction of both type and token frequency, but also in the retention of form(s) in certain stylistic functions and specific lexical constructions, i.e. it is one source of lexicalization and idiomatisation through phrasal fossilization as in the development of discourse-marker-like elements like *shall we say*. Berglund (2000) comes to a similar conclusion:

It is not only the frequency of *shall* that has decreased; it also seems that the use of the expression has changed. In the FLOB corpus in particular, the expression is primarily found in a few texts, and it is often used in quoted contexts. This could be interpreted as the expression having become more marked, or less general. It is also interesting to note that the expression occurs to a relatively high degree in clusters in FLOB, a further indication that the expression is not generally used but found primarily in specialized contexts or constructions (Berglund 2000: 51)

3.4. Compensation strategies

There is at least one more point that needs to be discussed with regard to the concept of functional condensation in general and the loss of *shall* in particular. When *shall* and its forms are stigmatized and finally lost, do speakers develop any compensation (or perhaps rather "avoidance") strategies that fulfil the same or at least some of the functions? Even without assuming that there are certain linguistic functions that always need to be fulfilled in any given language, it seems fairly safe to assume that asking for the addressee's volition, for example, is a fairly basic linguistic function, and that usually specific items (like *shall*) are used for that purpose. What happens now when *shall* is marked, fossilizes, or even disappears? In this concrete case, there is one very simple alternative: modal *should*. This also has the advantage of greater modal remoteness, which is of course very helpful for face-saving purposes. In MICASE, for example, we find 38.41 occurrences of *should I* per million words (and 39.49 of *should we*). In the BNC, there are only 11.42 and 6.66 occurrences per million words, respectively. In contrast to that, MICASE contains only two occurrences of *shall I* (per million words of running text), and 8.12 of *shall we*. The BNC has 13.51 of *shall I* and 14.29 of *shall we*. So the corpus of American English, which has few occurrences of interrogative *shall*, shows proportionally more interrogatives with *should*, while the corpus of British English, which still contains a rather high number of interrogatives with *shall*, contains a surprisingly small number of *should* interrogatives. This suggests that *should* is indeed one of the preferred compensation or avoidance strategies in S-less varieties like American English. Similarly, more complex constructions like *would you like me to V* or *do you want X* are also available. These might be less economical in the linguistic system, but essentially they do the same job. As regards deontic *shall* in declarative clauses, we can say that in legal text (where this structure is quite common) *shall* will probably be retained for the longest time. But even here we can identify alternatives such as *be to*. In declarative clauses expressing prediction, i.e. with first-person subjects, *will* has already taken over. A study of all these different strategies still needs to be carried out.

In sum, we can say that the loss of a construction through functional condensation – at least in the case of *shall* – does not severely endanger the constructional inventory and thus the language on the whole. Apparently, at least with the most central functions, there are always alternative constructions which are easily adapted into the vacant function. In fact, one could even speculate in how far this case of constructional deconstruction

is actually similar to the push or pull chain controversy in historical phonology. With the pull or push chain, scholars argue whether the Great Vowel Shift was triggered by the diphthongization of the close vowels (/i:/ to /ai/, /u:/ to /au/), which left a gap at the top of vowel space, which in turn "pulled the other long, stressed vowels up", or, alternatively, whether the raising of the open vowels (/a:/ to /æ:/, /ɔ:/ to /o:/) "pushed all other long, stressed vowels up" in the vowel space. Regarding the loss of *shall* one might ask whether it is the gap left by the loss of *shall* that is filled by alternative constructions such as *will* and *should*, or, perhaps, if these constructions pushed *shall* and *shan't* into the margins and finally out of the inventory?

4. Summary and conclusion

This article described and discussed the status of *will*, *will not*, *won't* and *shall*, *shall not*, *shan't* in contemporary and historical Englishes. It was shown that the distinction of *will-shall* originated in the late Middle English period (Arnovick 1990) and that the distinction was codified between c. 1600 and c. 1900. The loss of *shall* and its forms took place in several steps. Declarative *shall* with second- and third-person subjects was gradually lost (in favour of *will*) in many genres between c. 1600 and 1900 (see Fries 1925). Until about 1900 both *shall* and *will* show full paradigms and uses in declaratives, interrogatives and negation, and there is no clear evidence for any genre or register distinction until c. 1900. *Shall* as a marker of futurity was present, but infrequent in earlier American English. Negative contraction was productive in spoken language and literature, both in American and British English, as can be seen from its uses in literature from earlier periods. From 1900 onwards we find a gradual loss of *shall* forms. *Shall* in declarative clauses is restricted to first-person subjects (with a future interpretation) and second/third-person subjects in legalese (with a deontic reading). There seems to be a gradual loss of first-person future *shall* even in English English, while in American English this form in this particular function is no longer available today. In interrogatives, *shall* is retained with first-person subjects. *Will* is possible, but clearly preferred with plural subjects and non-agentive verbs. There seems to be a growing tendency to use alternative strategies such as *should* in this context, especially in American English, a more or less S-less variety. In negative constructions, *won't* is by far the most frequent item; *will not* and *shall*

not are register specific due to full negation, and thus also less frequent. *Shan't* has practically disappeared in all contexts and varieties.

It was suggested that expressions of futurity in English, in particular *will* and *shall*, can be treated as constructions in the technical sense, since their form and function are heavily dependent on co- and contextual factors, which are explicitly included in CG frameworks, but very difficult to capture in traditional grammatical models. In CG, language is seen as a structured (finite, open) inventory of constructions. This means that in language change, new constructions can be added to the inventory, that existing constructions can change their form and function, and that they can also be deleted, i.e. disappear from the language. It was argued that one mechanism in the latter case is functional condensation – the gradual reduction of forms and functions of a particular construction. This may lead to a reduction both in type and in token frequency, and may also be the starting point for phrasal fossilization, i.e. the emergence of more or less fixed expressions. However, it can also first lead to marginalization and finally the deletion of the construction from the inventory. The use of a Construction Grammar approach thus offers a number of interesting new perspectives and ideas, including the integration of syntax and pragmatics in the widest sense, and the modelling of sometimes even very fine granularity in the development of constructions – a feature that is usually not available in other grammatical frameworks. Future work will have to show the extent to which other constructions, such as the subjunctive, the mediopassive, or *be*-performs, have undergone similar developments. Also, it remains to be seen what factors can influence the process itself. When does a regular, frequent construction turn into a rare exception, when does it die out?

Notes

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1. The term “productively” here and in the following means that the forms are used frequently and/or in new contexts and morphosyntactic environments. Low productivity in this sense means that the item or construction in question

no longer forms an integral part of everyday grammar, but rather occupies a more marginal position in the linguistic system which is usually associated with low token frequency.

2. This paper does not deal with the reduced enclitic form *'ll* since this cannot be clearly categorized as belonging to either *will* or *shall* (pace Huddleston and Pullum 2002: 195). Moreover, the frequency of *'ll* does not seem to play any role in the distribution and relationship of the full forms *shall* and *will* and their negative counterparts.
3. Needless to say, rules like these only apply to contemporary “standard” varieties of English. Many other varieties, like Scots, for example, do not employ *shall/shan't* at all. We thus need to distinguish between S-full and S-less varieties. This paper is mainly concerned with S-full varieties, although occasional reference will be made to S-less varieties. Also, for the sake of clarity, we will restrict most of our discussion to simple declarative clauses.
4. Note that the interpretation of utterances such as these is usually not straightforward and unambiguous. In many cases, one could offer a different interpretation. The readings presented here only reflect the author's individual perspective on the utterance in context.
5. Carter and McCarthy (2006: 650), and Biber (1999: 486) also come to this conclusion.
6. The British National Corpus (BNC) contains 100 million words of British English, 90 million of which come from various written language genres, 10 million of which come from spoken language genres. The corpus can be searched online at www.view.byu.edu.
7. For methodological reasons, the present study just investigates combinations of personal pronouns and verbs. Needless to say, slightly different figures can be expected for a full range study. However, the general tendencies and patterns observed here also seem to hold on a larger scale.
8. The Michigan Corpus of Academic Spoken English (MICASE) contains 1,848,364 million words of 152 transcripts of spoken academic US English (see www.hti.umich.edu/m/micase/).
9. Note that there is a total of only 38 occurrences of *shall* in MICASE. Of these 38 occurrences, only four are unambiguously with non-pronominal subjects, two of which in turn occur in rather fixed legal phrases (“[x] under the law shall not be denied or abridged”). The two remaining ones are “the death of Cicero shall haunt the memory...” and “all children shall enjoy the same, social protection...”. One occurrence is in an interrogative context: “who shall our daughter marry?”, one in a relative clause “[x], who shall remain nameless”. This distribution underlines the previous claim that a more general picture can be derived from a study based on the context of personal pronoun subjects.
10. The Freiburg-Brown Corpus and Freiburg-LOB Corpus are exact modern replications of the early LOB and Brown corpora, and offer 1,000,000 words

of exactly defined written genres of American English (FROWN) and British English (FLOB) (see <http://khnt.hit.uib.no/icame/manuals/>).

11. Fries's (1925) data are not very precise; the figures presented here thus only represent approximations. The approach and its findings are critically discussed in Arnovick (1997).
12. The data from the UVA corpus cannot be properly quantified since there is no total number of words available for the whole corpus or individual texts. Still, the proportions mentioned here can be seen as symptomatic.
13. There is an ongoing debate about whether constructions need to have non-compositional meaning or not. Goldberg and Jackendoff have recently suggested that constructions prototypically either have non-compositional meaning or are "sufficiently frequent" to be stored as separate units (Goldberg and Jackendoff 2004; cf. Goldberg 2006).

References

- Alexander, Louis George
1990 *Longman English Grammar Practice for Intermediate Students*. New York: Longman.
- Arnovick, Leslie
1990 *The Development of Future Constructions in English: Temporal and Modal Will and Shall in Middle English*. Frankfurt am Main/New York: Peter Lang.
- 1997 Proscribed collocations with *shall* and *will*: the eighteenth century (non-)standard reassessed. In *Taming the Vernacular*, Jenny Cheshtre and Dieter Stein (eds.), 135–151. London: Longman.
- Berglund, Ylva
2000 Utilising Present-day English corpora: A case study concerning expressions of future. *ICAME Journal* 24: 25–63.
- Bergs, Alexander
2008a The future in context. In *Context and Constructions*, Alexander Bergs and Gabriele Diewald (eds.). Philadelphia/Amsterdam: John Benjamins.
- 2008b The expression of futurity in present-day English: form, function, development. A constructional approach. In *Constructions and Language Change*, Alexander Bergs and Gabriele Diewald (eds.). Berlin/New York: Mouton de Gruyter.
- Biber, Douglas
1999 *Longman Grammar of Spoken and Written English*. Harlow: Longman.
- Cappelle, Bert
2006 Particle placement and the case for 'allostructions'. In *Constructions all over: Case studies and theoretical implications*, Doris Schönefeld (ed.) <http://www.constructions-online.de/articles/specvol1/683>
- 2008 Contextual cues for particle placement: Multiplicity, motivation, modelling. In *Context and Constructions*, Alexander Bergs and Gabriele Diewald (eds.). Philadelphia/Amsterdam: John Benjamins.
- Carter, Ronald & Michael McCarthy.
2006 *Cambridge Grammar of English: A Comprehensive Guide; spoken and written English grammar and usage*. Cambridge: Cambridge University Press.
- Coates, Jennifer
1983 *The Semantics of the Modal Auxiliaries*. London: Croom Helm.
- Croft, William and Alan Cruse
2004 *Cognitive Linguistics*. Cambridge: Cambridge University Press.
- Facchinetti, Roberta
2000 The modal verb 'shall' between grammar and usage in the nineteenth century. In *The History of English in a Social Context*, Dieter Kastovsky and Arthur Mettinger (eds.), 115–133. Berlin/New York: Mouton de Gruyter.
- Fowler, H. W.
1983 *A Dictionary of Modern English Usage*, 2nd revised edition. Oxford: Oxford University Press.
- Fries, Charles Carpenter.
1925 The periphrastic future with *shall* and *will* in Modern English. *PMLA* 40: 963–1022.
- Goldberg, Adele E.
1995 *Constructions: A Construction Grammar Approach to Argument Structure*. Chicago: University of Chicago Press.
- 2006 *Constructions at Work: The Nature of Generalization in Language*. Oxford: Oxford University Press.
- Goldberg, Adele E. and Ray Jackendoff
2004 The English resultative as a family of constructions. *Language* 80(3): 532–568.
- Haugen, Einar
1972 Dialect, language, nation. In *Sociolinguistics: Selected Readings*, John B. Pride and Janet Holmes (eds.), 97–111. Harmondsworth: Penguin.
- Hilpert, Martin
2007 Germanic future constructions. A usage-based approach to grammaticalization. Ph.D. Dissertation, Rice University.

- Hopper, Paul J.
 1994 Phonogenesis. In *Perspectives on Grammaticalization*, William Pagliuca (ed.), 29–45. Amsterdam/Philadelphia: John Benjamins.
- Hopper, Paul J. and Elizabeth Closs Traugott
 1993 *Grammaticalization*. Cambridge: Cambridge University Press.
- Huddleston, Rodney and Geoffrey Pullum
 2002 *The Cambridge Grammar of the English Language*. Cambridge: Cambridge University Press.
- Joos, Martin
 1968 *The English Verb: Form and Meanings*. Madison, WI: University of Wisconsin Press.
- Kay, Paul
 2002 English subjectless tagged sentences. *Language* 78: 453–481.
- King, Robert
 1969 *Historical Linguistics and Generative Grammar*. Englewood Cliffs, NJ: Prentice-Hall.
- Lass, Roger
 1990 How to do things with junk: Exaptation in language evolution. *Journal of Linguistics* 26: 79–102.
- Michaelis, Laura A.
 1998 *Aspectual Grammar and Past-Time Reference*. London: Routledge.
- Mindt, Dieter
 1992 *Zeitbezug im Englischen: eine didaktische Grammatik des englischen Futurs*. Tübingen: Narr.
- Murphy, Raymond
 1994 *English Grammar in Use*. Cambridge: Cambridge University Press.
- Nesselhauf, Nadja
 2007 Diachronic analysis with the internet? *Will and shall* in ARCHER and in a corpus of e-texts from the web. In *Corpus Linguistics and the Web*, Marianne Hundt, Nadja Nesselhauf, and Carolin Biewer (eds.), 287–305. Amsterdam/New York: Rodopi.
- Niedzielski, Nancy A. and Dennis R. Preston
 2000 *Folk Linguistics*. Berlin/New York: Mouton de Gruyter.
- Östman, Jan-Ola & Mirjam Fried
 2004 *Construction Grammar in a Cross-Linguistic Perspective*. Amsterdam: John Benjamins.
- Poutsma, Hendrik A.
 1924 *A Grammar of Late Modern English*. Groningen: Noordhoff.
- Sundby, Bertil, Anne Kari Bjørge and Kari Haugland
 1991 *A Dictionary of English Normative Grammar 1700–1800 (DENG)*. Amsterdam/Philadelphia: John Benjamins.
- Tieken-Boon van Ostade, Ingrid
 1985 'I will be drowned and no man shall save me': the conventional rules for *shall* and *will* in eighteenth-century English grammars. *English Studies* 66: 123–142.
- Traugott, Elizabeth Closs
 2008 The grammaticalization of NP of NP constructions. In *Constructions and Language Change*, Alexander Bergs and Gabriele Diewald (eds.), Berlin/New York: Mouton de Gruyter.
- Weiner, E. S. C. and Maurice Waite (eds.)
 1995 *The Oxford Dictionary and Usage Guide to the English Language*. Oxford: Oxford University Press.
- Wray, Alison
 2002 *Formulaic Language and the Lexicon*. Cambridge: Cambridge University Press.