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GRAMMATICALIZATION AND VARIATION OF WILL AND SHALL IN SHAKESPEARE'S COMEDIES

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1. Introduction

The grammaticalization of modals expressing obligation and volition to yield future senses has been studied in broad strokes with general conclusions such as that deontic modality leads to epistemic modality (Shepherd 1982; Sweetser 1990) and that less subjective modalities lead to more subjective (Traugott 1989; Traugott & Dasher 2002). For mechanisms of change both metaphorical extension (Sweetser 1990) and metonymic change via inferencing have been proposed (Bybee 1988; Traugott 1989). As in any scientific endeavor, the study of a phenomenon at a finer level of granularity will reveal new patterns and yield new insights. The functions of modal categories are strongly tied to face-to-face interaction, especially negotiatory contexts in which interlocutors are conversing about future actions in which they will engage. To understand change in modal and future meanings, these sorts of contexts need to be considered. Focusing on WILL and SHALL in a period of English in which they are both robustly represented and considering the local interactional contexts in which constructions with these modals are used, we propose to refine the characterization of the senses and readings of WILL and SHALL.

Our data come from the plays of William Shakespeare, considered a good representative of Early Modern English. However, this study is not just a study of synchronic variation in Shakespeare's time; rather the variation is viewed in terms of what we know about how WILL and SHALL are used in earlier periods—Old and Middle English—as well as how these future modals come to be used in later periods. We make use of what is known about the grammaticalization of future in English over a long period of time, as well as what is known about how futures develop cross-linguistically. This broad frame of reference (a panchronic point of

view) allows us to discover the differences in the usage of WILL and SHALL in this period that have eluded other researchers. In particular we are able to show that many of the uses of these future modals in the plays examined follow directly from earlier uses, including their lexical meanings as demonstrated in OE of ‘want, desire’ for WILL and ‘be right, becoming’ for SHALL and inferences from these meanings made in context, as proposed by Bybee and Pagliuca (1987). Here we are able to refine earlier theories with details from a particular period, showing how certain kinds of interactive functions serve as developmental niches for grammatical meaning.

2. Data

We draw on three Shakespeare comedies, *Two Gentlemen of Verona* (first performed 1594), *As You Like It* (1599), and *The Tempest* (1611).¹ Such plays provide a written representation of speech in that they depict dialogue and, although characters’ pursuits (such as plotting to gain a kingdom) are removed from most people’s, the kinds of interactive functions or social acts involved—advice, threats, compelling someone to do something, cooperation, planning, negotiating who will do what—are common enough.

Our envelope of variation is broadly future temporal reference. We take a grammaticalization-path approach to the variable context, whereby “the contexts for the analysis of variation include not only all the forms fulfilling a given function, but also the range of functions along the grammaticalization path that can be expressed by those forms” (Schwenter & Torres Cacoullous 2010: 24).² We exhaustively extracted all orthographic variants of WILL (*’ll, ’lt, wilt*) and SHALL (*shalt*) with a verb complement (including elided verbs, as in *I will stand, and so shall Trinculo* (*Tempest*, III.2, Stephano) (N = 18). We proceeded from the beginning of each play until we obtained 150–200 tokens from each (through Act 3, Scene 2 for *Two Gentlemen* [N = 166]; Act 3, Scene 5 for *As You Like It* [N = 195], and Act 3, Scene 3 for *Tempest* [N = 164]), excluding occurrences in proverbs, songs, verse, or characters reading. The overall rate of WILL (with respect to SHALL) in this sample is 75% (391/525); we observe no increase in the rate of WILL among the plays.

We do not consider here the Present, which is a minor variant numerically and in its restricted contexts of use.³ Nor do we consider *going to* + VERB, of which there was only one instance in all three plays (*And I am going to deliver them* [*Two Gentlemen*, III.1, Valentine]).

Tokens of WILL and SHALL were coded for features of the linguistic context in which they appear (e.g., grammatical person, clause type). As future markers are notoriously polysemous and because understanding semantic/pragmatic change was one of our goals, we also coded for the reading conveyed. The cross-linguistic literature on the meaning of future tense markers often mentions the meaning of intention and prediction. The intention reading is an agent-oriented reading

with narrow scope and indicates that the subject of the modal intends to complete the action in the predicate. The prediction reading has scope over the whole proposition which is asserted by the speaker to be true in the future. A finer-grained analysis such as appears in various language-specific studies shows that the English future markers *WILL* and *SHALL* are used in specific types of interaction between speaker and listener (Myhill 1995; Nakayasu 2009). Thus, in addition to prediction and intention (including the negative, refusal) readings, categories coded were willingness of the subject, an arranged situation for the subject, and a request for authorization. We also looked for but did not find many tokens of volition and obligation. In addition, we noted certain pragmatic functions within the discourse, such as promises and suggestions.

The coding of readings evolved from the examination of the tokens of *WILL* and *SHALL* in the particular social situations that are depicted in the comedies of William Shakespeare. The quantitative results are based on these readings. The coder agreement rate between the two authors was 82% (89/109) in a sample coded for reading; otherwise, the coding was done individually by one or the other of us.

3. Distinctive Uses of *WILL* and *SHALL*

Our coding for the readings of the 525 tokens in context revealed (near) categorical association of *WILL* and *SHALL* with certain readings—arrangement for *SHALL*; willingness, refusal, and intention for *WILL*—and overlap in function for the broader meaning of prediction. First we consider the use of *SHALL* for arrangement.

3.1 *SHALL* and Arrangement

Our decision to look for a usage context that we could describe as ‘arrangement’ in which the situation described in the clause has been planned or arranged either locally by the participants or more globally by society as a whole was based on earlier and later uses of *SHALL*. In OE and ME *SHALL* (*sceall* and other variants) when used with an infinitive indicated what is right, becoming, or necessary (1), and what is appointed or settled to take place (2) (OED). In second or third person it was used in commands and instructions (3).

- (1) *Swa sceal geong guma gode gewyrecean . . .* (*Beowulf*, line 20)
‘So a young warrior must do good deeds . . .’
- (2) King Arthur says to the Green Knight:
(dismount and stay, I pray thee)
‘And quat-so þy wylle is we *shal* wyt after’ (*Gawain*, line 255)
‘And whatever it is you want we shall know after’

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- (3) Saf þæt þou *shal* siker me, segge, bi þi trawþe,
 þat þou *shal* seche me þiself . . . (*Gawain*, lines 294–395)
 ‘Save that thou shall assure me, knight, by your plighted word,
 that thou shall seek me thyself . . .’

In a study of 19th-century American English, Myhill (1995) observes that uses of obligation modals such as *SHALL* and *MUST* in the earlier parts of that century are dictated by social norms and decorum or by one person exerting control over another. This continuity of function strongly suggests that in the interim period of Early Modern English, we will also find uses of *SHALL* that refer to social norms and arrangements made in the local discourse, perhaps among people of unequal status.

The results of our coding of readings for the 525 tokens yielded 28 instances of ‘arrangement,’ and all of these were expressed with *SHALL*. Declarative instances have second- and third-person subjects, as in (4) and (5), and (6) and (7).

- (4) By this light, thou *shalt* be my lieutenant,
 monster, or my standard. (*Tempest*, III.2, Stephano to Prospero)
- (5) Go with me to it and I’ll show it you and by the way
 you *shall* tell me where in the forest you live.
 Will you go? (*As You Like It*, III.2 Rosalind to Orlando)
- (6) ‘Twere good, I think, your lordship sent him thither:
 There *shall* he practise tilts and tournaments, (*Two Gentlemen*, I.3, Panthino)
- (7) O Rosalind! these trees *shall* be my books
 And in their barks my thoughts I’ll character;
 That every eye which in this forest looks
shall see thy virtue witness’d every where.
 Run, run, Orlando; carve on every tree
 The fair, the chaste and unexpressive she. (*As You Like It*, III.2, Orlando)

In the second person (with 13 tokens out of 28) we see that both *you* (as in [5]) and *thou* (4) are used, but *thou* occurs seven times, accounting for 25% of ‘arrangement’ tokens. At this rate it is more common here than in the data overall where it constitutes only 8% of the data. The overrepresentation of *thou* in these arrangement contexts points to the power differential between speaker (who does the arranging) and addressee (who must follow orders). Such situations resemble obligation contexts because obligation requires that an authority exists who imposes an obligation; this authority could be a person or a set of social norms or even laws. Note that there are also examples, in contrast to

(4)–(7), where SHALL indicates that a social norm is at stake, as in this example, where Proteus laments his possible perjury:

- (8) To leave my Julia, *shall* I be forsworn;
 To love fair Silvia, *shall* I be forsworn;
 To wrong my friend, I *shall* be much forsworn; (*Two Gentlemen*, II.6, Proteus)

A common subtype occurs in questions with first-person subjects; these we could call ‘requests for authorization.’ In such cases, a speaker requests confirmation of future actions from the addressee who in the context is taken to be the authority. All such requests occur in the first person and use SHALL. This common pattern (N = 13) suggests a special construction of the form:

- (9) [(WH) *shall* I/we VERB?] = request for authorization
- (10) Sir Oliver Martext, you are well met: will you dispatch us here under this tree, or *shall* we go with you to your chapel? (*As You Like It*, III.3, Touchstone)
- (11) How *shall* I fashion me to wear a cloak?
 I pray thee, let me feel thy cloak upon me. (*As You Like It*, III.1, Duke)

Note that in (10) both WILL and SHALL occur. The use of WILL here is willingness, ‘are you willing to marry us here under this tree?’, while the SHALL asks for authorization, ‘do you require that we go to your chapel?’ The importance of this particular construction, in which SHALL occurs in a first-person question, is that it is one of the specific uses of SHALL that has survived into modern usage. Coates (1983) finds that this use, called “addressee volition” (as in, *shall we have a cup of coffee?* [Coates 1983: 188]), constitutes 13% (57/425) of the tokens of SHALL she found in her British corpora compiled in the 1970s. The survival of this particular usage points to a specific construction with a specific interactive function, or ‘niche,’ as captured in (9). When a use such as this becomes entrenched it can survive even while other, more general, constructions are being replaced.

As for other uses of SHALL, Myhill (1995: 187) notes that the appearance of SHALL in declaratives in the first half of the 19th century still reflects some of the ‘arrangement’ sense. He describes one usage as “speaker controls future event,” as in this example:

- (12) Pocahantas *shall* be thine [spoken by father promising his daughter’s hand]

In summary, then, we find many tokens of use where SHALL indicates an external imposition on the subject by either a local authority or a social norm or compact. In section 3.3 we will compare these uses with the intention uses

of WILL and note that WILL indicates an intended action whose motivating source is the subject him/herself.

3.2 WILL and Willingness

Our decision to code for ‘willingness’ as a reading was based on the fact that WILL meant ‘want, desire’ as a main verb in OE and the existence of a willingness reading in OE, ME, and Present Day English (PDE). In her study, Coates (1983) cites examples such as *he drinks and he’ll eat anything* (he is willing, prepared to eat anything). In PDE, a willingness reading for WILL occurs in questions (*Will you listen to me and stop interrupting?*), in *if*-clauses (*if you will play it this way . . .*), and in other contexts (*give them the name of someone who will sign for it . . .*) (Coates 1983: 171–173). In the plays we studied, we found 52 tokens that expressed willingness, and all of them used WILL.

The willingness sense of WILL is very much an interactive tool, being used primarily in first and second person (22, or 42%, are first person, and 20, or 38%, are second person). Its main function is to mark offers by a first person and polite requests to a second person, in which 14 of the 20 are framed in the interrogative, as illustrated in the first line of (10). These second-person uses stand in contrast to the use of SHALL to the second person, which comes across more as a command. Also 13 of these second-person requests use the more polite *you* and only 7 use *thou*. Example (13) shows an offer, which is set up by the rhetorical question about the interlocutor’s willingness to accept the state of affairs offered by the speaker; (14) shows a request.

- (13) O my poor Rosalind, whither wilt thou go?
Wilt thou change fathers? I *will* give thee mine.
I charge thee, be not thou more grieved than I am. (*As You Like It*, I.3, Celia)
- (14) No, I warrant you; I will not adventure
my discretion so weakly. *Will* you laugh
me asleep, for I am very heavy? (*Tempest*, II.1, Gonzalo)

Following Bybee and Pagliuca (1987), we regard willingness as a weaker version of desire or volition and thus a retention from the lexical meaning of WILL. The willingness use may play a role in the development of future meaning because our examples show that a statement about willingness may also imply a prediction about future situations. Consider (15) where willingness implies prediction:

- (15) Rosalind: But, cousin, what if we assay’d to steal
The clownish fool out of your father’s court?
Would he not be a comfort to our travel?
Celia: He’ll go along o’er the wide world with me; (*As You Like It*, I.3)

Celia is asserting the willingness of the clown to go anywhere with her, but at the same time, the statement could be taken as a prediction about his future action. The same type of implication is made by *WILL* in its most common use, the statement of intentions, to which we now turn.

3.3 *WILL Used for Intention*

Out of the 525 tokens of both *WILL* and *SHALL*, 197 (38%) were coded as expressing 'intention,' meaning the subject of the sentence has the intention of completing the situation described in the main predicate. The vast majority of these instances contained *WILL* (188, or 95%). Of the intention uses containing *WILL*, 153 (81%) are in the first person. Thus *WILL*'s most common use in the database is to express a first-person intention. An examination of the examples shows that these intentions are internally motivated; they express what the subject (usually the speaker) has decided to do based on his or her own desires or motivations. They are not motivated by an external authority as the arrangement uses of *SHALL* are. As the examples indicate, there are various interactive uses of intention. Example (16) can be interpreted as an offer and also a promise, while (17) has overtones of willingness, as well as intention and promise. In contrast, (18) occurs in a soliloquy and lacking an addressee expresses a purer intention.

- (16) We two, my lord,
will guard your person while you take your rest,
 And watch your safety. (*Tempest*, II.2, Antonio)
- (17) Valentine: And on a love-book pray for my success?
 Proteus: Upon some book I love I'll pray for thee. (*Two Gentlemen*, I.1)
- (18) Now presently I'll give her father notice
 Of their disguising and pretended flight; (*Two Gentlemen*, II.6, Proteus)

Of special interest are cases in which *WILL* can be interpreted as expressing either or both intention or prediction. In (19) the clause with *WILL* expresses intention, but it is embedded under a clause that predicts the outcome as well. In (20) Antonio and Sebastian are making fun of Gonzalo, and Antonio's rhetorical question could be either 'what impossible matter does he intend to make easy?' or 'what impossible matter do you predict he will make easy?'

- (19) Charles, I thank thee for thy love to me, which
 thou shalt find I *will* most kindly requite. (*As You Like It*, I.1, Oliver)
- (20) Sebastian: His word is more than the miraculous harp; he hath raised the
 wall and houses too.
 Antonio: What impossible matter *will* he make easy next? (*Tempest*, II.1)

As noted earlier, intention uses are predominately first person; the reason for this is that these intentions are internally motivated (as willingness is) and best put forward by the speaker as his/her own. Second-person uses coded as intention are predominately questions about the addressee's intentions. Third-person uses, such as (20)—as statements about someone else's intentions—leave open the possibility of a prediction interpretation. Thus it is that the majority of prediction uses have third-person subjects, as we will see in the next section. These trends in the data suggest that the prediction sense arises as an inference from the intention sense when a third-person subject is present.

Negative intentions and refusals are also expressed by *WILL*, and they also occur primarily in the first person. Example (21) shows a rather strong refusal, but weaker negations of intention also occur, as in (22).

- (21) Be gone! I *will* not hear thy vain excuse;
But, as thou lovest thy life, make speed from hence. (*Two Gentlemen*, III.1, Duke)
- (22) Go find him out,
And we *will* nothing waste till you return. (*As You Like It*, II.7, Duke Senior)

In summary, as might be predicted from the common association of intention with future markers, cross-linguistically, intention uses dominate in the functions of *WILL*. This use is a clear outgrowth of the volitional sense, because intention has its source in the internal motivation of the subject, as does willingness.

4. Prediction with *WILL* versus *SHALL*

As we have seen, in Shakespeare's plays *WILL* and *SHALL* give rise to distinct preferred readings and are used in different types of interactions or social situations. These preferred senses provide the basis for the use of *WILL* and *SHALL* for the expression of prediction. In this use, as illustrated in (23)–(26), both forms are robustly present at close to the same rate, *WILL* at 60%, *SHALL* at 40%.

- (23) A little time *will* melt her frozen thoughts
And worthless Valentine *shall* be forgot. (*Two Gentlemen*, III.2, Duke)
- (24) She *shall* not long continue love to him.
But say this weed her love from Valentine,
It follows not that she *will* love Sir Thurio. (*Two Gentlemen*, III.2, Proteus)
- (25) This *will* prove a brave kingdom to me, where I *shall*
have my music for nothing. (*Tempest*, III.2, Stephano)
- (26) Bring us to this sight, and you *shall* say
I'll prove a busy actor in their play. (*As You Like It*, III.4, Rosalind)

Here meaning differences may appear to be “neutralized in discourse” (Sankoff 1988: 153). In this section we will see that lingering meaning differences are manifested in distributional differences within this narrower, purer future, variable context of prediction.

Table 8.1 shows a variable rule analysis (Sankoff, Tagliamonte & Smith 2012) of factors contributing to the choice of WILL over SHALL in prediction contexts,

TABLE 8.1 Factors contributing to the choice of WILL versus SHALL in prediction contexts in Shakespeare (three comedies)

Corrected mean <i>Total N</i>	<i>Prediction contexts only</i>			<i>All tokens</i>	
	0.61 <i>60/215</i>			<i>75/525</i>	
	<i>prob.</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>
ANIMACY OF SUBJECT					
Inanimate	.60	70	67	76	77
Animate	.45	56	148	76	448
PERSON					
1st sg		53	38	86	240
1st pl		75	9	62	34
2nd sg <i>you</i>		68	18	76	50
2nd sg <i>thou</i>		28	19	52	42
3rd inanimate		70	67	66	77
3rd animate		63	60	65	76
VOICE					
Active	[.52]	62	198	76	496
Passive	[.32]	41	17	52	29
CLAUSE TYPE					
Apodosis	[.65]	72	25	83	46
Other main	[.49]	58	146	74	413
Subordinate	[.45]	58	40	66	56**
SENTENCE TYPE					
Affirmative	[.53]	63	179	77	394
Negative	[.30]	42	24	75	64
Interrogative		67	12	61	67
SOCIAL CLASS					
Lower	[.53]	63	76	77	331
Higher	[.48]	59	139	73	194

Note: Non-significant factors within [], compared with distributions of all tokens

* Person was not included in the variable rule analysis and interrogatives were excluded from sentence type.

** Clause type excludes 10 *if*-clauses, all with WILL.

in the first set of columns. The second set of columns provides a comparison with distributions in the entire Shakespeare dataset. Discernible in Table 8.1 are distribution tendencies for *WILL* and *SHALL* with respect to subject animacy and grammatical person, voice, clause type, and sentence type.⁴

4.1 Subject Animacy and Grammatical Person

The properties of the subject in the variable context of prediction show three trends. One, more than half the tokens are with third-person subjects (59%, 127/215), whereas in the entire dataset the proportion of third person is less than one-third (29%, 153/525). That is, readings of prediction occur more with third- than with first- or second-person subjects.

Two, *WILL* is most disfavored, and conversely *SHALL* is most favored, when the subject is a 2sg *thou*, but not a *you*. This tendency follows from *SHALL*'s meaning of arrangement (§3.1). A *thou* addressee is more likely than a *you* addressee to be under the authority of the speaker or another person. Though Ns are low, the highest rate of *SHALL* appears with a *thou* addressee and a high social status speaker (such as a duke, lord, or one of their kin) (83%, 10/12 in prediction contexts; 60%, 15/25 in the entire dataset).

Three, considering just third person, *WILL* is favored, and conversely *SHALL* is disfavored, by inanimate subjects. How might *WILL* and *SHALL* come to be used with inanimate subjects for prediction? On the one hand, it appears that a prediction/arrangement reading is possible with inanimate subjects (of *SHALL*) (7/20 were coded as prediction/arrangement), as in the threat that “thy food *shall* be the fresh-brook muscles, wither'd roots and husks . . .” (*Tempest*, I.2, Prospero). Thus *SHALL* could come to be used with inanimate subjects via extension of its arrangement meaning. For *WILL*, on the other hand, the prediction sense arises by inference from intention and willingness in third-person animate contexts (see examples [19] and [20]) and from there can be extended to inanimates.

WILL's willingness and intention uses (§3.2–3.3) are reflected in its association with 1sg: in the entire Shakespeare dataset (the second set of columns), the frequency of *WILL* relative to *SHALL* is higher in 1sg contexts, at 86%. In studying present-day variation, Torres Cacoullos and Walker (2009: 339) identify as *WILL* “collocations” those subject-main verb combinations that make up a greater than average proportion of the main verb's occurrences. They find the most frequent one to be 1sg *I'll tell* (which constitutes 58%, 40/69 of *tell*, whereas 1sg *WILL* makes up 21% of that data overall).

Collocations appear to persist. Though the data here are sparse, we also identify *I + will + tell* as a collocation in Shakespeare: of 9 *tell* tokens, 6 are 1sg *will*, 4 of these with a 2sg object, as in (27a, b). This use of *I will* or *I'll* with a verb of speaking helps to structure the discourse. Another collocation is *I + will + show*, which constitutes 6 of the 8 *show* tokens, again with a 2sg object in 4/6 cases, as in (27c). Applying the same criterion, a *SHALL* collocation is *you/thou + shall*

+ *have*, for example (28a), which constitutes 7 of 15 occurrences of main verb *have*. Of the other main verbs with at least 8 occurrences, *give* and *go* are associated with WILL (13 *will* + *give* of 14 *give*; 7/13 1sg; 23 *will* + *go* of 30 *go*; 12/23 1sg) (27d), while *see* is associated with SHALL (7 *shall* + *see* of 8 *see*; 3/7 1sg) (28b).

(27) Collocations with WILL

- a. I had myself notice of my brother's purpose herein and have by underhand means laboured to dissuade him from it, but he is resolute. *I'll tell thee*, Charles: is the stubbornest young fellow of France, (*As You Like It*, I.1, Oliver)
- b. *I'll tell you* who Time ambles withal, (*As You Like It*, III.2, Rosalind)
- c. *I'll show thee* the best springs (*Tempest*, II.2, Caliban)
- d. O my poor Rosalind, whither wilt thou go? Wilt thou change fathers? *I will give* thee mine. (*As You Like It*, I.3, Celia)

(28) Collocations with SHALL

- a. Come on, you madcap, I'll to the alehouse with you presently; where, for one shot of five pence, *thou shalt have* five thousand welcomes. (*Two Gentlemen*, II.5, Speed)
- b. Orlando: He is drowned in the brook: look but in, and you *shall see* him. Jacques: There I *shall see* mine own figure. (*As You Like It*, III.2)

4.2 Voice

The disfavoring of WILL by passives indicated in Table 8.1 is really the favoring of SHALL by passives (29). This effect may follow from SHALL's arrangement sense (which is most clear in example [29a]). Of the arrangement tokens (§3.1), 14% (4/28) are passives, even though passives constitute only 6% (29/525) of the data overall. According to Benveniste (1968) the Romance synthetic future may also have originated in the use of infinitive + *habēre* with passive infinitives and to refer to situations that were destined or prearranged to happen (see Bybee, Perkins & Pagliuca 1994: 187, 261–262).

- (29) a. Look, what thou want'st *shall be sent* after thee: (*Two Gentlemen*, I.3, Antonio)
- b. thou shalt be pinch'd
As thick as honeycomb, each pinch more stinging
Than bees that made 'em. (*Tempest*, I.2, Prospero)
 - c. And worthless Valentine *shall be forgot*. (*Two Gentlemen*, III.2, Duke)

4.3 Clause Type

Under clause type in Table 8.1 we find the favoring of WILL in apodoses of *if*-clauses. In their study of the diachrony of (Brazilian) Portuguese future expressions, Poplack and Malvar (2007: 142) interpret the situation referred to in the apodosis as a contingent event whose realization depends on fulfillment of a condition, rather than one whose realization is assumed. Such an interpretation of apodoses has been marshaled to support a sense of uncertainty in future situations expressed by WILL as opposed to GOING TO (but see Torres Cacoullos & Walker 2009: 346–347). Here we attribute the apodosis effect at least in part to particular constructions.

WILL does not disproportionately occur with a first-person subject in apodoses (63% [24/38] vs. 53% [206/391] in other clause types). But there may be two particular 1sg WILL apodosis configurations, each of which constitutes approximately one-fifth of the WILL apodosis tokens. One is [2sg *if*-clause + 1sg apodosis] (N = 8), as in (30), in which the speaker makes an offer to the interlocutor. The other is [1sg *if*-clause + 1sg apodosis] (N = 7), as in (31), which is a speech-act conditional, rather than one in which the *if*-clause expresses a precondition or evokes an alternative scenario for the outcome in the main clause (Nikiforidou & Torres Cacoullos 2010; Sweetser 1990). It would seem, then, that one way that WILL may extend from willingness-intention to prediction is via an apodosis construction with an interactional function.⁵

(30) [2sg *if*-clause + 1sg apodosis]

I am your wife, if you will marry me;

If not, I'll die your maid: (*Tempest*, III.1, Miranda)

(31) [1sg *if*-clause + 1sg apodosis]

Well then, if ever I thank any man, I'll thank you; (*As You Like It*, II.5, Jacques)

4.4 Sentence Type

Turning now to sentence type, we see that negation tends to disfavor WILL in the prediction context in Shakespeare. The effect is skewed by grammatical person, with rates of negated WILL higher in first (89%, 33/37) than in second and third person (56%, 15/27) (in the entire Shakespeare dataset). This skewing is tied to the different readings obtained. In the aggregate approximately half (35/64) the negation tokens (both WILL and SHALL) were coded as conveying (negative) intention (a few times combined with willingness or prediction). However, in the first person, nearly all negation tokens (33/37) were coded as having a reading of (negative) intention, which, as we have seen (§ 3.3), overwhelmingly occurs with WILL rather than SHALL. Unlike WILL, negated SHALL is mostly (14/16) prediction (sometimes in combination with readings of arrangement, intention, or obligation) and (thus) mostly (12/16) non-1sg, as in (24).

The strength of negative intention with *WILL* correlates with fullness of form in Shakespeare. All instances coded as having ‘refusal’ as part of their reading ($N = 17$) appeared with full form *WILL*, as in (32), but of the tokens coded as negated or negative intention, close to half (9/20) appeared as *'ll*.

- (32) Come, sing; and you that *will not*, hold your tongues. (*As You Like It*, II.5, Jacques)

Interrogatives disfavor *WILL* in the entire dataset (second set of columns in Table 8.1), an effect that still holds in present-day variation with *GOING TO* (Torres Cacoullous & Walker 2009: 344). This tendency relates to *WILL*'s meanings, if we consider distributions by person and reading. On the one hand, about one-third (20/67) of interrogatives are 1sg, of which none are with *WILL* (see §3.1 on 1sg *SHALL* interrogatives). On the other, over half (36/67) the interrogatives are 2sg, of which 97% (35/36) are with *WILL* (as in [13]); 2sg interrogatives constitute the bulk (35/41) of interrogatives with *WILL*. About two-thirds (22/35) of these 2sg *WILL*-interrogatives were coded as having a sense of willingness or volition (alone or in combination with intention or prediction). Thus, 1sg interrogatives are associated with *SHALL* and ‘requests for authorization,’ while 2sg interrogatives are associated with *WILL* and ‘willingness.’

To summarize this section, nuances of internal motivation—a component of readings of ‘willingness’ and ‘intention’—as opposed to external motivation—part of a reading of ‘arrangement’—are discernible in co-occurrence patterns of *WILL* and *SHALL* as they compete as expressions of ‘prediction’ in Shakespeare.

5. Conclusion

Our detailed analysis of uses of two future modals in the comedies of Shakespeare reveals strong ties to earlier lexical meaning, as well as a converging trajectory toward the purer future use for making predictions. It has allowed us to look in more detail at a future gram developed from an obligation marker. Because intention is a very prominent use for future cross-linguistically, Bybee, Perkins, and Pagliuca (1994) hypothesized that intention is an essential intermediate stage in the development toward prediction. One surprise we find in the current data is that there were very few instances ($N = 9$) of *SHALL* for intention outside of the arrangement context. Thus it appears that from arrangement, an inference of prediction can be made directly, as shown in this example, which can be viewed both as stating an arrangement and making a prediction.

- (33) Look, what thou want'st *shall be sent* after thee: (*Two Gentlemen*, I.3, Antonio)

Following Myhill's discussion of *SHALL* in later stages of English, we have looked not so much for an obligation reading but a sense of arrangement based

on social norms and the local situation. In ME and OE *SHALL* was often employed to indicate destiny or divine arrangement. As Benveniste (1968) noted, similar usage for the *haber* future in Romance existed in the oldest literature. We have not found references to destiny or divine plans so commonly in Shakespeare's comedies, but the arrangement sense is clearly related. Thus the cultural context appears to be a determinant of the particular sense of obligation in actual use. More work in a cross-cultural context might reveal how different definitions of obligation might constrain the development of futures. In this way we might explain why obligation semantics is much less likely to develop into future than 'desire' or 'movement toward' meanings.

Studying the long-term development of *WILL* and *SHALL*, as well as comparing Early Modern English to 19th-century American English and 20th-century British English, has revealed that constructions that occupy certain interactional niches can become entrenched and remain in these uses while other related uses are disappearing. One such case is the use of *SHALL* in first-person questions as noted by Coates (1983) and Poplack and Tagliamonte (2001: 234, n. 3). This construction has also given rise to formulae such as *shall we say*, which occurs 473 times in Corpus of Contemporary American English (COCA). Hilpert (2006) notes that to the extent that *SHALL* is still used, it tends to have a discourse structuring function. Another case is the use of *WILL* in *if*-clauses, where it usually has the willingness meaning. Such cases demonstrate that polysemy is a stable concomitant of the grammaticalization process, especially for future grams, and that more specific meanings and functions can survive long after the more general meanings have developed.

When certain meanings or functions of grams are lost it is because they come to be replaced by items expressing the same, or perhaps a fuller, meaning. The ambiguity often present in the arrangement and intention uses that imply prediction means that if a speaker wants to be sure to express arrangement or intention, s/he must resort to another means, usually recruiting a more lexical expression for intention (*be going to*, *intend to*) or arrangement (*supposed to*). In this way some meanings cease to be expressed by the developing gram.

Notes

- 1 We use the Complete Moby™ Shakespeare, which was compiled from the Globe edition of the mid-1800s, which in turn was based on the earliest published forms of the plays. We also checked a number of passages against Neilson and Hill (1942) and found no discrepancies between the editions we used concerning the modals *WILL* and *SHALL*.
- 2 Thus, we do not discuss 'characteristic behavior' uses of *WILL* (N = 13), as in (i)

- (i) Orlando: Thou art not for the fashion of these times,
Where none *will* sweat but for promotion, (*As You Like It*, II.3)

This usage of *WILL* is found in both OE and ME and probably represents a use independent of the future.

- 3 Occurring at a ratio of approximately 1 to 5 with respect to WILL (N = 140) and 1 to 2 with respect to SHALL (N = 55), 30 tokens of the Present with future temporal reference in the first three acts of *As You Like It* appear mostly in subordinate clauses (13/30 in an *if*-clause and 8/30 in temporal [*when*, *until*] clauses). The remaining instances appear with temporal adverbials (e.g., *tomorrow*), in reference to scheduled events (such as a wrestling match), or to issue threats (e.g., *He dies that touches any of this fruit* [*As You Like It*, II.6, Orlando]).
- 4 Non-significant factor weights (from the first “stepdown” run in GoldVarb when all factors are included in the regression) are shown within brackets to indicate direction of effect (cf. Poplack & Tagliamonte 2001: 93–94).
- 5 In these Shakespeare data *if*-clauses are all with WILL (not SHALL); 5/10 of these were coded as expressing future, 4/10 as having a willingness reading. In present-day data it is GOING TO rather than WILL that appears in *if*-clauses (Torres Cacoullous & Walker 2009: 341–342).

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