

Syntactic Variation and Change in Progress: Loss of the Verbal Coda in Topic-Restricting
as Far as Constructions

Author(s): John R. Rickford and Thomas A. Wasow

Source: *Language*, Vol. 71, No. 1 (Mar., 1995), pp. 102-131

Published by: Linguistic Society of America

Stable URL: <https://www.jstor.org/stable/415964>

Accessed: 22-05-2019 22:29 UTC

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <https://about.jstor.org/terms>



JSTOR

Linguistic Society of America is collaborating with JSTOR to digitize, preserve and extend access to *Language*

SYNTACTIC VARIATION AND CHANGE IN PROGRESS: LOSS OF THE VERBAL CODA IN TOPIC-RESTRICTING *AS FAR AS* CONSTRUCTIONS

JOHN R. RICKFORD
NORMA MENDOZA-DENTON

THOMAS A. WASOW
JULI ESPINOZA

Stanford University

The construction *as far as* NP is a common topic restrictor in modern English, but its verbal coda (*goes/is concerned*) is often omitted. We examine potential constraints on this variation and find significant effects for syntactic, phonological, discourse mode, and social variables. The internal effects are also relevant to 'Heavy NP Shift' and other weight-related phenomena. Diachronic data on the *as far as* construction, and the evidence of synchronic age distributions and usage commentators, suggest that the verbless variant has become markedly more frequent in recent decades, allowing us a rare opportunity to study syntactic change in progress. In addition to documenting the nature of variation and change in this construction, our study has larger implications for the study of syntax and sociolinguistic variation, and demonstrates the value of integrating methods from different linguistic subfields (in this case, sociolinguistics and variation theory, historical linguistics, corpus linguistics, and syntax).*

1. INTRODUCTION. In this paper we examine the variable absence of the verb (*be concerned* or *go*) in *as far as* constructions which serve as qualifiers or topic restrictors in English. Such variation occurs sentence-initially, as in 1–3:

- (1) *As far as* the organized resistance *is concerned*, that's pretty much taken care of. [Lt. Gen. Thomas Kelly, 60s, TV newscast, 12/21/89, I95]¹
- (2) Now *as far as* misunderstanding *goes*, I'd just like to focus ... [Bill Labov, 50s, 10/85, I56]
- (3) *As far as* the white servants \emptyset , it isn't clear. [Renee Blake, 22, 5/5/87, I35]

It also occurs sentence-medially or -finally, as in 4–6:

- (4) The only catch *as far as* grad students *are concerned*, is that you have to be at least 25 ... [Diane Olsen, 30, email, 3/13/92, F273]

* Earlier versions of this paper were presented at NWAV-XXI and at colloquia at the University of California, Berkeley, and at Stanford. We received many helpful comments from audiences at those presentations, as well as from a number of other colleagues. We benefited tremendously from discussions and email correspondence with Andrew Garrett, Sharon Inkelas, and Elizabeth Traugott, and are pleased to express our gratitude to them. We also benefited greatly from the comments of Sally Thomason and the anonymous reviewers for *Language*. Finally, we also wish to thank Penelope Eckert, Susan Ervin-Tripp, Elizabeth Ewing, Melissa Iwai, Paul Kay, Paul Kiparsky, Geoffrey Nunberg, Alison Reid, Angela Rickford, Ivan Sag, Hinrich Schütze, Debra Solomon, Ewart Thomas, and Tom Veatch. Of course, none of these people is responsible for any shortcomings in the present work. We are grateful to the Summer Minority Research Exchange Program and Stanford's Undergraduate Research Opportunities office for support of Espinoza's participation in this project, and to Stanford's School of Humanities and Sciences for helping to support Mendoza-Denton's participation.

¹ Identifying information after each attested example includes speaker's or writer's name and age (where known), date produced, and identifying number in our variable rule corpus. I stands for sentence-initial examples, of which we have 539; 'F' stands for sentence-final or -medial examples, of which we have 548. 'WM' stands for 'white male', and 'WF' stands for 'white female'.

- (5) Results of this summit were positive *as far as* the Soviet desires *went*.
[President George Bush, 60s, quoted in UPI story, 7/12/90, F176]
- (6) The presence of *be*₂ forms, which compensates for gaps in the SAE aspectual system, also has repercussions *as far as* affecting progressive constructions \emptyset . [Carmen Richardson, 20s, in article in *American Speech* 66:301 (1991)]

Although these examples are all from Americans, including well-known public figures, our corpus includes verbless examples from speakers and writers from other countries too (e.g. Britain, Canada, and the Middle East) and from Americans representing a wide variety of socioeconomic, ethnic, and regional backgrounds. In particular, verb absence in topic-restricting *as far as* constructions is not one of those recent examples of variation and change which are restricted to working-class African American or European American communities (see Labov & Harris 1986, Fasold et al. 1987, Bailey & Maynor 1989, Rickford 1992). On the contrary, it is a widespread phenomenon which is first attested in the nineteenth century, although it appears to have been accelerated over the past few decades.

Understanding this variation is of interest for several reasons. In the first place, despite exceptions like Weiner & Labov 1983 and Adamson 1992, syntactic variation has been less studied than has phonological variation. Secondly, questions have been raised about whether syntactic variation is equally accessible to study in the framework of the sociolinguistic variable, and equally open to influence from external constraints (Lavandera 1978, Romaine 1984, Winford 1993). Thirdly, verb absence in *as far as* phrases appears to represent syntactic change in progress, a process which is even more rarely studied and less well understood than syntactic variation per se. Finally, this variable provides an excellent example of the benefits of combining the approaches of linguistic subfields that remain relatively disparate: sociolinguistics/variation theory, historical linguistics, corpus linguistics, and syntax.

The only previous reference to this phenomenon in the linguistics literature is in a brief note by Faris (1962), who presented some of the sixty verbless examples he had collected and observed that '*as far as* occurs frequently in cultivated usage without any form of *concerns* following it' (238). Faris also noted, however, that, nearly four decades earlier, Fowler (1926) had commented on this omission in sentences like 7:

- (7) *As far as* getting the money he asked for \emptyset , Mr. Churchill had little difficulty.

Fowler (189) had issued a stern prescriptivist rebuke against the verbless construction: '*As* or *so far as* *x* cannot be used short for *as far as* *x* goes or *so far as* *concerns* *x*.'²

² Fowler (1926, entry for *far*) went on to suggest how the verbless construction might have arisen: 'The genesis of the misuse may be guessed at thus: *I have gone so far as* collecting statistics (right). [This is an example of the prepositional use of *as far as* with 'a noun (which may be an infinitive or gerund) that expresses a limit of advance or progress.'] *As far as* collecting statistics you have my leave to proceed (correct, but unnatural order). *As far as* collecting

Since the 1960s several other usage commentators, beginning with Bernstein (1962), have drawn attention to this omission. *Webster's dictionary of English usage* (1989) cites several of them and suggests that their universal condemnation of the verbless variant might be due to their 'frustrated expectation': 'Encountering *as far as* and then having the verb [*goes* or *is concerned*] withheld is a bit like not hearing the other shoe drop' (128). The editors of the *Harper dictionary of contemporary usage* (1985:49), introducing this feature for the judgments of their usage panelists, echo the sense of most usage commentators that verbless topic-restricting *as far as* is a relatively recent usage:

'INCREASINGLY IN RECENT YEARS, figures speaking on radio or TV omit the concluding words of phrases beginning as far as ... For example, the Mayor of Portland, Oregon, speaking of the plight of the homeless men and women in his city, said, 'many of them are irresponsible as far as their behavior and decorum.' Most careful speakers would conclude with '... are concerned' or simply, 'go.' Do you regard such truncated statements as acceptable in speech? ... In writing?' [Emphasis added.]

Interestingly enough, only 10% of the panelists considered this usage acceptable in speech, and only 1.25% considered it acceptable in writing. The verbless usage was variously described by the panelists as 'carelessness', 'illiterate', 'a form of mere laziness', 'Horrors!', 'Terrible—meaningless', 'absolutely unacceptable', 'sloppy', 'clumsy', and 'part of the lazy speech and writing that is deplorable'. One panelist—television sportscaster Ray Gandolf (quoted in the *Harper dictionary of contemporary usage* 1985:49–50)—went on at some length, presumably in jest, about this issue:

'The incomplete *as far as* is the most egregious misuse of the language today. It is dangerous, And it is epidemic. Preschool teachers and parents must whisper 'as far as (such and such) is concerned' into children's ears even as they sleep. The truncation must be stamped out. Users should be condemned to a life of coitus interruptus.'

Similar results were obtained in a 1993 survey of The American Heritage Dictionary's Usage Panel, a group of about 165 well-known writers, editors, and educators,³ using slightly modified versions of four attested *as far as* examples (one with *are concerned* and three with no verbal coda). The verbless examples (numbers 6, 13, and 20 in Table 1 below, number 6 with its verbal coda deleted) were judged 'unacceptable' by 84%, whereas the example with *are concerned* (number 18 in Table 1) was considered 'acceptable' by 75%.

Our conversations with a number of linguists revealed reactions not unlike those of the usage panelists. In particular, several generative grammarians accustomed to relying on introspective judgments as their primary data told us that the verbless version of the *as far as* construction was completely ungrammatical. Indeed, one claimed he had never heard it used.

statistics he is competent enough (... defensible, but better insert *goes*; the Churchill sentence quoted is just below this level). *As far as collecting statistics, only industry is necessary* (impossible).'

³ We are grateful to the Houghton Mifflin Company, Geoffrey Nunberg, and the editors of the *American heritage dictionary* for allowing us to include these queries in a recent mail survey of the Dictionary's Usage Panel.

In order to get a better sense of how widespread this reaction is, we circulated a questionnaire containing thirteen *as far as* sentences—four with *be concerned*, one with *go*, and eight verbless. All were attested examples we had collected, although some were slightly edited. Our questionnaire also included seven filler sentences, and the order of presentation was varied. Respondents were asked to rate all the sentences on a four-point scale, ranging from fully acceptable (scored as 4) to totally unacceptable (scored as 1). The questionnaire was sent out over several electronic mailing lists, eliciting 79 responses; it was also administered in person to 101 individuals, mostly Stanford undergraduates, yielding a combined data pool of 180 respondents.

The data from our survey are given in Table 1. The columns labelled ‘4’, ‘3’, ‘2’, and ‘1’ give the number of ratings of that type which each sentence elicited. The column labeled OVERALL gives the mean score of each sentence and the rank of that score among the thirteen *as far as* sentences on the questionnaire.

EX	Verb	RESPONDENT RATINGS (rankings in parentheses)								
		4 (OK)	3 (?)	2 (?*)	1 (*)	OVERALL	LING	NONLING	<30	≥30
#6:	<i>go</i>	95	49	25	10	3.28(1)	3.89(1)	3.03(3)	3.26(2)	3.67(1)
#10:	<i>be concerned</i>	100	43	22	15	3.27(2)	3.70(2)	3.14(1)	3.37(1)	3.56(2)
#11:	∅	74	62	26	16	3.09(3)	3.02(7)	3.04(2)	3.12(4)	3.03(6)
#18:	<i>be concerned</i>	84	51	21	24	3.08(4)	3.57(3=)	2.92(4)	3.17(3)	3.25(5)
#5:	∅	58	56	35	31	2.78(5)	3.07(6)	2.67(6)	2.86(6)	3.00(7)
#3:	<i>be concerned</i>	48	50	40	32	2.74(6)	3.57(3=)	2.40(8=)	2.81(7)	3.38(4)
#8:	<i>be concerned</i>	53	51	48	28	2.71(7)	3.46(5)	2.40(8=)	2.72(8=)	3.48(3)
#20:	∅	53	50	37	40	2.64(8)	2.48(10)	2.81(5)	2.95(5)	2.13(11)
#12:	∅	48	50	52	30	2.63(9)	2.73(8)	2.62(7)	2.72(8=)	2.59(9)
#13:	∅	44	40	38	58	2.39(10)	2.61(9)	2.31(10)	2.56(10)	2.28(10)
#14:	∅	20	46	47	67	2.11(11)	2.18(12)	2.08(11)	2.21(11)	2.90(8)
#19:	∅	13	37	62	68	1.97(12)	2.28(11)	1.89(12)	2.05(12)	2.02(12)
#16:	∅	16	28	53	83	1.87(13)	1.80(13)	1.88(13)	1.95(13)	1.94(13)
#3.	That’s sort of my personal view, <i>as far as</i> that’s <i>concerned</i> .									
#5.	<i>As far as</i> ball technique and tactics ∅, this area is years behind other areas.									
#6.	They are still very much alive, <i>as far as</i> the divisional race <i>goes</i> .									
#8.	<i>As far as</i> 16-bit graphics being “true color” <i>is concerned</i> , this is nonsense.									
#10.	<i>As far as</i> football <i>is concerned</i> , it’s just another game.									
#11.	<i>As far as</i> filling out the details ∅, that isn’t a problem.									
#12.	He sounds just like the other kids, <i>as far as</i> general style ∅.									
#13.	But <i>as far as</i> something to do on the weekend ∅, we didn’t even have miniature golf.									
#14.	<i>As far as</i> the temperatures in the Bay Area tonight ∅, this is the way I see it.									
#16.	I’ll never quit <i>as far as</i> trying to solve the case ∅.									
#18.	They’re not a cohesive unit <i>as far as</i> the areas we’re dealing with <i>are concerned</i> .									
#19.	I need to know about lifestyle, because that’s important, <i>as far as</i> where I’m going to be happy ∅.									
#20.	<i>As far as</i> how he got shot ∅, we don’t know yet.									

TABLE 1. Survey results for *as far as* examples, from 180 respondents.

The columns labeled LING and NONLING give the mean scores of those respondents who had some previous training in linguistics (a total of 44) and those who did not (a total of 131, including students currently taking their first linguistics

course). The columns labeled <30 and ≥ 30 give the mean scores for respondents under 30 years of age (a total of 141) and those 30 or older (a total of 39). The results indicate some agreement between our respondents and the usage commentators. Concerning the overall mean scores for each sentence, note that the verbless *as far as* sentences tend to have lower scores than the sentences with *be concerned* or *go* (see the 'Verb' column). This tendency is categorical for the respondents with linguistics training and for those 30 or older,⁴ in the sense that all of the verbless examples were judged worse than any of the other sentences by these respondents; the cutoff was slightly above 3 ('probably acceptable'). When we look only at the ratings of the younger respondents and those without a linguistics background, however, we find that three of the verbless sentences (#11, #5, and #20) were scored higher than some of the ones with a verbal coda (#3 and #8 in particular).⁵ The fact that younger respondents are more willing to accept verbless *as far as* sentences provides some indication that these may represent more of a norm for them—that is, that this variable may represent change in progress. We will see that there is other evidence, from actual usage, to support this possibility.

2. DATA ON ACTUAL USE. Despite the censure of usage commentators and the intuitive judgments of the respondents to our questionnaire, the verbless variant of *as far as* is extremely common. In order to unearth the regularities which govern this variation—and a major point of this paper is to show that there ARE such regularities—we examined language in use, drawing on the methods of corpus linguistics and sociolinguistics/variation theory.

Over an eight-year period we have collected over 1200 tokens of the *as far as* construction from a variety of sources. About 500 of these tokens come from systematic searches of computer corpora, including subsets of a United Press International (UPI) corpus, a *New York Times* corpus, the Switchboard (telephone conversation) corpus, and corpora of electronic mail (email) and bulletin board correspondence.⁶ Some of the remaining 700 examples are from recorded sociolinguistic interviews; but unlike phonological variables, which show up with high frequencies in such interviews, syntactic variables often involve special semantic and pragmatic circumstances which may occur rarely or unpredictably in interview settings (Rickford 1975:162–63). As a result, most

⁴ These two groups had a great deal of overlap. That is, most of the respondents 30 or older had some linguistics background, and most of the respondents with some linguistics background were 30 or older.

⁵ One other difference between the respondents with a linguistics background and those without is that the former showed a broader range in their mean scores (2.09 vs. 1.15, respectively), largely because they gave higher acceptability scores to the sentences they liked best (3.89 vs. 3.14, respectively).

⁶ The UPI corpus is one of the on-line corpora available through Searcher at Stanford University; we are grateful to Elizabeth Ewing and Alison Reid for their assistance with it. The New York Times Corpus is maintained at the Xerox Palo Alto Research Center; we are grateful to Hinrich Schütze for helping us to search it. The Switchboard Corpus is from the Linguistics Data Consortium at the University of Pennsylvania; we are grateful to the Center for the Study of Language and Information at Stanford for making it possible for us to access it.

of our spoken *as far as* examples come from participant observation in informal conversations, lectures, and meetings in which the members of our research team—and a dedicated cadre of contributors including our students and colleagues—were involved. We also monitored TV and radio broadcasts and culled examples from newspapers, articles, books, and students' exams and final papers, jotting down each example as it occurred and/or was noticed. This method has been successfully followed in variation studies of other syntactic variables (cf. Rickford 1975, Romaine & Lange 1991). Although it is not as exhaustive as an electronic search of a computer corpus, this kind of monitoring usually yields richer data about the speaker and the circumstances of production, and it can be very systematic and reliable, particularly when the variable involves a lexical trigger—in this case the occurrence of *as far as* before its following noun phrase and the site of the potential verbal coda.⁷

One significant finding to emerge from our research is that some sentences which have the superficial form of topic-restricting *as far as* clauses in fact have a different semantic or pragmatic function,⁸ and do not permit deletion of the verb. In short, the first finding of our variation study is a categorical restriction, and it is also one with respect to which the introspective and observational data are clear and convergent. The nonvariable sentences are what we refer to as 'perspective' cases (we collected 21), in which the *as far as* clause represents the point of view of the referent of the noun phrase rather than restricting the topic to that NP, as in 8 and 9a. Note that these perspective constructions not only require a verb (9b), they specifically require *be concerned*, and do not permit *go* (9c).

(8) And precious time ticking off the clock *as far as* the Cowboys are concerned. [Football commentator, KNBR radio, 12/7/88]

(9) a. *As far as* the faculty was concerned, reaccreditation was beyond question ... [Sam Gubins, 40s, email, 2/91]

b. **As far as* the faculty \emptyset , reaccreditation was beyond question ...

c. **As far as* the faculty went, reaccreditation was beyond question ...

This suggests that *be concerned* has semantic work to do here (relevant senses are 'to be the concern or business of', *Oxford English dictionary* [OED]4, or 'to be affected or liable to be affected', OED 13) which prevents it from being omitted. A related fact is that in all but two of these perspective cases the referent of the NP is a human or group of humans. The two exceptions are

⁷ One reviewer has raised the question of whether we might have tended to note primarily the verbless *as far as* variants in our monitoring of informal conversations and the media. Because we tried to record every *as far as* sentence token we encountered, regardless of whether it had a verbal coda or not, and because it was the lexical phrase *as far as* which triggered us to write each example down, and not whether it had a verbal coda, we do not believe the 'participant observation' portion of our data set is biased towards verbless examples. In fact, the proportion of verbless variants in this portion of our data set (58% of 657 tokens) is lower than in a random sample of the telephone switchboard corpus (76% of 116 tokens) which we searched systematically and exhaustively with this issue in mind.

⁸ See Lavandera 1978 on the importance of semantics in the study of syntactic variation.

interpretable as personifications (ex. 10) or instances of metonymy (11) in which people are the ultimate referent:

(10) *As far as the body is concerned*/* \emptyset , that [fruit juice concentrate]'s the same as sugar. [*Consumer reports*, May 1992, p. 327]

(11) *As far as this town is concerned*/* \emptyset , it never existed—just like sex. [Tom Jacobs, movie review in the *New York Times*, 11/1/91]

The only apparent exception to our generalization that perspective cases require *be concerned* is 12, which we recorded from a TV broadcast of the Sally Jesse Raphaël Show:

(12) Well, it's closed *as far as* the district attorney \emptyset .

But the surrounding context—which we obtained by sending for the transcript of the entire show on the day in question—suggests that there is a potential interpretation of the *as far as* phrase as topic-restricting.⁹

Another instance in which the verbless option is categorically excluded is when the NP is a personal pronoun (we stopped collecting examples of this type after about 40 tokens, but they are extremely common), as in 13–18:

(13) *As far as I'm concerned*/* \emptyset , we've won. [Elizabeth Taylor, 60s, quoted in UPI story, 1991]

(14) I say we can put an empty chair there *as far as I'm concerned*/* \emptyset . 'President George Bush, 60s, quoted in UPI story, 1992]

(15) *As far as I was concerned*, Perot was not the focal point of this unit. [WM, 50–60, 7/17/92]

(16) ... it's not going in the right direction, *as far as I am concerned*. [WF, 4/21/92]

(17) *As far as she was concerned*, that was the end of the story. [Kitty Dukakis, quoted in UPI story, 1990]

(18) ... starts in 1957, *as far as we're concerned*, with the publication of *Syntactic structures*. [Peter Sells, WM, 30s, 1/7/92]

On examination, this restriction appears to be a subset of the perspective restriction, both on semantic grounds (the propositions in the main clause of these sentences represent the point of view of the people referred to in the *as far as*

⁹ Here is the larger context for ex. 12:

SALLY: So you believe your daughter did not kill herself; she was murdered?

STEVE: Oh, yes.

SALLY: There has never been anyone charged with a murder?

STEVE: Nope. They had—

SALLY: And the case is closed. So you will never—Nothing will happen.

STEVE: Well, it's closed as far as the district attorney \emptyset . But I have written to the attorney general's office. And they have told me that he was going to give it to one of his assistants to review it. [Sally Jesse Raphaël Show, 2/5/92, show #0205-92, transcript #892, p. 11]

Although the *as far as* sentence in this extract appears to us most natural as a 'perspective' token ('closed from the point of view or in the opinion of the district attorney'), it is also construable as a topic restrictor ('closed with respect to our dealings with the district attorney'). The other alternatives for dealing with this sentence are to consider it a performance error, or as the vanguard of the spread of the verbless construction from topic-restricting to perspective cases. Neither of these possibilities strikes us as especially plausible.

clause) and because these cases similarly disallow *go* as their verbal coda:

(13') **As far as I go*, we've won ...

The following sentence shows us a sequence of perspective cases, the first pronominal, the second a full NP:

(19) ... extremely important, *as far as you're concerned*/* \emptyset , and *as far as the instructors are concerned*/* \emptyset , ... [from Susan Ervin-Tripp's Berkeley file T.SKS02.a]

An alternative interpretation is that personal-pronoun NPs require a verb not because of their perspective status but because of their lightness (single words and syllables). But note that equally short nonpersonal pronouns like *that* may appear without a verb (albeit rarely, and with stress), as in 20, while personal pronouns do not (21):

(20) *As far as THAT* \emptyset , ... [Kellen Glass, undergraduate, Stanford, 10/92]

(21) **As far as HE/HIM* \emptyset

In any case, although we consider this perspective restriction an intriguing finding of our study, we followed the tradition of quantitative sociolinguistics and set aside both personal-pronoun and full-NP perspective tokens from the corpus on which we did our variable analysis, on the grounds that they are semantically different and behave categorically, rather than variably.

3. VARIABLE RULE ANALYSIS. In our search for significant constraints on verb absence in the remaining *as far as* corpus—the examples that were indeed topic-restricting and permitted variation among \emptyset , *be concerned*, and *go*—we drew on VARBRUL IIS, a statistical computing program written by David Sankoff. This program uses maximum likelihood estimation to compute the relative effects of individual factors and factor groups on linguistic variation. As Sankoff notes (1988:990), there are commercial statistical computing packages which can provide a similar analysis, involving logistic regression, but the VARBRUL programs 'are specifically set up to receive the type of data generated in studies of language variation, and ... calculate the results in a form most useful in these studies.'

For our VARBRUL analysis, we considered the seven factor groups and factors shown in Table 2. Some of these factors require a bit of explanation. For syntactic complexity, we made a three-way distinction among simple NPs, with or without prenominal modifiers (e.g. 22); more complex but nonsentential NPs—that is, conjoined NPs (e.g. 23) or NPs containing a PP (e.g. 24); and NPs containing a VP, which can be gerundial (as in 25), infinitival (as in 26), or finite (as in 27).

(22) Now *as far as* the sociolinguistics corner *is concerned* ... [Charles A. Ferguson, 60s, 2/10/87]

(23) *As far as* a better house and better cars \emptyset , ... [Griselda Silva, 30s, 4/92]

(24) The whole situation upset me *as far as* the outcome of the verdict \emptyset . [female, 20s, 1992]

(25) ... people think that I'm constantly in motion, *as far as* making films \emptyset . [Clint Eastwood, 60s, KCBS radio, San Francisco, 12/31/88]

(26) *As far as* something to do on the weekend \emptyset , ... we didn't even have miniature golf. [Mrs A., 31, 2/89, Ling 286 interview, 188]

(27) *As far as* what constitutes an allergy \emptyset , ... [Andrea Frankel, electronic news-group, 8/17/92, 1464]

If more than one category applied to an example, we coded it as the more complex one; for example, the *as far as* phrase in 26, which contains both a PP (*on the weekend*) and a verb (*do*), was coded as a sentential NP.

SYNTACTIC COMPLEXITY of the NP following *as far as*:

Simple NPs

Conjoined NPs or NPs containing PPs

Sentential NPs

NUMBER OF WORDS in the NP following *as far as*:

One word

Two or three words

Four or five words

Six or seven words

Eight or more words

PROSODIC STRUCTURE of the NP following *as far as*:

Nonbranching

Branching

POSITION OF *as far as* PHRASE IN SENTENCE:

Initial

Noninitial

AGE OF SPEAKER/WRITER (if known):

19 or younger

20–39 years old

40–59 years old

60 or older

SEX OF SPEAKER/WRITER (if known):

Male

Female

MODE:

Speech

Electronic mail or written exams

Writing (newspapers, novels, academic papers & books)

TABLE 2. Factor groups in VARBRUL analysis of *as far as* verb absence.

For prosodic structure, we followed Zec & Inkelas (1990:373). NPs classified as nonbranching consist of one phonological phrase, which generally equals one noncontrastively stressed content word:

(28) *As far as* Americans are concerned, ... [Secretary of State James Baker, 60s, 12/90, 1147]

Branching NPs consist of two or more phonological phrases, which generally equals two or more content words:

(29) *As far as* the game itself \emptyset , ... [Mike Suter, email, 7/28/92]

For the position of the *as far as* phrase in the sentence, we distinguished initial (as in 1–3 above) from noninitial (as in 4–6), without attempting to make finer distinctions among noninitial positions.

The VARBRUL IIS analysis was done with zero as the dependent variable, ignoring the distinction between *be concerned* and *go*. Higher percentages and probabilities or feature weights therefore correspond to more favorable contexts for the absence of the verb. Overall, the verb was absent in 56% of the 1065 tokens used for the variable analysis.

VARBRUL IIS includes a stepwise regression routine that selects the factors which have a significant effect on the variation (at the .05 level or better) and discards those which do not. On the basis of this statistical process, one of our seven factor groups—number of words in the NP following *as far as*—did not have a significant effect on the observed variation. We will nevertheless say a few words about it before turning to the factors which turned out to be significant.

We considered the number of words in the NP to explore the suggestion made by Postal (1974:83), Hawkins (1990), and others that NP weight is essentially a matter of length. In the VARBRUL run which included all the factor groups (level 7), the ordering of the factors in this group did appear to be largely monotonic and in line with what we might have predicted, with longer strings increasing the likelihood of verb absence: one word, .45; two or three words, .48; four or five words, .50; six or seven words, .53; eight or nine words, .61; and ten or more words, .71. But the superficial goodness of fit of this factor group was apparently a function of the fact that longer NPs also tend to be more complex. When we omitted the number of words factor group in the step-down routine of the program, it made little difference in our ability to account for the observed variation (significance = 0.273, far from the significance level of $p < 0.05$). By contrast, omitting the syntactic complexity factor group at the same step-down level made a massive difference (significance = 0.000). As a matter of interest, we should note that we also tried to test the significance of NP weight by considering the number of syllables in the NP, but this turned out to be so insignificant in our early runs that we eventually disregarded it.

We will now go on to consider the six factor groups which WERE selected as significant, shown in Table 3 in the order of their selection (first to last, beginning with the ones which made the greatest impact on this variable) and with individual factor weights. We will discuss each in turn, but first we should note that the significant factors include both internal or narrowly linguistic ones, like syntactic complexity and prosodic weight, and external or sociolinguistic ones, like mode and the age and sex of the language user. An analytical approach which neglected factors of one type or the other would have missed some of the relevant regularities and made it more difficult to solve the problem of understanding the social context in which this instance of variation and change is embedded (Weinreich et al. 1968:185, Labov 1972:283).

SYNTACTIC COMPLEXITY of the NP following *as far as*, the single most significant factor group in our analysis, divides nonpronominal NPs into three types, based on the number of phrasal nodes (i.e. maximal projections) they contain. (See Figures 1–4, in which the phrasal nodes are circled.) Note that the simple noun phrase represented in Fig. 1, with one phrasal node, is the least favorable to verb absence (VARBRUL weight = .31), while the sentential noun phrase

represented in Figure 4, with five phrasal nodes, is the most favorable to verb absence (.86);¹⁰ and the noun phrase with a phrasal conjunct or a prepositional phrase, shown in Figs. 2 and 3, respectively with three phrasal nodes each, is appropriately in between (.46).¹¹

SYNTACTIC COMPLEXITY OF THE NP:

Noun, with or without modifiers: .31 (679)
 Conjoined NPs and NPs with PPs: .46 (163)
 Sentential NPs: .86 (314)

MODE:

Speech: .62 (732)
 Electronic mail, or written exams: .33 (322)
 Writing (newspapers, articles, books): .21 (95)

AGE OF SPEAKER/WRITER:

19 years old or younger: .69 (17)
 20–39 years old: .56 (306)
 40–59 years old: .44 (180)
 60 years old or older: .24 (31)

PROSODIC STRUCTURE OF THE NP:

Branching: .57 (682)
 Nonbranching: .40 (483)

SEX OF SPEAKER/WRITER:

Male: .47 (670)
 Female: .56 (295)

POSITION OF *as far as* PHRASE IN SENTENCE:

Initial: .54 (550)
 Noninitial: .46 (605)

TABLE 3. VARBRUL weights for significant factors in *as far as* verb absence. Input probability (see Sankoff 1988: 989–90) = 0.56; n's (sample size per factor) in parentheses.

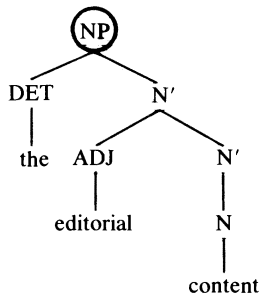


FIGURE 1. Simple Noun Phrase (1 phrasal node, circled).

¹⁰ Feature weights for each of the sentential subtypes are as follows: sentential NPs with gerundial verbs .81 (n = 177); sentential NPs with finite verbs .93 (n = 103); sentential NPs with infinitival verbs .93 (n = 34).

¹¹ From an earlier VARBRUL run, we can report that, when they are considered separately, there is virtually no difference between the feature weights for noun phrases with prepositional phrases (.44, n = 124) and noun phrases with conjoined noun phrases (.47, n = 39).

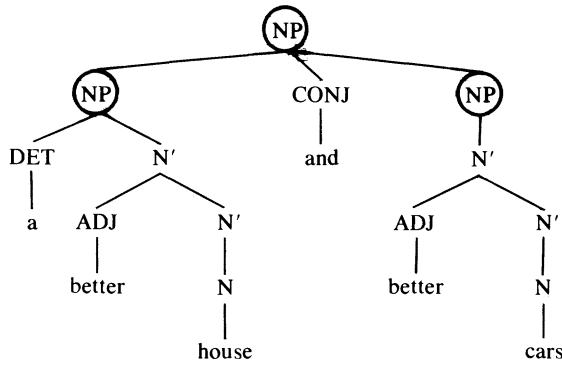


FIGURE 2. Noun Phrase with conjoined Noun Phrases (3 phrasal nodes, circled).

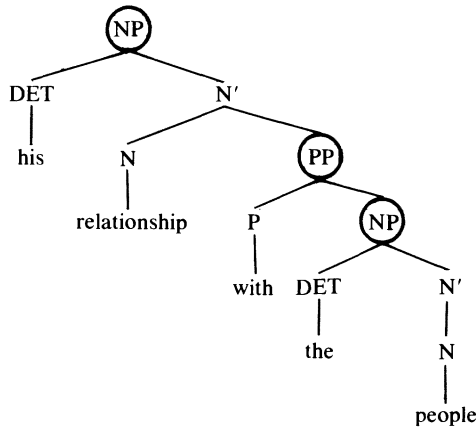


FIGURE 3. Noun Phrase containing a Prepositional Phrase (3 phrasal nodes, circled).

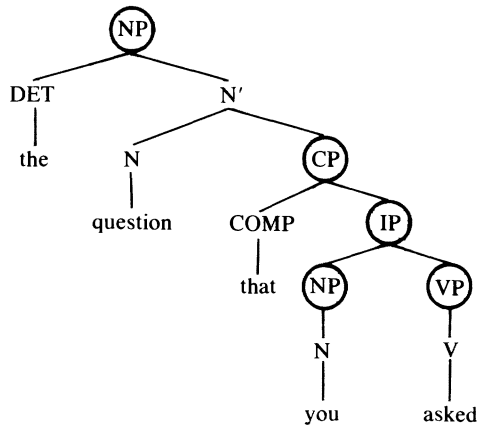


FIGURE 4. Noun Phrase with an embedded Sentence (5 phrasal nodes, circled).

The results for *MODE*, the second most significant factor group, confirm our hypothesis that verb absence is highly favored in natural speech and disfavored in writing.¹² The intermediate electronic mail/exams factor group suggests that the degree of planning involved (Ochs 1979) might be an underlying factor, since electronic mail and in-class exams are both modes in which speed is usually at a premium, and extensive planning and self-correction are reduced, compared to other kinds of writing.

The results for *AGE*, our third most significant factor group, indicate change in apparent time, reinforcing our informal impression that the verbal component in *as far as* constructions is declining in frequency. The youngest age group (19 years old or younger) displays the highest probability of verb absence,¹³ while the oldest age group (60 years old or older) displays the lowest probability of verb absence, and the intermediate age groups are appropriately in between. Significantly, it is only the two younger age groups that have values for this variable over .50 (19 years old or younger = .69, 20–39 yrs = .56), indicating that they favor verb absence.¹⁴ The evidence of change in apparent time (cf. Bailey et al. 1991) which we derive from these age distributions accords with the evidence of change in real time which emerges from a comparison of language samples before and after 1960 and from the explicit observations of usage commentators.

The results for *PROSODIC STRUCTURE* of the NP, our fourth significant factor group, confirm the predictions of Zec & Inkelas 1990 that this phonological factor plays a role in NP weight and related phenomena in English and other languages. While this binary distinction is significant, it does not reveal the more fine-grained patterning which other weight-related measures, like syntactic complexity and number of words, attempt to capture.

With respect to the *SEX* of the speaker, our fifth most significant factor group, females show higher frequencies and probabilities of verb absence than males do; the differences are not huge, but they are regular and statistically significant (63% vs. 50%, feature weights of .56 vs. .47, respectively). Since the omission of the verb in *as far as* constructions is still a change from below—one that is not generally recognized or stigmatized by ordinary users of the language—the lead shown by females in our data accords with the general finding of quantitative studies: ‘In change from below [the level of consciousness], women are

¹² Compare the observation of the editors of *Webster's dictionary of English usage* (1989:127): ‘Most of our citations are from speech, either as recorded off the air, or as reproduced in newspapers and magazines.’

¹³ It should be noted, however, that our sample size for this group is relatively small (17 tokens). Topic-restricting *as far as* constructions are relatively complex, and are not (as far as we have been able to determine) used by young children, so one is essentially restricted to the speech of teenagers for examples. Teenagers, in turn, are relatively unrepresented among the users of the kinds of computer corpora to which we had access, and one limitation of such corpora is that age information of individuals is not indicated (hence the low *n* for this factor group overall—about half of our total sample).

¹⁴ In the logistic model, factors with values greater than .50 favor rule application, those with values under .50 disfavor rule application, and those with values at or around .50 have little effect either way.

most often the innovators' (Labov 1990:215). What makes this case particularly interesting is the fact that it is a SYNTACTIC change in progress, while the generalization articulated by Labov is based entirely on studies of SOUND change. However, further study will be needed to see whether the interactions between sexual differentiation and social/stylistic stratification found in these other studies apply in this case as well (see Labov 1990:220 ff.).

Finally, the results for the POSITION of the *as far as* phrase in the sentence, the final significant factor group, suggest that there may be some validity to earlier suggestions (Faris 1962:238, Cassidy 1985:94) that verb absence in *as far as* constructions might have been influenced by *as for* phrases—which, although they also serve as topic restrictors, are prepositional and never take a following verb.¹⁵ *As for* phrases occur only sentence-initially:

(30) *As for* the organized resistance ... (compare 1 above)

(31) *The only catch *as for* the grad students ... (compare 4 above)

The fact that sentence-initial position favors verb absence more than sentence-final position is what we'd expect if variation had started sentence-initially and on the analogy of *as for*, but the effect, while statistically significant, is not very powerful (.54 vs. .46).

Having presented the variable rule analysis of synchronic verb absence in *as far as* constructions, we will now broaden our perspective in two respects, first by examining constituent weight in other constructions besides *as far as* and then by considering the diachronic development of *as far as* NP *be concerned/go* constructions.

4. CONSTITUENT WEIGHT. Three of the factor groups we used in coding our data—Syntactic Complexity, Number of Words, and Prosodic Structure—were attempts to measure the weight of the NPs that follow *as far as*. Even a glance at a representative set of examples reveals that the verb is more likely to be absent following more complex NPs, and the VARBRUL analyses confirmed that the factor groups of Syntactic Complexity and Prosodic Structure are significant predictors of where the verb will be absent.

There are a number of other phenomena that appear to be sensitive to the size and complexity of constituents. We have begun to examine these in order to see whether the measures we need for the *as far as* construction are useful in accounting for them. Most of these phenomena have to do with the ordering of postverbal constituents within a clause. The overriding generalization covering them is what Behaghel (1909) called 'Das Gesetz der wachsenden Glieder' and Quirk et al. (1972) labeled the 'principle of end-weight'. As these names imply, the generalization in question is that heavier (bigger or more complex) elements normally come later in a clause than lighter (smaller or simpler) ones.

¹⁵ Most of the usage handbooks we consulted distinguish between the use of *as far as* as a preposition, which does not require a following verb (e.g. 'He went as far as the corner drug store'; Bernstein 1977:23), and its use as a conjunction, 'which is required to contain a verb' (ibid.). When they describe the topic-restricting use of *as far as* as prepositional rather than conjunctive (as in Webster's dictionary of English usage, 1989:127–28), this is their way of referring to it as occurring without the customary verb (*be concerned* or *go*).

A particularly nice example illustrating this generalization is the following sentence, taken from Mark Train's *Roughing it*:

- (32) ... at the end of two hours and a half a population of fifteen thousand souls had paid [in coin] [for a fifty pound sack of flour] [a sum equal to forty thousand dollars in greenbacks].

Here, the three bracketed postverbal constituents occur in order of increasing size and complexity, rather than in any order based on their grammatical or semantic functions.

The clearest illustration of end-weight is what is commonly referred to as 'Heavy NP Shift', a construction allowing material such as prepositional phrases or adverbials to intervene between a verb and its direct object if that object is heavy, as in the Twain example above. A few more of the examples we have collected are given in 33–35.¹⁶

- (33) We need people who are able to interpret [historically, ethically, and socially] THE ISSUES OF THE DAY. [Ernest L. Boyer, quoted in *San Jose Mercury News* 6/24/92]
- (34) The grammar makes [available to the speaker] GRAMMATICAL ELEMENTS SUCH AS ZERO ANAPHORA AND DEFINITE NPS. [Frederick J. Newmeyer, in article in *Language*, 68:775 (1992)]
- (35) Mandela made [clear] THE BASIS OF ANC POLICY, WHICH TAKES [INTO CONSIDERATION] ISRAEL'S TIES TO THE WHITE MINORITY SOUTH AFRICAN GOVERNMENT IT IS FIGHTING.¹⁷ [UPI story]

A number of other facts about English constituent order conform to the principle of ordering heavier constituents towards the end of the clause. These include:

(i) The canonical order of constituents in the English verb phrase. Phrase structure rules for the Verb Phrase (1960s vintage) usually looked like this:

- (36) $VP \rightarrow V(NP)(NP)PP^*(S')$

The ordering of the elements on the right side conforms to the principle of end-weight, according to our hierarchy: noun phrases are lighter than prepositional phrases, which are in turn lighter than clauses. Even when a given verb (like *explain*) can take a PP with either an NP or an S', the preferred order of the PP follows the principle of end-weight:

- (37) a. explain the problem to Pat [NP, PP]
b. explain to Pat that it's a problem [PP, S']

(ii) The verb-particle construction. Alternations like *bring up the subject/bring the subject up* are either impossible or dispreferred if the object NP is very light or very heavy. If the object NP is very light, as in 38a, the particle must occur to the right of the object NP, as in 38b. If the object NP is very

¹⁶ In the following examples, square brackets surround the material intervening between the verb and its direct object, and small capitals indicate the heavy NP.

¹⁷ Note that this example involves two occurrences of Heavy NP Shift, one embedded within the other.

heavy, as in 38c, the preferred position of the particle is adjacent to the verb, as in 38d.

- (38) a. *bring up it
 b. bring it up
 c. ??bring the subject we were talking about last night up
 d. bring up the subject we were talking about last night

However, NP weight in this case, as in the case of *as far as* constructions, seems to be a matter of syntactic complexity rather than of mere size. Chomsky (1975:477) made this point in an early discussion of the verb-particle alternation:

'It is interesting to note that it is apparently not the length in words of the object that determines the naturalness of the transformation, but rather, in some sense, its complexity. Thus, "they brought all the leaders of the riot in" seems more natural than "they brought the man I saw in." The latter, though shorter, is more complex ... since it has the infix sentence "I saw."'')

The contrast is even more striking in the following examples, where the object NP is very short (two words) but complex (an embedded question), and the particle is preferred adjacent to the verb (39a):¹⁸

- (39) a. I couldn't figure out what happened.
 b. ?*I couldn't figure what happened out.

(iii) The choice between double object (*give [John] [a book]*) and prepositional (*give [a book] [to John]*) constructions. In a sample of approximately 400 sentences involving *give* (taken from a corpus of UPI stories and the London-Lund corpus), we found that the second NP was as heavy as or heavier than the first NP 99% of the time, irrespective of whether it was preceded by a preposition:

- (40) We must give [the peace negotiations under the UN mediation] [every possible chance to succeed].
 (41) They immediately give [a natural chemical] [to patients who have suffered heart attacks].

Despite the longstanding recognition of the role of weight in constituent ordering, there is no widely accepted characterization of how to measure 'heaviness'. Among the candidates that have been suggested are the following: length in words (Hawkins 1990), number of prosodic phrases (Zec & Inkelas 1990), newness of information (Niv 1992), nonterminal to terminal node ratio (Frazier 1985),¹⁹ domination of an S or PP node (Emonds 1975), and presence of a posthead modifier (Erdmann 1988). Our scale of syntactic complexity subsumes at least the last two of these, since almost all post-head modifiers in English NPs are either Ss or PPs, and our hierarchy classifies NPs containing Ss or PPs as more complex than simple NPs.

¹⁸ Contrast these with the following sentences, whose object NP, like the one in 39a and 39b, consists of two words: here the object NP is syntactically simple and the particle can occur in either position:

- (i) I couldn't figure out the story.
 (ii) I couldn't figure the story out.

¹⁹ Frazier proposes this as a general measure of 'syntactic complexity', rather than something specifically directed at the notion of grammatical weight.

In order to assess the relative significance of alternative weight measures in another variable besides *as far as* verb absence, we have collected over 400 instances of Heavy NP Shift and over 250 control sentences,²⁰ and have coded the noun phrases in question for a number of the properties cited in the previous paragraph. Four of these were factor groups we used in coding our *as far as* data: syntactic complexity (which we also employed in the analysis of the *give* data cited above), number of words, prosodic structure, and spoken vs. written mode. We also coded for definiteness, as a rough surrogate for newness of information (on the assumption that definite NPs typically denote given entities, while indefinites denote new ones—see Gundel et al. 1993).²¹

All five factor groups turned out to be statistically significant for this sample, although the correlation for definiteness was in the opposite direction from what had been predicted. The VARBRUL weights are given in Table 4.

SYNTACTIC COMPLEXITY OF THE NP: ^a	
Noun, with or without modifiers:	.13 (244)
Conjoined NPs and NPs with PPs:	.33 (210)
Sentential NPs (gerundial/nonfinite/finite verbs):	.95 (211)
NUMBER OF WORDS:	
One word:	.27 (50)
Two or three words:	.47 (162)
Four or five words:	.49 (124)
Six words or more:	.68 (87)
MODE:	
Speech:	.69 (115)
Writing (including email):	.46 (550)
PROSODIC STRUCTURE:	
Nonbranching:	.33 (131)
Branching:	.54 (534)
DEFINITENESS OF NP:	
Indefinite article, plural or mass noun:	.39 (303)
Definite article:	.63 (210)
Possessive determiner:	.69 (59)
None of the above:	.44 (93)

TABLE 4. VARBRUL weights for significant factors in Heavy NP Shift. Input probability = .66.

^a Personal pronouns are categorical (i.e., they never appear in shifted position), so they are not included in these data.

As in the case of the *as far as* data, the syntactic complexity hierarchy turned out to be the most significant factor group, the one which accounts for the greatest variance in the data and the one which is selected first in the regression routine of the variable rule program. Number of Words does turn out to be

²⁰ The Heavy NP Shift examples come from a variety of sources, including electronic corpora, books, newspapers, broadcasts, and conversations. The controls, in contrast, are all taken from electronic messages or the London-Lund corpus. Hence, the present numbers should not be taken as definitive. In particular, the frequency of occurrence of Heavy NP Shift is clearly much higher in this sample than it would be in a more representative sample. We are in the early stages of a more systematic study of Heavy NP Shift.

²¹ Of course, other factors affect NP shift. For instance, emphatic stress can make even the

significant with this variable, in contrast with the *as far as* data, but it plays second fiddle to syntactic complexity, and the distinction between two or three and four or five words (.02) is very small. As with the *as far as* data, speech favors NP shift, and branching structures do too (phonological ‘weight’). Definiteness is the fifth (and weakest) of the significant constraints, but, as noted above, its results do not accord with predictions about the effect of the given/new distinction, since the constituents which express ‘new’ information (indefinites) favor NP Shift less than do the ones which express old or given information (definites).

To sum up, a survey of constituent order phenomena and a variable rule analysis of Heavy NP Shift both suggest that syntactic complexity is the single most important element in constituent weight, as we found to be the case with *as far as* verb absence.

5. HISTORICAL PERSPECTIVE. The historical development of the *as far as* NP *be concerned* construction²² is both complex and interesting, requiring initially separate discussions of *concern* and *as far as*. In our investigation of this topic, we conducted electronic searches²³ of the Helsinki Early Modern English corpus, including works dating from the 16th century to the early 18th century, and of more than 40 book-length texts dating from the seventeenth to the mid-twentieth century (mostly novels and philosophical treatises), representing a total of more than 5,000,000 words.²⁴ We also received generous assistance from Douglas Biber, who provided us with data from a computer search of 553 (mostly shorter) texts representing around 900,000 words of prose, including

simplest NP behave like a heavy one, as in the following examples (small capitals indicate heavy stress):

- (i) ... because no one can take from me MY education. (female, 60s)
- (ii) I just don't want to thrash out with Karen ANYTHING. (male, 40s)

Likewise, the informational focus of an utterance tends to exhibit behaviors associated with weight. For example, Hank Greenwald, the radio announcer for the San Francisco Giants, produces sentences like (iii) several times a game.

- (iii) That will bring to the plate Will Clark.

The name in such utterances need not be emphatically stressed, but it always denotes the informational focus.

²² In analyzing and presenting the historical data, we have treated *as far as*, *so far as*, and *insofar as* as equivalent, as they tend to serve the same function. The latter phrases tend to be more common in older texts.

²³ For this purpose we used the Searcher program, developed by the Stanford University office of Library and Information Resources.

²⁴ The writers whose works we searched electronically included Jane Austen (1775–1817), Jeremy Bentham (1748–1832), George Berkeley (1685–1753), Charles Darwin (1809–1882), Arthur Conan Doyle (1859–1930), Ford Madox Ford (1873–1939), A. C. Graham (1958), Georg Wilhelm Hegel (1770–1831, as translated into English, 1910), Thomas Hobbes (1588–1679), David Hume (1711–1776), James Joyce (1882–1941), John Locke (1632–1704), Herman Melville (1819–1891), John Stuart Mill (1806–1873), Henry Sidgwick (1838–1900), Ludwig Wittgenstein (1889–1951, as translated into English, 1958), and Virginia Woolf (1882–1941).

news reportage, letters,²⁵ fiction, and medical prose from 1650 to 1989.²⁶ Some details of the historical picture still remain to be filled in; however, we will sketch what appear to us to be the main outlines and indicate where further research is needed.

The earliest occurrences of *concern* in a topic-restricting function are as gerundials, preceding the noun phrase. As Mendoza-Denton has noted (1994:8), 'Initially, these constructions occur in S-internal position as [NP1 concerning NP2], where 'concerning NP2' serves to restrict the denotation of NP1', as in 42:

- (42) ... if any suyt be [commenced] her after for cause of eny such seysyng
in which any issue *concernyng* this acte shall be taken ...
[1420–1500: Docum Chancery: p. 270]

Later, for pragmatic reasons which are explored in Mendoza-Denton's study, *concerning* is shifted to initial position and functions as an external topic marker. Our earliest examples are from the early and mid 1500s, as in 43 and 44:

- (43) *Concernynge* the gadderynge that is made for the Sayntes, as Thau
ordeyned in the congregacions of Galacia, even do ye also. [1535,
Coverdale Bible, I Corinthians 16.1]
(44) *Concerning* our feare, we have the Apostle that sayth ... [1557, Thomas
More, *Works*: 1344 B1]

Concerning alternates in this function with a small set of other topic-restricting verbs, like *touching* and *regarding* (*OED*, *concerning*, sense 2), and like them, it is sometimes preceded by *as*:

- (45) ... *as concerninge* the lawe, a Pharisaye, and *as concerninge* fer-
ventnes, I persecuted the congregacion, and *as touchinge* the right-
ewesnes which is in the lawe, I was unrebukable. [1535, Tyndale edn.
of the Bible, *Phil.* iii.5–6]
(46) ... *as touching* the law, a Pharisee; *Concerning* zeal, persecuting the
church; *touching* the righteousness which is the law, blameless.
[1611, King James version of the Bible, *Phil.* iii.5–6]

Shifting our attention for the moment to *as far as* phrases themselves, these are not at first attested with *concern* or in a topic-restricting function, but as

²⁵ The examples from personal letters (including the 1803 letters of William Blake and the 1891 letters of Ernest Dowson)—and to some extent the examples from 19th-century and early twentieth-century newspapers—are particularly significant because they provide us with *as far as* tokens from more colloquial registers than formal prose. We know from the evidence of our synchronic data (1960s–1990s) that verbless *as far as* constructions are more common in informal speech (although it should be noted that they do occur in our written synchronic sample, 32% of the time).

²⁶ These texts are part of the ARCHER corpus—a Modern English extension of the Helsinki corpus—constructed by Douglas Biber and Edward Finegan with support from the National Science Foundation. Since 1960 is our cut-off point for the historical phase of this study, we only considered data from their corpus which came from the 1950s or earlier, and in fact the latest topic-restricting *as far as* token which we found in their data is from a 1928 article in *The Times* (Jan. 2, 1928, v. 44, #779, p. 13).

distance markers or extent delimiters, as in the following examples from Chaucer's *Canterbury Tales*:²⁷

(47) He conquered and broght hem in to wo, I seye, *as fer as* man may ride or go. [1375, Monk's Tale, B.3841]

(48) *As fer as* god hath maked see and lond, Nas of so fewe so noble a compaignye. [1385, Knight's Tale, A.2104]

Both of these uses have persisted up to the present day. The diachrony of *as far as* functions may well have been: distance marking < extent marking < topic restricting.²⁸

The first clear-cut attestation we have been able to find of *concerns* in a topic-restricting *as far as* structure is in 1652; it occurs as an active verb, prenominal (preceding the NP):

(49) In sum, he hath the supreme power in all causes, as well ecclesiastical as civil, *as far as concerneth* actions, and words, for those only are known, and may be accused; [1652, Thomas Hobbes, *Leviathan*, p. 546]

In this sentence there is a subtle ambiguity between topic-restricting and extent-marking functions for the *as far as* phrase. Thus, 49 may mean either 'restricting attention to actions and words' or 'to the extent that actions and words are concerned'. It is, presumably, the similarity between these two functions that led to the use of a construction with the superficial form of a comparative as a topic restrictor.

Exx. 50–52 show that the prenominal construction with *concerns* in the active continued up to the 19th century (and on the evidence of Fowler 1926 into the early 20th century), with *concerns* alternating with verbs like *regards* and *touches*, much as topic-restricting *concerning* alternated with *touching* and *regarding*:²⁹

²⁷ These examples are from Kurath & Kuhn's 1953 *Middle English dictionary*, p. 495.

²⁸ There are two complications with this proposed ordering, which will need to be ironed out in future research. One is the fact that examples with the extent-delimiting functions are more numerous in the early period than those with a distance-marking function. Secondly, at least some of the distance-marking examples differ structurally from the ones in 51 and 52, involving a bare NP and no verb (that is, they are prepositional rather than conjunctive; see n. 15 above), as in (i):

(i) The next ebbe we cam down to Lulworthe and ther rode yt owt and the next *as far as* *Abbotsebury* (1570–1640, *Diary of Madox*, p. 136.)

²⁹ One issue which requires further investigation is why some of the verbs in this prenominal topic-restricting *as far as* or *so far as* construction lacked an overt subject, as in 49, 50, and 51. Fowler (under the entry for *concern*, I) notes that the verb in *so far as concerns* or *regards* constructions is impersonal, with an unexpressed subject. But the unexpressed subject, which seems most often to have been *it*, is also evident in some of the extent-delimiting *as far as* examples from the same authors, for instance:

(i) To conclude, the doctrine of the Trinity, *as far as can be gathered* from the Scripture, is in substance this; [1651, Hobbes, *Leviathan*, pt. 3, ch. 42, para. 3/135, p. 486 mp. 522]
 (ii) ... contract which united man and wife in that society, *as far as may consist* with procreation and the bringing up of children ... [1690, Locke, *Two Treatises of Government*, bk. 2, ch. 7. sec. 83, p. 321]

- (50) Even the clergy, as their duty leads them to inculcate morality, may justly be thought, *so far as regards* this world, to have no other useful object of their institution. [1777, David Hume, *Essays*, p. 113]
- (51) I hope, *so far as concerns* my brother, you are misinformed. [1818, Jane Austen, *Northanger Abbey*, p. 204]
- (52) She then spoke of the letter, repeating the whole of its contents *as far as they concerned* George Wickham. [1813, Jane Austen, *Pride and prejudice*, p. 224]

The earliest post-NP occurrence we have found of *be concerned* in a topic-restricting *as far as* construction—the common modern type—comes from the late eighteenth century, in the writings of David Hume.³⁰

- (53) where, in the main, we seem rather superior, *so far as* the present question *is concerned*. [1777, David Hume, *Essays*, pt. 2, E11, go. 397]

The same author furnishes us with our earliest example involving *go*:

- (54) ... the impulses, likewise, become contrary, and the inferior destroys the superior, *as far as* its strength *goes*. [1739–40, David Hume, *Theatre of human nature*, book 1, part 3, §12, paragraph 1/25]

Although we don't find verbless variants with any regularity until another two centuries later, the possibility of omitting the verb might have been facilitated by the discontinuous construction which began to emerge at the end of the eighteenth century—that is, by the possibility that a speaker or writer, after inserting a particularly long or complex NP after *as far as*, might forget or for other reasons omit the closing verb (*go* or *be concerned*) which the construction required.³¹

The topic-restricting *as far as* NP *be concerned/go* construction appears to have flourished from the nineteenth century onwards. We have over a hundred examples from 1800 through 1959 (the cut-off date for our historical corpus), in contrast to fewer than half a dozen from the period before 1800. And the

³⁰ We have come across two possible earlier examples, but close examination of their contexts suggests that their *as far as* phrases served as extent delimiters rather than topic restrictors. The first one, cited in *Webster's dictionary of English usage*, is from Lord Berners's translation of Froissart's *Chronicles* (1523):

- (i) Then the king don Peter answered the prince and said; 'Right dear cousin, *as far as the gold, silver and treasure that I have brought hither, which is not the thirtieth part so much as I have left behind me*, as long as that will endure, I shall give and part therewith to your people.'

The second is in Locke's *Essay concerning human understanding* (1694: 2:337):

- (ii) And that it never is so, will by us, till we have clearer views of the nature of thinking substances, be best resolved into the goodness of God, who *as far as the happiness or misery of any of his sensible creatures is concerned in it*, will not by a fatal error of theirs transfer from one to another that consciousness which draws reward or punishment with it.

³¹ Compare, on this point, Faris (1962:238): 'Sometimes a lengthy or involved sentence pattern following the *as far as* clause causes the user to forget the construction he has committed himself to, or to become confused concerning it. Sometimes sentence length, rhythm, or complexity leaves no entirely satisfactory place to insert the *concerns*.'

nineteenth- and early twentieth-century examples come from a variety of authors and sources, including the following, given in chronological order:

- (55) ... therefore I cannot feel depress'd tho' I know that *as far as* designing and poetry *are concern'd* I am envied in many quarters but I will cram the dogs. [1803, *The letters of William Blake*, pp. 79–83]
- (56) Beyond a competence, it [money] can afford no real satisfaction, *as far as* mere self *is concerned*. [1811, Jane Austen, *Sense and sensibility*, vol. 1, Ch. 17, p. 91]
- (57) *As far as* good intentions *went*, we were BOTH right, [1816, Jane Austen, *Emma*, vol. 1, Ch. 12, p. 99]
- (58) he is as smart as a steel trap and will make as good a foreign minister *so far as* the prudent and successful management of business confided to him *is concerned* as any man yet appointed. [1853, *New York Daily Tribune*, Jan. 8, vol. 12, #3660, p. 6]
- (59) That's my small experience, *so far as* the Massachussetts calendar, and Bowditch's navigator, and Daboll's arithmetic *go*. [1851, Herman Melville, *Moby Dick*, p. 430]
- (60) *As far as* his letters *went*, she claimed the right to open them when she chose. [1915, Ford Madox Ford, *The good soldier*, p. 64]

The earliest instances of VERBLESS topic-restricting *as far as* constructions we have been able to find also occur in the 19th century.³² But they are rare. We have located only these three examples:

- (61) And I will own to you, (I am sure it will be safe), that *so far as* our living with Mr. Churchill at Enscombe \emptyset , it is settled. [1816, Jane Austen, *Emma*, p. 460]
- (62) If I understand your brother, he only means *so far as* our having some thoughts of marrying \emptyset . [1816, Jane Austen, *Emma*, p. 465]
- (63) *So far as* what there may be of a narrative in this book \emptyset ; and indeed, indirectly touching one or two very interesting and curious particulars in the habits of sperm whales, the foregoing chapter, in its earliest part, is as important a one as will be found in this volume; [1851, Herman Melville, *Moby Dick*, p. 200]

It is noteworthy that these verbless nineteenth-century examples all involve very heavy (sentential) noun phrases following *as far as*,³³ suggesting that syn-

³² In this respect, thanks to the electronic searching capabilities of the Searcher program, we have been more successful than the editors of *Webster's dictionary of English usage*, who, in their excellent coverage of *as far as*, noted (1989:128) that, 'While we have by no means exhausted the possibilities, we have not yet found a 19th century example, even in that most reliable repository of the informal language, letters.'

³³ We did find one additional possible example, in which the NP is not heavy:

(i) No government by a democracy or a numerous aristocracy, ... ever did or could rise above mediocrity, except *in so far as* the sovereign \emptyset . [1859, John Stuart Mill, *On Liberty*, p. 269]

Upon examination of the context, however, it seemed to us that this use of *as far as* did not function as a topic restrictor.

tactic complexity may have been a factor in this variation since its inception. We have five additional verbless examples from the 'early' twentieth century (1926 through 1959), and these all involve relatively heavy NPs; one NP is conjoined, and the others are sentential NPs (gerundials):

- (64) *As far as* getting the money he asked for \emptyset , Mr Churchill had little difficulty. [Cited without date or source in Fowler 1926, entry for *far*]
- (65) The result was that the men practically met with defeat *so far as* obtaining a definite pledge in regard to their demands \emptyset .³⁴ [Cited without date or source in Fowler 1926, entry for *far*]
- (66) The cabin ... was in perfect condition *so far as* frame and covering \emptyset until 1868. [1939, Henry Seidel Canby, *Thoreau*, cited in Faris 1962]
- (67) *As far as* disturbing a writer at his work \emptyset , this hotel bedroom might just as well have been filled with howling monkeys this past week, for all the work I've been able to get done. [1942, E. B. White, letter, Feb. 8, cited in *Webster's dictionary of English usage*, p. 127]
- (68) The Bikini was originally called the 'atome' by M. Heim, and the sky was the limit *so far as* advertising it \emptyset . [1959, *New York Times*, Feb. 20, cited in Bernstein 1962]

Overall, our diachronic corpus includes approximately 110 occurrences of topic-restricting *as far as*.³⁵ Among those examples, the verbless variant is far less frequent in historical sources than in contemporary ones, comprising about 6% (compared with 32% of our synchronic written tokens). Most of the historical authors—Hume, Bentham, Darwin, Sidgwick, Doyle, and Woolf, among others—never used the verbless variant, even in very complex or heavy constructions, as in 69–71 below.³⁶

- (69) *As far as* the mere enunciation of the principle of natural selection *is concerned*, it is quite immaterial whether or not Professor Owen preceded me ... [1872, Charles Darwin, *The origin of species*, p. 59]
- (70) such an understanding is ordinarily attained with sufficient clearness, *as far as* the apprehension of express words or signs *is concerned*. [1890, Henry Sidgwick, *Methods of ethics*, bk. 3, ch. 6, sec. 9, para. 1/3, p. 308]
- (71) Well it was, *as far as* anybody that could be of any good *goes*. [1892, Arthur Conan Doyle, *Being a reprint from the reminiscences of John H. Watson, MD, late of the Army Medical Department*, p. 35]

The fact that verb absence is so much less frequent in the pre-1960 period, even in favorable 'heavy' environments, while it is so much more common in the

³⁴ Fowler put the omission point before *obtaining* ('so far as concerns obtaining'), but it could equally well be put after *demands*, as we did here.

³⁵ As with the synchronic data, *as far as* tokens in which the NP consisted of personal pronouns or expressed point of view were excluded; so were cases in which *as far as* was not a topic delimiter, but occurred with other main verbs with a function like 'to the extent that', e.g. '*as far as* matter and human force *permit*' (Thomas Hobbes, *Leviathan*, 1651, pt. 4, p. 664). Also excluded were cases in which *concerns* or *regards* was active and prenominal, as in 49–52.

³⁶ See also examples 58 and 59 above, which also contain their verbal codas despite the fact that their NPs are heavy.

synchronic (post-1959) data, suggests that we are indeed witnessing a syntactic change in progress. This conclusion is supported by the fact that it is only from the 1960s onward that dictionaries and usage handbooks comment regularly on this feature (cf. Faris 1962:236, *Webster's dictionary of English usage* 1989:127), by the fact that younger respondents to our questionnaire (under 30 years old) accepted the verbless tokens more readily than the older respondents did, and by the significant correlation in our synchronic data between verblessness and age of speaker/writer.³⁷ Although it is possible that verbless *as far as* was being used in colloquial speech more widely before the 1960s than the written records indicate—as in all historical studies, oral and colloquial registers are among the most difficult to access—the available evidence suggests that the verbless variant has been increasing steadily in frequency since then and that it has also extended its range of syntactic environments to include simple NPs (see exx. 3 and 12 above) since then.

Overall, our diachronic and synchronic data fit very well with the principles and predictions of Baileyan wave theory (Bailey 1973:55–56, 67 ff.), according to which linguistic change begins variably in a very limited environment and over time spreads in waves to new environments while increasing in frequency and moving towards completion in its original environment(s). In fact, the spread of verb absence in topic-restricting *as far as* constructions can be readily depicted in terms of the simplest form of Bailey's wave model, shown in Figure

³⁷ Andrew Garrett (personal communication, 1993) has suggested a different interpretation of our data. Noting that verbless *as far as* phrases denoting distance have existed throughout the history of English, Garrett proposes that the change in question is semantic, not syntactic. Specifically, he speculates that there was no stage when a topic-restricting *as far as* NP Verb construction existed but a verbless topic-restricting *as far as* NP construction did not. On his account, both topic-restricting constructions (with and without the verb) evolved from the extent-delimiting function at the same time, but the *as far as* NP construction was initially restricted to cases semantically compatible with the extent-delimiting interpretation—that is, to NPs with verblike semantics (largely gerundials). According to this story, the recent change to which the usage commentators are reacting is not the loss of the verb in the *as far as* construction, but the extension of the verbless construction to a broader semantic class of NPs. On Garrett's account, the presence or absence of a verb is not influenced by the syntactic complexity of the NP following *as far as*, but rather by whether it denotes an event or has verbal aspectual properties.

This is an interesting hypothesis, and one which could benefit from further research, but we have so far found no evidence to support it. On the one hand, *as far as* constructions with *be concerned* and *go* are attested about half a century earlier than their verbless counterparts (see exx. 57, 58, and 64 above). Although this could be due to the accidental nonattestation of the zero construction during the intervening half century, it is striking that the latter construction does not appear with any regularity until the latter half of the 20th century, while examples with the verbal coda are plentiful from the 19th century on.

In order to provide an alternative test of Garrett's hypothesis, we also recoded our synchronic data, dividing the NPs containing VPs into endocentric and exocentric, that is, essentially, NPs with a head noun and a relative clause versus gerunds or embedded questions. On Garrett's theory, we would expect a higher rate of verblessness with exocentric NPs following *as far as*, since a relative clause modifier would not give an NP the semantics Garrett links with the verbless construction. This prediction was not confirmed: 96% of the endocentric NPs containing VPs were followed by \emptyset , whereas only 92% of the exocentric ones were. The VARBRUL weights were .91 and .87, respectively.

5, with the relative times and environments indicated therein. And Bailey's finer prediction that 'the operation of a rule will be proportionately greater in earlier or heavier weighted environments than in later or lighter-weighted ones' (Bailey 1973:79, Principle 19) holds too, since synchronic verb absence is most frequent (almost categorical) in the sentential environment where the diachronic evidence shows the change to have started, less frequent in the prepositional and conjunctive NP environments which seem to have been affected next, and least frequent in the simple NP environment which represents its most recent threshold.

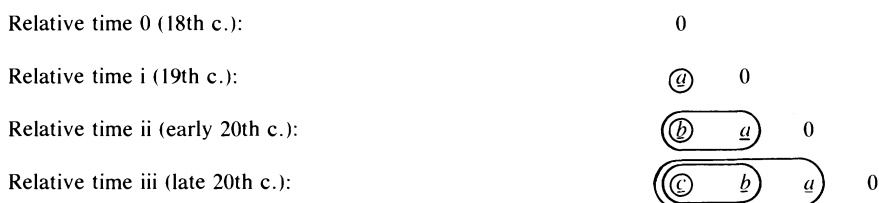


FIGURE 5. Spread of the rule deleting the verbal coda in topic restricting *as far as* constructions, depicted in terms of the Baileyan wave model. (Adapted from Fig. 2 [Bailey 1973:68], in which, as Bailey's caption notes, 'The letters represent successively later, or lighter-weighted, environments in which the rule operates.' In our case, *a*, the earliest environment affected by the rule, refers to sentential NPs, as in ex. 61; *b*, the next environment affected by the rule, is prepositional or conjoined NPs, as in 66; and *c*, the most recent environment affected by the rule, includes simple NPs, as in 3.)

6. SUMMARY AND CONCLUSION. We began this investigation by noticing that the verbal coda (*go/be concerned*) in *as far as* constructions was variably omitted in everyday speech. Suspecting that the omission might be increasing, and conscious of the rarity with which syntactic variation and change in progress are studied in linguistics, we decided to study this variable in depth. We consulted usage dictionaries and surveyed the intuitions of nearly 200 speakers of English, and also assembled for further analysis a data pool of over 1200 actual examples, culled from participant observation, media monitoring, and searches of electronic corpora.

Although the authors and editors of the usage handbooks felt, as we did, that the verbless *as far as* was becoming more frequent, they were virtually unanimous in condemning it. The survey respondents were not quite as categorical (or colorful) in rejecting this usage, but they generally preferred sentences in which the verbal coda was intact.

Analysis of the *as far as* corpus revealed one subtype in which the verbal coda was never omitted—the so called 'perspective' cases, including those in which the NP was a personal pronoun ('*As far as I'm concerned/Ø*'). Variable rule analysis of the remaining examples, all topic-restricting, revealed that verb absence was not significantly affected by the number of words in the NP following *as far as*, but that it was significantly favored by a combination of internal and external factors: with syntactically more complex NPs, in spoken usage,

by younger speakers, in prosodically branching NP structures, by women, and in sentence-initial position.

When we considered other syntactic constructions involving constituent weight, the syntactic complexity measure which was the most significant constraint on *as far as* verb absence also appeared to be relevant, and when we did a variable rule analysis of Heavy NP Shift, it turned out to be the most significant constraint.

Our diachronic survey—facilitated by dictionary and electronic searches of materials from the 1300s through the 1950s—indicated that (*as*) *concerning* was used as an external topic marker earlier (16th c. on) than *as far as* was, and that the distance-marking and extent-delimiting uses of *as far as* (14th c. on) also preceded its use as a topic restrictor (first attested in the 17th c.). Moreover, in the earliest attestations of topic-restricting *as far as*, the verb is active and precedes the NP (e.g. *as far as concerneth actions*, 1652); attestations with the discontinuous post-NP verb don't emerge until the 18th century (e.g. *so far as the present question is concerned*, 1777). From the available evidence, the *as far as* NP *be concerned/go* construction increased steadily in frequency from the 19th century on, but the omission of the verbal coda remained relatively rare and syntactically restricted until the 1960s. We have only eight examples from 1816 through 1959, all but one of these involving maximally heavy (sentential) NPs, and *as far as* phrases with simple NPs occur without verbal codas only in the modern (post-1959) period. These developments concur with the predictions of a Baileyan wave model.

Beyond the substantive findings which it has yielded about variation and change in this variable, we believe that our research on topic-restricting *as far as* constructions has larger implications for the study of syntax, sociolinguistic variation, and the field of linguistics as a whole.

For syntax, this study provides fresh evidence of a point made cogently by Labov (1975) some twenty years ago, but still neglected by many syntacticians: that, useful though introspective judgments about language (especially syntax) can be, they are sometimes highly unstable, and sharply at variance with attested behavior.³⁸ We found substantial variation among respondents for every one of our survey sentences. For example, our highest ranked sentence, #6 (*They are still very much alive, as far as the divisional race goes*), was judged 'completely unacceptable' by 10 respondents; and sentence #20 (*As far as how he got shot Ø, we don't know yet*) was judged 'completely acceptable' by 53 of the respondents, 'probably acceptable' by 50, 'probably unacceptable' by 37, and 'completely unacceptable' by 40. Moreover, while verbless *as far as* sentences were dispreferred by most respondents, they occur more than half of the time in the naturalistic corpus we collected, even from highly educated speakers and in writing. Overall, while some consistent patterns did emerge

³⁸ As Labov (1975:34–35) notes, '... we now have ample evidence that introspective reports about positive *anymore* have a very weak relation to what speakers actually say. Since 1972 we have collected 12 cases of speakers who used positive *anymore* quite freely though their introspective judgments were entirely negative.' For examples involving other variables, see Bright 1975.

from the introspective judgments of specific subgroups of respondents (younger versus older people, for instance, or linguists versus nonlinguists), they were neither robust nor in accord with attested usage, and the judgments of individual speakers were even less reliable. Now that a book-length examination of the use of introspective data in linguistics is forthcoming—Schütze 1995—the time may be ripe for syntacticians to face up to the limitations of such data and to take usage data seriously as a complementary source of information about people's grammatical competence.

The second implication of our study for syntax is that it may be fruitful to consider syntactic complexity as a central measure of constituent weight, a concept repeatedly invoked by syntacticians, but rarely—and certainly not uniformly—defined. Syntactic complexity, measured in terms of the number of maximal projections, turned out to provide the single best approximation to the notion of grammatical weight, both for *as far as* verb absence (a variable not previously considered in discussions of constituent weight) and, tentatively, for Heavy NP Shift (an old variable in the constituent-weight literature). Moreover, our findings about the value of this weight measure emerged from the quantitative analysis of naturalistic data (including VARBRUL)—a method which syntacticians might find useful as a supplement to their usual qualitative use of introspection and elicitation.

For sociolinguistic variation, this study will help to satisfy the need for studies of syntactic variation first noted by Sankoff (1973) some twenty years ago, but still relatively unfulfilled. Variationist studies of grammaticalization and other kinds of syntactic change (for instance, Sankoff & Brown 1976 and Kroch 1989) are relatively rare. Studies of currently ongoing syntactic change are rarer still, but invaluable for the rich details they offer on linguistic and social embedding. The current study, along with that of Romaine & Lange (1991), falls within this last category.

There are methodological and theoretical implications of this study for variationists. First, contrary to the fears of Lavandera (1978), it is both feasible and enlightening to extend the concept of the linguistic variable to levels 'above' phonology, and to employ VARBRUL in its analysis. Moreover, the isolation of significant internal constraints on this syntactic variable—syntactic complexity and prosodic structure of the NP and position of the *as far as* phrase in the sentence—does not obscure our view of simultaneous external constraints (mode, age, and sex).

A second point which our study drives home is that, in extending the study of variation and change to syntax, we cannot depend exclusively on sociolinguistic interviews for data, as is common in phonological studies. The relative rarity of many syntactic variables requires that interview data be supplemented with tokens collected through such techniques as participant observation, media monitoring, and searches of electronic corpora (cf. Aijmer & Altenberg 1991).

Thirdly, our study casts some light on larger theoretical generalizations about the nature of sociolinguistic variation and change. Labov's 1990 finding that women lead in linguistic change—formulated almost entirely on the evidence of studies of sound change in progress—appears from this study and that of

Romaine & Lange 1991 to hold true for syntactic change as well, although the role of social class or category and its intersection with sex requires further study in both cases (cf. Eckert 1989).³⁹ However, our data do not support Kroch's 1989 critique of the sequential actuation scenario in Baileyan wave theory—specifically, Bailey's assumption that change 'might occur sequentially, with the new form appearing at the start in the most favoring context and then successively in less and less favorable contexts' (Kroch, p. 205). Kroch says that Bailey provides no empirical support for his general assumption. He goes on to argue, on the basis of four case studies, that—at least in syntax—'change seems to proceed at the same rate in all contexts' and postulates the following principle: 'contexts change together because they are merely surface manifestations of a single underlying change in grammar' (Kroch, p. 199). We do not have enough attestations of verbless topic-restricting *as far as* in earlier periods to document the successive developments in detail, but the competing 'simultaneous actuation' scenario which Kroch sketches for the development of periphrastic *do* in late Middle English—with change beginning simultaneously in all contexts—does not seem to apply to our variable. As noted above, the extension of verb absence to topic-restricting *as far as* phrases with simple NPs is absolutely unattested until the late 20th century. This issue, like the role of sex and social class in syntactic change, will require further investigation, with the same and other syntactic variables. For the present, it can at least be said that neither Bailey's prediction nor Kroch's prediction is universally valid.

Finally, for linguistics as a whole, this exploration on the boundaries of sociolinguistic variation, corpus linguistics, historical linguistics, and syntax demonstrates the value of bridging the gaps between subfields. We believe that the field could benefit from more such collaboration.

REFERENCES

- ADAMSON, H. D. 1992. Social and processing constraints on relative clauses. *American Speech* 67.123–33.
- AIJMER, KARIN, and BENGT ALTENBERG (eds.) 1991. *English corpus linguistics: Studies in honor of Jan Svartvik*. London & New York: Longman.
- BAILEY, CHARLES-JAMES N. 1973. *Variation and linguistic theory*. Washington, DC: Center for Applied Linguistics.
- BAILEY, GUY, and NATALIE MAYNOR. 1989. The divergence controversy. *American Speech* 64.12–39.
- BAILEY, GUY; TOM WIKLE; JAN TILLERY; and LORI SAND. 1991. The apparent time construct. *Language Variation and Change* 3.241–64.

³⁹ Labov's finding applies to changes both above and below the level of consciousness, but it is based primarily on quantitative studies of changes in English (although French, Spanish, Cantonese, and Sheshatsiu are also represented), and it is qualified by its relations to such other factors as social class or group, style, and stage of change. Moreover, Labov reports (1990:214–18) a small number of exceptions, both for changes above the level of consciousness—in the case of language shifts tied to economic factors, for instance the acquisition of English, Tok Pisin, and Hiri Motu by more men than women in Papua New Guinea—and for changes below the level of consciousness, e.g. the unrounding of (o) in Norwich English, led by men.

- BEHAGHEL, OTTO. 1909. Beziehungen zwischen Umfang und Reihenfolge von Satzgliedern. *Indogermanische Forschungen* 25.110–42.
- BERNSTEIN, THEODORE. 1962. *More language that needs watching*. Manhasset, NY: Channel.
- . 1977. *Dos, don'ts and maybes of English usage*. New York: Times Books.
- BRIGHT, WILLIAM. 1975. Things people know about language that ain't so. *Folia Slavica* 3.333–42.
- CASSIDY, FREDERIC G. 1985. *Dictionary of American regional English*, vol. 1. Cambridge, MA: Belknap Press of Harvard University Press.
- CHOMSKY, NOAM. 1975. *The logical structure of linguistic theory*. Chicago: University of Chicago Press.
- ECKERT, PENELOPE. 1989. The whole woman: Sex and gender differences in variation. *Language Variation and Change* 1.245–67.
- EMONDS, JOSEPH E. 1975. *A transformational approach to English syntax*. New York: Academic Press.
- ERDMANN, PETER. 1988. On the principle of 'weight' in English. In *On language, rhetorica phonologica syntactica: A Festschrift for Robert P. Stockwell from his friends and colleagues*, ed. by Caroline Duncan-Rose and Theo Vennemann, 325–39. London: Routledge.
- FARIS, PAUL. 1962. 'As far as halfbacks, we're all right'. *American Speech* 37.236–38.
- FASOLD, RALPH W.; WILLIAM LABOV; FAY BOYD VAUGHN-COOKE; GUY BAILEY; WALT WOLFRAM; ARTHUR K. SPEARS; and JOHN R. RICKFORD. 1987. Are black and white vernaculars diverging? *American Speech* 62.3–80.
- FOWLER, HENRY WATSON. 1926. *A dictionary of modern English usage*. Oxford: Clarendon Press.
- FRAZIER, LYN. 1985. Syntactic complexity. In *Syntactic theory and how people parse sentences*, ed. by David Dowty, Lauri Karttunen, and Arnold M. Zwicky, 129–89. Cambridge: Cambridge University Press.
- GUNDEL, JEANETTE K.; NANCY HEDBERG; and RON ZACHARSKI. 1993. Cognitive status and the form of referring expressions in discourse. *Lg.* 69.274–307.
- Harper dictionary of contemporary usage*, ed. by WILLIAM MORRIS and MARY MORRIS. 1985. New York: Harper and Row.
- HAWKINS, JOHN A. 1990. A parsing theory of word order universals. *Linguistic Inquiry* 21.223–62.
- KROCH, ANTHONY S. 1989. Reflexes of grammar in patterns of language change. *Language Variation and Change* 1.199–244.
- KURATH, HANS, and SHERMAN M. KUHN (eds.) 1953. *Middle English Dictionary*, part F.1. Ann Arbor: University of Michigan Press.
- LABOV, WILLIAM. 1972. *Sociolinguistic patterns*. Philadelphia: University of Pennsylvania Press.
- . 1975. *What is a linguistic fact?* Lisse: Peter de Ridder Press.
- . 1990. The intersection of sex and social class in the course of linguistic change. *Language Variation and Change* 2.205–54.
- , and WENDELL A. HARRIS. 1986. De facto segregation of black and white vernaculars. In *Diversity and diachrony*, ed. by David Sankoff, 1–24. Amsterdam & Philadelphia: Benjamins.
- LAVANDERA, BEATRIZ. 1978. Where does the sociolinguistic variable stop? *Language in Society* 7.171–82.
- MENDOZA-DENTON, NORMA. 1994. Concerning NP constructions. Paper presented at the Grammaticalization Workshop held at Stanford University and the University of California, Berkeley, March 12–13, 1994.
- NIV, MICHAEL. 1992. Right association revisited. Paper presented at the annual meeting of the Association for Computational Linguistics, Newark, Delaware.
- OCHS, ELINOR. 1979. Planned and unplanned discourse. In *Discourse and syntax: Syntax and semantics*, vol. 12, ed. by Talmy Givón, 51–80. New York: Academic Press.

- POSTAL, PAUL. 1974. *On raising*. Cambridge, MA: MIT Press.
- QUIRK, RANDOLPH; SIDNEY GREENBAUM; GEOFFREY LEECH; and JAN SVARTVIK. 1972. *A grammar of contemporary English*. London: Longman.
- RICKFORD, JOHN R. 1975. Carrying the new wave into syntax: The case of Black English BIN. *Analyzing variation in language*, ed. by Ralph Fasold and Roger R. Shuy, 162–83. Washington, DC: Georgetown University Press.
- . 1992. Grammatical variation and divergence in Vernacular Black English. *Internal and external factors in syntactic change*, ed. by Marinel Gerritsen and Dieter Stein, 175–200. Berlin & New York: Mouton.
- ROMAINE, SUZANNE. 1984. On the problem of syntactic variation and pragmatic meaning in sociolinguistic theory. *Folia Linguistica* 18.409–37.
- , and DEBORAH LANGE. 1991. The use of *like* as a marker of reported speech and thought: A case of grammaticalization in progress. *American Speech* 66.3.227–79.
- SANKOFF, DAVID. 1988. Variable rules. *Sociolinguistics: An international handbook of the science of language and society*, ed. by Ulrich Ammon, Norbert Dittmar, and Klaus J. Mattheier, 984–97. Berlin: Walter de Gruyter.
- SANKOFF, GILLIAN. 1973. Above and beyond phonology in variable rules. *New ways of analyzing variation in English*, 44–61. Washington, DC: Georgetown University Press.
- , and PENELOPE BROWN. 1976. The origins of syntax in discourse: A case study of Tok Pisin relatives. *Lg.* 52.631–66.
- SCHÜTZE, CARSON T. 1995. *Grammaticality judgements and linguistic methodology*. Chicago: University of Chicago Press, to appear.
- Webster's dictionary of English usage, ed. by E. WARD GILMAN. 1989. Springfield, Massachusetts: Merriam-Webster.
- WEINER, E. JUDITH, and WILLIAM LABOV. 1983. Constraints on the agentless passive. *Journal of Linguistics* 19.29–58.
- WEINREICH, URIEL; WILLIAM LABOV; and MARVIN I. HERZOG. 1968. Empirical foundations for a theory of language change. *Directions for historical linguistics: A symposium*, ed. by Winfred P. Lehmann and Yakov Malkiel, 97–195. Austin: University of Texas Press.
- WINFORD, DONALD. 1993. Variability in the use of perfect *have* in Trinidadian English. *Language Variation and Change* 5.141–87.
- ZEC, DRAGA, and SHARON INKELAS. 1990. Prosodically constrained syntax. *The phonology-syntax connection*, ed. by Sharon Inkelas and Draga Zec, 365–78. Chicago: University of Chicago Press.

Department of Linguistics
Stanford University
Stanford, CA 94305-2150

[Received 31 August 1993;
revision received 30 March 1994;
accepted 19 May 1994.]