# 'Bad' Grammar and the Language Faculty 

J.K. Chambers

University of Toronto, jack.chambers@utoronto.ca

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#### Abstract

Usage variables usually involve superficial aspects of linguistic structure, but those that are stable and persistent reach deeper into the language faculty. Two grammatical niceties of standard English that are frequently botched even by people who are nominally standard-bearers are Subject-Verb Agreement with dummy subjects (as in There's twelve months in a year for There are twelve months...) and Accusative Case Concord with Conjoined Pronouns (as in Between John and II, we won three games for Between John and me...). Unlike normal variation, the nonstandard variants are not seen as stylistic choices but as mistakes. These usage variables persist not because of failings of the education system but because of the futility of its expectations. The prescribed grammatical forms invoke scope mechanisms that tax human processing capabilities in specific structural configurations. Grammars prescribe forms that the language faculty cannot reliably produce in the multiple tasks involved in ordinary conversation. The discovery of cognitive limitations that override grammatical processing qualifies the strong version of Chomsky's concept of the Language Faculty as an autonomous 'mental organ', and the concept of grammatical processing as hierarchical rather than linear. The persistence of these unstable constructions as grammatical prescriptions reinforces key concepts in variation theory, especially Kroch's concept of standard grammars as ideologically-motivated social constructs.


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## 1 Persistent and Stable Usage Problems

Usage variables have held little interest for sociolinguists. They typically originate from either prescriptivism or resistance to change, both of which are anathema to sociolinguists. Ain't, for instance, served a useful purpose as the syncretic contraction for isn't, aren't and the cumbersome amn't until arbiters decided it was crude and, in a rare victory for prescriptivism, proscribed it from all standard varieties of English. The noun quote, for instance, is condemned by traditionalists as a vulgar shortcut for quotation, the venerable Latinate nominalization, but they complain in vain; quote has joined the long list of unmarked nouns from homophonous verbs along with run, smoke, turn, walk, warn and dozens of others. Polysyllabic quotation is obsolescent if not obsolete, traditionalists be damned.

I am interested in usage variables of a different order. The variants that come from these usage variables are neither eliminable (like ain't for isn't) nor incoming (like quote for quotation). On the contrary, they are persistent and stable. They persist as far back as the historical record goes regardless of stigma or criticism. Education can reduce the frequency of the nonstandard variants but it cannot eliminate them. They are stable because they do not progress from minority variants to standard ones. They are not stylistic variants; they are 'mistakes.'

What makes them persistent and stable, as I will show, is that they pose processing problems. They will not go away because they challenge our production mechanism, and as a result everyone produces the nonstandard variants sometimes. In other words, everyone gets them 'wrong' sometimes. Coming to grips with them may provide a window on the language faculty, the system of rules and representations that accounts for language perception and production. Moreover, their social stature reinforces key concepts in variation theory, especially the role of standard grammars as ideologically-motivated social constructs.

## 2 Two Usage Problems

I will consider two usage variables that are persistent and stable: (2.1) agreement breakdown with expletive there and (2.2) concord breakdown with compound objects of prepositions.

### 2.1 Agreement breakdown with expletive there

In each pair in (1) and (2), one sentence is deemed to be correct and the other incorrect.
(1) a. There're two men at the door.
b. *There's two men at the door.
(2) a. We are well aware that there are often unforeseeable discoveries coming out of pure research.
b. *We are well aware that there is often unforeseeable discoveries coming out of pure research.

The correct sentence is (a) in both cases because in (a) the plural verb agrees in number with the subject. Identifying the correct sentence in citation forms like these is something that no educated person finds challenging. That makes it all the more puzzling, then, that even educated people find agreement impossible to maintain categorically when speaking and often when writing. That is, even educated people sometimes find themselves using non-agreeing variants like the (b) sentences.

The frequency of the non-agreeing variants only became obvious with the advent of sociolinguistic studies of real speech. Figure 1, for instance, shows that there's occurs in sentences like (1b) for women and men in Toronto more than 70 percent of the time (Tagliamonte in progress).

### 2.2 Concord Breakdown with Compound Objects of Prepositions

Again, one of the paired sentences in (3) is deemed to be correct and the other incorrect.
(3) a. *With you and I on the same team, we should have no trouble winning the tournament. b. With you and me on the same team, we should have no trouble winning the tournament.


Figure 1: Percentage of there's (plural) by Toronto females and males in eight age groups (Tagliamonte in progress).

The correct sentence is (3b), in which the accusative pronoun me occurs as object of the preposition with rather than the nominative pronoun $I$. The extent of this usage problem also became clear when sociolinguists began studying real speech.

Figure 2 shows the frequency of concord breakdown in six Canadian regions from survey data provided by the Dialect Topography of Canada. The subjects in those regions are divided according to education (Elementary vs. University), and the results displayed thus provide a graphic illustration of two relevant observations: (1) education plays a role in 'correcting' concord breakdowns, and (2) education fails to eliminate it completely (for more detail, see Chambers 2009a).


Figure 2: Percentage of concord breakdown in six Canadian regions (New Brunswick, Quebec City, Eastern Townships, Montreal, Ottawa Valley, Golden Horseshoe; All = average) according to education of respondents.

## 3 Processing at the Limits

### 3.1 Look-Ahead Mechanism with Expletive there

The rule for subject-verb agreement in English requires the verb to agree with its subject in number. It is straightforward and readily applied in most constructions. Where it is not readily applied, in agreement mismatches like (1) and (2) above, problems arise because the subject NP slot is filled with expletive there, a featureless place-holder. The subject NP with which the verb should agree in number is displaced so that it follows the verb itself. In order to mark agreement correctly, speakers must anticipate the relevant grammatical attribute (number in contemporary English because person and gender no longer figure) of a constituent that is not yet explicit in the linear order of the utterance.

Verb agreement thus depends upon a look-ahead mechanism for registering grammatical properties of a constituent that is not yet in short-term memory. The frequent failure of English speakers (and sometimes writers) to get agreement right with expletive there suggests that lookahead mechanisms challenge the language faculty to its limits.

If indeed the language faculty is implicated, then it cannot merely be a problem for English. Look-ahead mechanisms must cause similar problems for all languages. It turns out that there is copious evidence for this. I have discussed the evidence elsewhere (Chambers 2009b), and will here merely list three main findings:

1. Languages in which the expletive subject is homophonous with a non-expletive pronoun always avoid look-ahead mechanisms by marking agreement as if the expletive were the pronoun.
2. Languages that require agreement with postverbal subjects make grammatical compromises by agreeing only with the left conjunct, that is, the most proximate constituent, in conjoined subjects.
3. VS languages, in which Verb-Subject agreement would necessarily require a look-ahead mechanism, typically have no Subject-Verb agreement.

On this last point, Welsh, a canonical VS language, uses an invariant verb form (third person singular, as it happens) regardless of the number of the following subject NP, as in canodd Sion 'Sean sang' and canodd y plant 'the children sang.'

In English, post-verbal subjects are rare, and mainly occur with expletive there. The rarity presumably makes them too inconspicuous for special grammatical dispensation, and as a result the grammar makes no exception for them. The verb is expected to agree with the subject in number even when the subject occurs in exotic post-verbal position. The processing challenge leads to breakdowns like There's two men... for standard There're two men... Because they are not correctable by any amount of prescriptive grilling, the result is stable and persistent 'bad' grammar.

### 3.2 Proximity Problems with Conjoined Objects in Prepositional Phrases

In sentences like (3), with is a preposition, and prepositions take objects. The concord rule requires that nominals in the scope of prepositions must be accusatives. The syntactic context that results in correct variants such as between you and me and 'bad' grammar between you and I is highly restricted. English has almost no case-marking, so that accusatives are differentiated from nominatives inflectionally in only a few forms. Those forms are pronouns, and of them only five (of eight) have different forms for nominative and accusative: I/me, she/her, he/him, we/us and they/them. But the concord breakdowns are even more restricted: they occur only when one of these pronominal objects is compounded, and furthermore only when it is the pronoun in the second (or later) conjunct. Concord variants never occur with single constituents (in any dialect), as in *With I on your team.... And they never occur (in any dialect) on the first conjunct, as in *She gave three dollars to I and Mary.

The usage variants occur in the remaining context, when the conjoined constituent is one of the five case-marked pronouns and it shows up as the second (or later) conjoined object of a preposition. Given all these restrictions, it is clearly the distance between the preposition and the pronoun in its scope that causes the processing problems.

Once again, if it is a processing problem then it cannot be a problem for English alone. And again, there is evidence from other languages for the same phenomenon. One of them, listed as 2. above (and illustrated from several languages in Chambers 2009b), is a compromise whereby grammars mark agreement only with the first conjunct and ignore the others. English, presumably because the problematic context is so restricted, allows no such compromise, and as a result usage variants occur. One hears Between Mary and me, we own three Hondas and also the 'incorrect' variant Between Mary and I, we own three Hondas. The result is, again, stable and persistent 'bad' grammar.

## 4 Cognition and Grammar

Apart from these specific constructions, the rules themselves are in most contexts easily applied and automatic. Verbs agree with their subjects in number. Objects take the accusative form. Where the rules fail-where even well-intentioned users apply them inconsistently-they may give us a glimpse of the workings of the language faculty.

The two processing problems are not exactly the same. There expletives require a look-ahead mechanism to code properties of a constituent that has not yet been uttered. Accusative concord requires marking a constituent that is in the scope of a preposition but is distant from it (or not proximate to it). Both problems implicate short-term memory. And both show memory limitations impinging upon grammatical form.

Evidence that memory limitations can override grammatical constraints comes from other observations as well. The phenomenon of "proximity concord" denotes agreement that gets marked on the nearest constituent regardless of grammatical structure (Quirk et al. 1972:177). The term is usually applied to mismatches that result from heavy subject NPs, in sentences like The quality of the talks were uniformly high, where the verb agrees with proximate plural talks instead of its singular subject quality (this example and numerous others are cited in Bock et al. 2006). Concord breakdown with compound objects of prepositions is obviously a species of proximity concord.

Proximity concord, like agreement breakdowns and accusative nonconcord, implicates shortterm memory. All three lead to the same conclusion: under duress, the language faculty sometimes abandons hierarchical grammatical structure and resorts to linear processing.

The fact that the grammatical processor breaks down in the face of such constrained scope and distance problems makes it appear to be fairly fragile. What it seems to show is that in the multiple tasks involved in speaking, getting the grammar exactly right gets lower priority than conveying the message, choosing the right words, expressing the appropriate tone and all the other myriad choices people make in milliseconds when they speak to one another.

## 5 Grammatical Implications of Two Kinds

The discovery of a cognitive module like short-term memory interfering with grammatical processing has theoretical implications. First, it forces us to qualify the strong version of Chomsky's conception of the Language Faculty. Secondly, it sheds light on the role of standard grammars as social constructs, that is, the social purpose of communal rules of conduct that get passed down from one generation to the next.

### 5.1 Chomskyan Conception of the Language Faculty

The strong form of Chomsky's conception maintains that grammar, that is, I-grammar, the "mental organ" (Chomsky 1980:39), is autonomous, and that grammatical principles apply to representations that are hierarchical, and that those principles are grammar-specific. This conception must be essentially correct. Autonomy accounts for the rapidity of acquisition by children. Hierarchical processing is indisputable in numerous paradigms in which constituents of varying complexity are treated holistically. Innate predisposition for grammatical principles accounts for their developing from relatively meager experiences with raw data, the phenomenon known as Poverty-ofStimulus. (These ideas are promulgated in many sources, especially Chomsky 1980, and perhaps more accessibly in, for instance, Pinker 1994 and Lightfoot 2006.)

However, the usage problems show that autonomy cannot be absolute. The strong form must be qualified. Grammatical principles obviously interact with memory, and appear to be subordinate to them. That is, memory limitations can disrupt grammatical processing and lead to the production of strings that are ungrammatical. These are not "memory limitations" of the trivial sort listed by Chomsky in Aspects of the Theory of Syntax (1965: 3) that lead to 'hemming and hawing', as in forgetting a word or making a false start. In those instances, the grammar is undisturbed but there is a breakdown in fluency or cohesion. In the instances we have been looking at, the cognitive system causes the grammatical system to break down. Hierarchical grammatical structure is ignored or, more accurately, superseded by strictly linear processing. Hence the grammar selects proximate constituents and ignores the phrasal structures in which they are embedded.

None of this should come as a surprise. Cognitive limitations must affect grammar just as physiological limitations affect phonology.

### 5.2 Grammatical Standards as Social Constructs

Turning our attention from grammatical malfunctions to the social reception of those malfunctions, it is worth wondering why 'bad' grammar attracts attention. Why do some people single out usage errors whenever they hear them? Everybody gets the agreement rule right most of the time, but with expletive there everybody gets it wrong some of the time. Everybody gets the concord rule right most of the time, but with compound pronouns in the scope of prepositions everybody gets it wrong some of the time. What are the practical consequences when people get them wrong? They do not cause communication breakdowns or vagueness or misunderstandings or any other linguistic shortcomings. The consequences obviously are not linguistic at all.

Grammatical complexity serves social purposes, not linguistic purposes. It is no accident that in the continuum from standard (literary) dialects to vernaculars, the 'highest' varieties are always the most complex. The standard or literary dialect, that is to say, the variety spoken in the highest social echelon, is always the variety with the most structure-dependent grammatical devices and the most articulated phonological contrasts (discussed further in Chambers 2009c:esp. 12-15).

Linguistic complexity is a marker of social status. This insight became clear from systematic studies of the social uses of language and was stated this way by Kroch (1978:18):

Dominant social groups tend to mark themselves off symbolically as distinct from the groups they dominate and to interpret their symbols of distinctiveness as evidence of superior moral and intellectual qualities. This tendency shows itself not only in speech but also in such other areas of social symbolism as dress, body carriage and food.

The cases we have been considering show that on rare occasions even the dominant social groups fail to execute their symbols of distinctiveness. The grammar sometimes gets so complex that it runs afoul of processing capabilities. That can only happen when odd structural configurations befuddle otherwise executable rules. If the usage problems were more widespread, the grammar would adjust to them, as Welsh does simply by foregoing VS agreement. The English usage variables occur in a few very specific structures, and as a result the 'incorrect' variants are stable and persistent. When grammar asks more than cognition can deliver, even the most fastidious speakers get the grammar wrong some of the time.

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Department of Linguistics
Sidney Smith Hall 4073
University of Toronto
Toronto M5S 3G3
jack.chambers@utoronto.ca

