

Gonna, Auxiliary Reduction, and two modules of syntactic organization

I. ***Gonna***. For many speakers of English, futurate *BE GONNA*, as in *I'm gonna wash that man right out of my hair*, is subject to two conditions, not previously observed, that do not apply to *BE GOIN(G) TO*, as in *I'm goin(g) to wash that man right out of my hair*:

(1) THE FINITENESS CONDITION (FC): *BE GONNA* occurs only in finite forms.

(2) THE EXPLICIT HEAD CONDITION (EHC): *BE GONNA* requires an explicit head verb *BE*; it is unacceptable in headless constructions. (So it contrasts not only with *BE GOIN(G) TO*, but also with prospective *BE TO*.)

The FC is illustrated via the base form *be* of *BE*, in construction with a modal auxiliary in (3a) and with infinitival *TO* in (3b), and via its past participle form *been*, in construction with perfect *HAVE* in (3c).

- (3) a. I might be *gonna visit Seattle next week.
 √goin(g) to
- b. I hope to be *gonna visit Seattle soon.
 √goin(g) to
- c. I've been *gonna finish my thesis for years now.
 √goin(g) to

(Note that these contrasts do not follow from a discord in stylistic level, since informal *BE GOIN'* *TO* patterns with *BE GOING TO* rather than *BE GONNA*, and in any case the constructions in (3a-c) are stylistically neutral.)

The FC is familiar from its applicability to the modal auxiliaries (like *MUST*) and prospective *BE TO* (Pullum & Wilson (1977)), which contrast minimally with non-modal verbs like *HAVE TO* and with prospective *BE ABOUT TO*, respectively. There is no problem in contexts calling for finite forms:

- (4) Dana must visit Seattle soon.
 has to
- (5) Dana is to visit Seattle soon.
 is about to

But in the contexts of (3a-c) a sharp contrast appears:

- (4) a. I might *must visit Seattle next week.
 $\sqrt{\text{have to}}$
- b. I hope to *must visit Seattle soon.
 $\sqrt{\text{have to}}$
- c. I've *must finish my thesis for years now.
 $\sqrt{\text{had to}}$
- (5) a. I might *be to visit Seattle next week.
 $\sqrt{\text{be about to}}$
- b. I hope to *be to visit Seattle soon.
 $\sqrt{\text{be about to}}$
- c. I've *been to finish my thesis for years now.
 $\sqrt{\text{been about to}}$

My main interest here is in the EHC. The EHC is illustrated below in two of the headless constructions of English: in (6), in what I'll call the Augmented Absolute construction, and in (7), in what I'll call the Absolute Exclamation construction (see Stump (1985) and Riehemann & Bender (1999)). In this respect it contrasts not only with *BE GOIN(G) TO*, but also with prospective *BE TO*.

(6) with my thesis $\sqrt{\text{goin(g) to}}$ be finished soon,...
 *gonna
 $\sqrt{\text{to}}$

(7) Good grief, that idiot $\sqrt{\text{goin(g) to}}$ become our boss!
 *gonna
 $\sqrt{\text{to}}$

Contrasts like these add evidence to the arguments of Pullum (1997) that “*to*-contracted” expressions like *gonna* (*wanna*, etc.) are instances of separate lexical items from (though morphologically related to) “uncontracted” *going* (*want*, etc.) plus a complement in *to*. In the case of *gonna* vs. *going*, the two items have strikingly different syntax.

However, apparent violations of the Explicit Head Condition abound, and have been cited in the literature for decades now. These appear in truncated sentences in informal speech and writing: yes-no interrogatives missing an initial auxiliary, like the *is* missing from (7a), or an initial auxiliary plus a following subject, like the *are you* missing from (7b) (what I'll call Initially Reduced Questions; there is a large literature on these subjects); or tag questions missing an initial subject plus following auxiliary, like the *she's/you're* missing from (8) (the Tag-Controlled Deletion of Akmajian et al. (2001:288-91); now see Kay (2002)); or declaratives missing an initial subject plus following auxiliary, like the *I'm* missing from the lyrics in (8) (the Informal Subject Omission treated by Zwicky (1990), Haegeman (1987, 1999), and others, under various names).

- (7) a. \emptyset Anyone gonna eat that shark steak?
 b. \emptyset Gonna fix that leak?
- (8) a. \emptyset Gonna eat that shark, isn't she?
 b. \emptyset Gonna fix that leak, aren't you?
- (9) a. \emptyset Gonna take a sentimental journey.
 b. \emptyset Gonna wash that man right outa my hair.

(The contrast here is not between main clauses and subordinate clauses, given that the condition applies in the main-clause construction in (6).)

II. Auxiliary Reduction. A long-famous constraint on English Auxiliary Reduction (AR: *you're* for *you are*) disallows it in various phrase-final contexts, as in (10). (The constraint became famous after the publication of King (1970) and has been the subject of an enormous literature. Pullum & Zwicky (ms. 1997) argues that the relevant condition on AR requires that the auxiliary lack accent, and that various syntactic configurations and specific rules require an accent on the auxiliary; we then predict ungrammaticality when the two requirements are in conflict.)

(10) We should leave now.

- a. Well I know \checkmark I am leaving.
 \checkmark I'm leaving.
 \checkmark I am \emptyset .
 *I'm \emptyset .
- b. And I hope \checkmark you are leaving, too.
 \checkmark you're leaving,
 \checkmark you are \emptyset ,
 *you're \emptyset ,

However, in at least some elliptical quiz questions like (11), sentence-final reduced auxiliaries are fine.

(11) I'm Arnold Zwicky.

- And \checkmark you are who?
 \checkmark you're who?
 \checkmark you are \emptyset ?
 \checkmark you're \emptyset ?

(I first came across such examples on the television series *CSI*. In this scene, a CSI investigator, whose name is Kitty X (for some X I didn't catch) is introducing herself to a complainant: *Kitty X, criminal investigator. And you're?*)

You might think at first that such examples are merely questions suspended in mid-course, but there's reason to think they are conventionalized types of questions (cite Sadock).

Once again, in certain constructions, well-motivated conditions on English syntax are violated.

III. Two modules of syntactic organization. My resolution of these paradoxes builds on Culy's (1996) analysis of missing objects in instructional registers of English, in particular the recipe register, as in (12); cf. also missing subjects in informal styles, as in (13). The point here is that objects are not generally omissible in English when their referents are available in the context, nor is English generally a *pro*-drop language.

(12) Take \emptyset with food. Use \emptyset with caution. [Recipe Object Omission]

(13) \emptyset Visited the Smiths yesterday. \emptyset Found them appalling. [Informal Subject Omission]

Culy proposes that the constructions of a language – the conventional associations of form and meaning – fall into (at least) two types, which I'll neutrally label Module 1 (M1) and Module 2 (M2). (Culy's own, easily misunderstood, labels are GRAMMAR for M1 and USER'S MANUAL for M2; I appropriated these labels in Zwicky (ms. 1999) and was widely misunderstood.) What we need is a general principle of interaction between them:

(14) M2 OVERRIDES M1. M1 feeds M2, so that stipulations in M2 override stipulations in M1.

That is, the conditions of M1 apply generally, except insofar as they would disallow structures explicitly licensed by M2. Intuitively, the function of M2 is to provide conventional form-meaning pairings for various special purposes, and the need to have expressions for these purposes is more important than the strictures of ordinary grammar. In still other terms, the conditions and constraints at issue belong specifically to M1, and not to the grammar of English as a whole. I'll return to this way of looking at things in a moment.

As for the details of how (14) works for *BE GONNA* and for Auxiliary Reduction... Suppose we assign the various rules permitting omission of auxiliaries in special circumstances, as in (7)-(9), to M2, and similarly assign the quiz question rule(s), as in (11), to M2. Then given that M2 OVERRIDES M1, we predict that *GONNA* can appear without an explicit head verb *BE*, against the Explicit Head Constraint, but only in constructions in M2; and that Auxiliary Reduction is possible for certain phrase- (indeed, sentence-) final auxiliaries, apparently against the accent condition on AR, but only when the auxiliary is subject to AR in M1 and the material following it is omissible by a construction in M2.

IV. Positive licensing. This mode of analysis fits fairly easily within current "constraint-based" frameworks for syntactic analysis (HPSG, LFG, and any framework incorporating OT), especially those that are also modular, though the AR case apparently depends crucially on the ordering of the two modules M1 and M2: some auxiliaries are reducible in M1, but then some crucial context for the reduction is eliminated in M2, making AR surface-opaque.

The *GONNA* case is apparently a bit simpler. First, the Finiteness Condition. The FC isn't syntactic, but lexical and morphological: it's a condition on what inflectional forms are available for a particular lexeme, *BE GONNA* (and the modals and *BE TO*). If F is the property shared by all the finite forms of a lexeme, then the condition is simply that any inflectional form of *BE GONNA* etc. has the property F and so is not available in syntactic structures that call for a verb lacking this property. The FC is not only lexical/morphological, but also positive in character: it stipulates that every inflectional form of certain lexemes has the property F. It licenses certain forms, and only by implication bars, prohibits, or rules out all the others.

This sort of positive licensing was the model in very early generative syntax: syntactic rules licensed particular classes of expressions, and expressions were barred if they were licensed by no rule or set of rules. In such a view (as I point out in Zwicky (1994)), it's not necessary to stipulate a *constraint* against, say, VPs as subjects in English – and in fact it would be wrong to do so in this case, since it turns out that VP subjects are licensed, but only (so far as I know) in the Inverted Pseudocleft construction (*Eat some sushi is what Kim did first*). (Geoff Pullum and I have pursued the project of positive licensing in several articles, notably Pullum & Zwicky (1991, ms. 1997, 1999).) Is there a plausible positive-licensing treatment for the facts that I described above in terms of “constraints”? Going further, can we even do away with the M1/M2 module division, and just have syntactic rules interact with one another in natural ways? My tentative answers are “yes” and “maybe”, respectively.

Let's start with the Explicit Head Constraint. The effect of the EHC can be achieved with only positive licensing (and, in fact, without modularity) by stipulating that *GONNA* as a main verb in a clause is licensed with auxiliary *BE*, while *GOIN(G)* as a main verb is licensed with auxiliary *BE* or on its own. (Both *GONNA* and *GOIN(G)* are present participial verb forms, a fact that further limits their privileges of occurrence.) Then if the various truncation constructions are stated as licensing stand-alone main verbs of various types, without auxiliaries and sometimes without subjects, we get the desired result. It's much like the VP-subject case: one set of rules fails to license some structure, but then others do, so that the structure in question is available only in the latter cases. (Similar treatments can be given for Recipe Object Omission and Informal Subject Omission.)

As for Auxiliary Reduction, Pullum & I have argued that the accent condition is not transconstructional, but a condition on one particular rule, which licenses special shapes of certain auxiliary words. This is entirely parallel to our treatment of the famous English *Double-ing* constraint, which we argue to be a condition on one particular rule of the language.

So much for positive licensing. What about modularity? AR will license *you're* (as well as *you are*) in combination with predicative expressions (*You're Kim* and *You are Kim*). If the Truncated Quiz Question rule allows for omission of predicatives in certain circumstances, we apparently get the desired result again, and without the assumption of modularity: “stranded” items like *you're* will indeed be licensed, but only in quiz questions (or any other ellipsis constructions that don't impose accent on a remainder auxiliary).

But there are many tricky details to work out in this analysis. Much depends on how AR, “ordinary” ellipsis rules (like VPE), and “special” ellipsis rules (like Truncated Quiz Question)

are formulated, and on how the interaction between AR and ellipsis rules like VPE is managed. For the moment, the best I can say is that a non-modular analysis is worth pursuing.

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