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Principles shaping grammatical practices: an exploration

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ABSTRACT This article explores the principles of interaction that shape grammatical practices of conversational speech cross-linguistically. Seven such principles are explored, and the grammatical practices they give rise to are illustrated. The role of these principles in shaping non-linguistic behavior is also touched on.

KEY WORDS: *grammar, grammatical practices, interaction*

Introduction

A question that scholars in the area of usage and grammar pose is the following: if language is primarily used in interaction, how has this affected the fundamentals of language structure? Indeed, should linguistic structure be seen as primarily and directly arising from the contingencies of real-time talk in interaction? The goal of the current article is to present some answers to these questions, as they have been explored by scholars in the areas of Conversation Analysis, Interactional Linguistics and usage-based approaches to language. A secondary goal of the article is to explore whether these same principles apply in other arenas of human conduct.

It is important to note here that this article focuses on the grammar of conversational speech, as this is the form of language most directly engaged in language-in-interaction. The relationship of written language to language-in-interaction is complex and worthy of independent study; I have offered only a few comments regarding written language in the conclusion. In addition, it should be pointed out here that the focus of this article is on interaction, mostly because this is a force in shaping grammar that has received much less attention than other factors, such as cognition. The focus on interaction is not meant to suggest that interaction is the only force at work, but is rather meant as a way of bringing to light some principles at work that have not received the attention they might warrant. Those interested in cognitive factors shaping grammar will

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find a wealth of literature on that topic, including Chafe (1976, 1980, 1994), Cole et al. (2005), Du Bois (1987), Givon (1979, 1983, 2002), Mithun (1987), and Thompson (1987).

In what follows I offer some initial comments on seven of the fundamental principles of language-in-interaction that shape the grammar of conversational speech.

Grammar is shaped by frequency

Linguistic items – be they segments, morphemes, words, phrases, clauses or sentences – occur in conversation with differing frequencies. Some items, like the definite article *the* in English, are immensely frequent in conversation, while other items, like the English lexical item *cataclysm* are quite infrequent. Following Bybee (2002), I will refer to this level of frequency as the 'token frequency' of an item. Token frequency affects grammatical organization in several crucial ways.

First, items that occur frequently together tend to become unified phonetically. That is, items that co-occur with high frequency tend to undergo phonological reduction. This process of phonological reduction happens within single morphemes (e.g. *camera* → *cam'ra*) as well as across word boundaries (as in *going to* → *gonna*), and even across phrase boundaries (*what are you* → *whacha*). Phonological reduction of this sort can have the effect of eliminating or blurring older grammatical boundaries and simultaneously creating new grammatical boundaries or even new grammatical categories. For example, as Biber and Conrad (1999) have suggested, collocations like *what are you* do not form a single traditional grammatical category in English (presumably the auxiliary *are* should be part of a constituent with a main verb, and *you* as the subject should be separate from the rest of the sentence), but because of the extremely high frequency of co-occurrence of these forms, they have come to be pronounced as a single unit, thus eliminating the grammatical boundaries that might have separated them in the past and creating a new grammatical pattern, *whacha X-ing*, whose structure is quite different than a traditional view might suggest. The same kind of re-analysis may be taking place with *gonna*: what might have been analyzable at one time as *going* [*to X*], seems now to be analyzable as *gonna X*, with a complex clause structure eliminated by virtue of phonological reduction.

Second, as Bybee (2002) mentions, high token frequency can lead to a resistance to certain grammatical and morphological change. For example, while low frequency irregular verbs – like *kneel* and *dream* – have developed a regular past tense form – *kneeled* and *dreamed* – high frequency irregular verbs – like *sleep* and *eat* – have not (we hear *sleeped* and *eated* only in the speech of young children). Bybee argues that it is precisely their high frequency which 'protects' the past tense forms *slept* and *ate*, in that the mental representations of those forms have been so strongly reinforced by the large numbers of repetitions they have experienced that they are not susceptible to change.

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Third, high frequency can lead to what Haiman (1994) has called emancipation. Through the process of emancipation, the original instrumental value of an item is lost or subordinated, and the item comes to take on a new function. For example, the phrase *you know* began as a genuine question for confirmation from the recipient, and now has a range of 'discourse-marker' uses, as the following examples indicate:

(1) It was a s- it was a close- **y'know** closeout sale.
(2) Yeah, it's activity and the coaches' whistles **'n y'know** things like that.

In the case of *y'know*, the original function still exists but is vastly less common than the newer discourse-marker uses.

There is another kind of frequency effect at work in shaping grammar, and that is what Bybee (2002) refers to as 'type frequency'. An item has a high type frequency if there are many instances of that item in the language (rather than in use). For example, the plural marker *-s* has an extremely high type frequency, because it is the plural marker for most nouns in English. The effect of this high type frequency can be seen when new nouns (or new uses of old nouns) come into the language; that is, if they have a plural, it will be marked with *-s*. The new use of the old word *mouse* provides an illustration of this phenomenon: if a plural form is used at all for our new computer device, it is *mouses* and not *mice* (except for humorous effect).

Grammar is thus shaped in profound ways by frequency, both token frequency and type frequency.

Grammar is shaped by collocations

In most views of grammar, groups of lexical items are believed to form grammatical classes, based on a set of shared abstract properties. For example, in most grammatical theories one finds a class of lexical items called something like 'verbs of cognition'. Recent usage-based approaches to grammar have brought this notion into question, however, by suggesting that in fact each verb (or noun) has a unique set of collocational patterns and may not share many properties with other verbs (or nouns) previously believed to belong to the same class. In this new view, each word in a language has its own unique 'footprint' of syntactic behavior; individual words may be more or less alike, and only loose associations, rather than traditional 'classes' organize similar words. Bybee (forthcoming) and Nicita (2002) provide important illustrations of this new view.

Consider, for example, the Spanish verb *creer*, 'believe'. In a study of mental verbs in conversational Spanish, Nicita (2002) finds that *creer* occurs 82 percent of the time in first person (compared with two percent of the time in third person), and nearly always in present tense (91 percent of the time). Thus *creo* 'I believe', is by far the most common form of this verb, and *creo* very often occurs with a finite complement. Compare that with *entender*, 'understand', which occurs heavily with second person subjects (62 percent of the uses). The second person has essentially grammaticized into the forms *entiendes* 'understand?'

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and *me entiendes* 'do you understand me?', with null complements, both of which are now discourse markers. In fact, in her study of the seven main verbs of cognition in Spanish, Nicita finds that no two verbs pattern exactly alike; indeed, verbs that might seem to be closest in meaning (*acordar(se)* and *olvidar(se)*, 'remember' and 'forget', for example) tend to show complementary rather than similar argument structure patternings. The notion of verb class must thus be re-examined to reflect the unique use of each verb. Collocational frequency thus strongly shapes the organization of grammar.

In this context it may be useful to introduce the hypothesis, introduced by Paul Hopper (1987) and now proposed by a variety of scholars (Bybee and Hopper, 2001; Fox, 1994; Helasvuo, 2001), that grammar is not a static object but rather emerges in use. As Bybee and Hopper suggest in their introduction to the edited collection *Frequency and the Emergence of Linguistic Structure*:

> The notion of emergence constitutes a break with standard ideas about grammar that envisage it as a fixed synchronic system. It relativizes structure to speakers' actual experience with language, and sees structure as an on-going response to the pressure of discourse rather than as a pre-existent matrix . . . It follows that accounts of grammatical (and phonological) structure must take note of how frequency and repetition affect and, ultimately, bring about form in language. (Bybee and Hopper, 2001: 3)

If grammar is indeed emergent, then it is perfectly fitted to the needs of real-time talk-in-interaction. Since we know from studies in Conversation Analysis that talk-in-interaction is contingent, interactionally achieved and retroactively reconstructable (Goodwin, 1979, 1981; Schegloff, 1996b), grammar for talk-in-interaction must be designed so as to adapt itself to these forces. In this way it seems appropriate that grammar would arise from, or emerge from, a dynamic constellation of interactional practices which are themselves brought to bear in unique and unpredictable ways in any given spate of talk. In this view, then, grammar itself shares the properties of interaction in being contingent, interactionally achieved and retroactively reconstructable and its momentary forms arise from recurrent interactional practices uniquely applied to every new situation.

In what follows below I address these properties of grammar and interaction, as well as a few others.

Grammar is shaped by occurring in turns

As Schegloff notes in his article 'Turn Organization: One Intersection of Grammar and Interaction' (Schegloff, 1996b), grammar is shaped by its existence in turns:

> . . . we are beginning with the premise that grammar as an organizing device is expectably formed up by reference to the habitat, 'the turn' . . . The central prospect, then, is that grammar stands in a reflexive relationship to the organization of a spate of talk as a turn ... the organizational contingencies of talking in a turn . . . shape

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> grammar – both grammar as an abstract, formal organization and the grammar of a particular utterance. (Schegloff, 1996b: 55–6)

As Schegloff suggests, turns regularly – though not always – begin with grammar that is recognizably a beginning, and end with something that is recognizably an ending. Consider the following utterance, for example, which begins with *I'm*, an element which is an extremely common item at the beginning of turns in English, and which ends with *a lot*, elements which are common in endings of turns in English:

(3)

B: Are there any in Boulder? ((laugh))
(0.5)
J: °I'm sure there's a lot.° ←

Speakers do, for various interactional reasons, sometimes begin utterances with grammatical elements that are clearly non-beginnings. Consider example (4) below, in which the speaker begins a turn with the predicate adjective *wacked*, and is thereby heard, in this sequential environment, to be offering a possible completion to J's as-yet incomplete utterance (*My body is:*):

(4)

J: I know. My body is:
(0.8)
T: wacked ou:t. ←
J: Mhm, wacked out.

Given the importance of recognizable beginnings and endings (and middles) for turn organization, it seems plausible to suggest that grammars of languages are so organized as to have units with recognizable beginnings and/or endings. While English tends to have prominent markers of unit beginnings (such as prepositions, determiners, pronoun subjects, etc.), other languages may prefer to mark endings. In Japanese, for example, it has been suggested that units are more strongly marked at their ends than at their beginnings (see Fox et al., 1996; Ford et al., 2003; Hayashi, 2003; Tanaka, 1999). For example, postpositions tend to mark the ends of noun phrases, and so-called sentence-final particles tend to mark the ends of utterances.

It is important to note here that the claim is not that turn-taking determines grammar, or that all grammatical practices have arisen in response to the needs of turn-taking. The claim is, rather, that certain facets of grammatical organization, especially regarding beginnings and endings, may be responsive to the fact that utterances occur in turns. And, as with all functional pressures, languages may show different forms in response to the same pressure, so the existence of different grammars across languages does not invalidate the claim that languages are shaped in part by the needs of turn-taking.

So this is one principle arising from turn organization that shapes grammar: at least some grammatical units in a language are organized so as to have recognizable beginnings and/or endings.

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Grammar is shaped by occurring in sequences

As we have seen, talk occurs in turns. And turns are always situated in some location in a sequence. A turn can initiate a sequence, end a sequence, preface a sequence, and so on. And, as Schegloff (1996b) suggests, where in a sequence a turn occurs, and what kind of action is accomplished in that sequence, shape the grammatical practices available for that turn. This claim is clearly related to the finding in numerous discourse studies (e.g. Givon, 1979, 1983) that prior context shapes the grammar of a particular clause. However, it takes the claim several steps further, to suggest that grammar is actually organized by specific, sequential locations in what Schegloff (1996a) refers to as 'positionally sensitive' grammars (cf. Ford et al., 2003).

For example, questions show quite different grammatical patterns than do answers. At least in English questions tend to show special syntax (inverted word order and in some types of questions special question words), and they often display a particular intonational pattern that is distinct from the intonation of answers.

Interestingly, the grammars of answers have received little attention within traditional linguistics, but they are beginning to receive attention within Conversation Analysis and Interactional Linguistics. For example, Raymond (2000) reveals some interesting patterns regarding answers to yes/no interrogatives in English:

- They regularly begin with a responsive token, such as *yeah*, *no*, *well*;
- They often rely on the grammar of the question for their interpretation (Q: *Where's he going?* A: *L.A.*); that is, they are built to be symbiotic on the question;
- When their grammar diverges from that of the question, it is to address an inadequacy in the formulation of the question.

Questions are thus quite different from answers in their grammars,[1] an illustration of the larger point that grammar is sequentially sensitive, or, as Schegloff (1996b) describes it, 'positionally sensitive'. Grammars are thus organized so as to embody this principle of positional sensitivity.

There is growing evidence that there may, in fact, be grammatical formats for sequentially-specific actions. Early work on compliments (Manes and Wolfson, 1981), for example, found that compliments in conversational English show highly recurrent grammatical patterns – 85 percent could be described with three simple grammatical patterns, and more than half of the instances (54 percent) occurred in the following format:

NP { is / looks } (really) ADJ

Initial work on offers in conversational English (Curl, 2006) has found that offers in different sequential environments display different grammatical formats. Offers done in response to an educed complaint, but at a distance from that complaint, regularly show the grammatical format *Do you want (me) to X*,

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or its relative *Would you like (me) to X*. Offers done in direct response to an immediately preceding complaint, on the other hand, never show this format, and display instead a range of forms, many of them of the format *I can X*.

In previous work I have referred to this feature of grammatical organization as Micro-syntax, and the formats as Social Action Formats (Fox, 2000). This is a fundamental way in which grammar is shaped by the forces of sequences (see also Couper-Kuhlen and Thompson, 2005).

There is another fundamental way in which grammars are shaped to provide for displays of sequential embeddedness. That is, grammar must be extremely flexible and easily fitted to its sequential location. Perhaps the best way to illustrate this principle is to imagine a hypothetical language in which the principle does not apply. Imagine, for example, that there is only one sentence pattern for all utterances. Every utterance must be of the form:

noun + verb+noun + preposition + noun

So, the sentence *cat ate tofu in livingroom* is a perfectly acceptable sentence in this language but *it ate* is not. So we can notice first that pronominal references, which allow a speaker to indicate a certain sequential relationship to a prior mention of a referent (Fox, 1987), are not possible. In fact, all forms of deixis and anaphora are disallowed, thus eliminating an entire range of devices whose function is precisely to show relationship to context.

Second, we can notice in this 'language' that designing an utterance to show responsiveness to a prior utterance by omitting mention of a locational or temporal phrase is not possible. Instead of the sequence in example (5), then, we would find the sequence in example (6):

(5)

T: What time did you get done cleaning.
(1.7)
J: Girl was eating spaghetti at two &o'clo(h)ck i[n the mo(h)rning
B: [((laugh))
T: YO(H)U WERE? ←

(6)

J: The girl was eating spaghetti at two o'clock in the morning.
T: The girl was eating spaghetti at two o'clock in the morning? ←

In the first – actually occurring – instance, T asks a question of B. Speaker J answers the question, referring to B as 'girl' (notice the lack of determiner – this usage of 'girl' is interesting in behaving almost like a proper noun). T responds with an incredulous *YO(H)U WERE?* Notice that T's utterance is built to show responsiveness to the prior utterances in several ways: (a) the pronoun *you* locates a particular individual as the recipient (Lerner, 1996), one that is not the speaker of the prior utterance (*you* in this utterance refers to B and not to J); (b) the verb *were* is parasitic on the whole verb phrase *was eating spaghetti at two o'clock in the morning* in J's utterance, indexing a responsive relationship to that utterance and constructing a particular kind of operation on that utterance.

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In the second instance, from our hypothetical language, T's utterance displays none of the elements of responsiveness or relatedness of the real example, except the exact repetition of the words of J's utterance. Exact repetition would be the only form of relatedness in such a language, and given that it would be the only form, it would lose most of the force that such an utterance would have in English.

Thus a wide variety of grammatical forms in a natural language, including deixis, anaphora, and 'ellipsis', can be shown to exist largely in order for an utterance to display its sequential relatedness and embeddedness.

Grammar is shaped by unidirectionality

By unidirectionality I mean to capture the fact that utterances in talk-in-interaction begin and move towards completion; they cannot move in any other direction. Although speakers can use the process of self-repair to go back to an earlier part of an utterance and start again, even that process will be constrained by the force of unidirectionality – it will be heard exactly as 'backing up', 'starting again', 'restarting', and so on, and not simply as continuing the utterance. As a song from my childhood says, 'time keeps on slipping into the future', and utterances move inextricably towards completion.

Unidirectionality suggests that each next item produced moves the utterance closer towards completion, either by elaborating the unit(s) that have preceded it or by beginning a new unit or units. Thus although utterance construction is unidirectional, any given linguistic item may create bonds to items before and/or after it. For example, in the following Japanese utterance, the postposition *ni* is heard as bringing to possible completion the noun phrase begun with *honya* as well as opening up a space for new units to begin:

(7)

H:	ano	chotto	*HONya ni:*	ne yoritai	**kara::**
	um	just	bookstore LOC	FP stop.by.want	**because**
	'um because (I) just want to stop by the bookstore'				

In the English example (8), by contrast, the preposition *on* re-opens an utterance that was possibly complete at *terrible*, and projects a new unit to come, namely a noun phrase:

(8)

Michelle: I mean that's just terrible. = *on a brand new building*.

Through the principle of unidirectionality, then, a somewhat paradoxical phenomenon arises: items may connect back as well as project forward. In example (7), *ni* both completes the prior noun and opens up a space in which a verb may be appropriate; in example (8), *on* connects back to the prior predicate while simultaneously projecting the production of a noun phrase. Moving the utterance forward towards completion implies the possibility of bringing prior subunits to completion while projecting the further course of the utterance

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(or at least opening up a space for that possibility). Unidirectionality leads to what Tanaka (1999) refers to as a 'binomial' effect for linguistic items.

The historical result of this effect can be the shifting of constituency of linguistic items. It has been argued for English, for example, that the particle-like uses of prepositions (*of, out, over, through* and so on) arise from a re-analysis of their uses, from projecting an up-coming noun phrase to connecting to the immediately prior verb (O'Dowd, 1998). Consider the following examples:

(9) throw them out the window
(10) throw them out

In example (9), the noun phrase window is overtly expressed, and we might think of *out the window* as a prepositional phrase. In example (10), however, which is produced shortly after example (9), the window is not expressed because it is now understood; *out* remains, without a following noun phrase, and seems to elaborate the prior verb more than projecting a following noun. O'Dowd offers these examples as an illustration of the kind of process that may have led historically to prepositions developing this prior-facing function of elaborating a verb (and hence becoming particles) from their original function of projecting a noun phrase. Similar shifts in constituency have been reported in other languages (see Bybee, forthcoming).

Unidirectionality thus shapes grammar by organizing and creating (and re-creating) constituents.

Grammar is shaped by being interactionally constructed

One of the findings of research in Conversation Analysis is that utterances in interaction are interactionally constructed. There are some utterances in conversation for which this observation is obvious, as in the case of anticipatory completions such as example (11) below:

(11)

J: I know. My body is:
(0.8)
T: wacked out:t. ←
J: Mhm, wacked out.

In anticipatory completions, it is clear that the utterance is interactionally produced: a single grammatical unit is actually voiced by two different speakers.

For most utterances, however, the validity of the claim is not so obvious. Consider the utterance analyzed in Goodwin's now classic article 'The Interactional Construction of a Sentence' (Goodwin, 1979). In this analysis Goodwin reveals the construction of a single sentence, voiced by a single speaker (*I gave, I gave up smoking cigarettes. l- uh one- one week ago today. actually)* to be an interactional achievement. The sentence appears to begin with one recipient and one action; when that recipient is found to be inattentive to the utterance at its

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possible completion, the speaker extends the utterance grammatically and designs the action to be fitted to another recipient; when that recipient, too, is found to not be aligning with the utterance, the speaker once again extends the utterance grammatically, once again shifting the action to fit the newest recipient. What thus comes off as a single sentence produced by a single speaker can thus be seen to have been the result of work on the part of all four participants (even if that work was just to not attend to the speaker), and in that sense the sentence can be seen to be interactionally constructed. With this perspective we can see that all utterances are interactionally constructed, even if voiced by only one speaker, in that all utterances are fitted to a particular action, in a particular sequence, for a particular recipient, and the responses of the recipient, including silence and non-alignment, shape the emerging structure of the utterance.

How does the interactionally achieved nature of utterances shape grammar? There are several characteristics of grammar that have been noted in the literature that deserve mention in this regard.

First, grammar is repairable. That is, there are mechanisms for initiating and accomplishing what Schegloff et al. (1977) call same-turn self-repair, which is repair initiated before possible completion of the turn-constructional-unit-in-progress – essentially within the bounds of the sentence (for studies of same-turn self-repair in languages other than English see Egbert, 2002; Fincke, 1999; Fox et al., 1996; Gomez de Garcia, 1994; Karkkainen et al., forthcoming; Levelt, 1982; Tao, 1995; Uhmann, 2001; Wei, 1998; Wouk, 2005; Yang, no date). Grammar must be repairable so as to allow speakers to adjust any element in the utterance, as well as the entire course of the utterance-so-far, to accommodate shifting alignments with recipients.[2] In the Goodwin sentence discussed above, for example, there are several instances of self-repair (*I gave, I gave* and *l- uh one- one week ago*), all of which appear to be designed to fix problems with recipiency.

Second, grammar is extendable in most, and perhaps all, languages. What this means is that utterances-in-progress can have grammatical units added to them, units that were not necessarily part of the original design of the utterance. English allows units to be added at almost any point in an utterance, and units can often be freely added after the verb phrase (as in the Goodwin sentence above: the temporal phrase *l- uh one- one week ago today* and the adverb *actually* are used to extend the grammar of the sentence; see Ford et al., 2002 and Schegloff, 1996a for discussions of extensions in English). In a verb-final language like Japanese, it is not common to add units after the verb and final particles have been produced; nonetheless, the grammar in Japanese is extendable in that Japanese speakers produce one small unit at a time (often less than a clause), separated by silences, gradually bringing the utterance closer and closer to the verb and possible completion. A unit such as an NP or adverb can thus easily be added to the utterance as it is unfolding. Extendability is this case comes before the verb (but see Couper-Kuhlen et al., 2003 for a discussion of increments after possible completion in Japanese). It is not clear how or if polysynthetic languages like Kickapoo or Apache, in which an entire utterance may consist of just a single morphologically complex verb, provide for extendability. Future cross-linguistic research is clearly needed here.

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Third, grammar can be retroactively constructed. That is, the grammatical integrity of an utterance can be re-viewed after its production, or after the production of some part of it, to re-analyze the structure that has been created. The Goodwin utterance provides a useful illustration of this phenomenon: with each successive extension, the grammar of the sentence-so-far is retroactively reconstructed to integrate the extension into the grammar of what came before (and reconstructs what came before as grammatically not-yet-complete, although at its completion it might have been treated as complete).

Another example of this phenomenon is given in example (12) below. In this interaction, the participants have just been commenting on how 'grouchy' they are being with one another. The focus is on J's arrowed utterances:

(12)

J: [Well, because (.) genuinely
(.) I [feel (0.6) like I want (it) to be cool, but I'm just so:
T: [((laugh))
T: I kno(h)w.
J: Like aside from (.) the hormones, I'm so like that shit
just, (0.9) having constant noise, outside the window
is (.) bad. (0.3) news.
T: ((sniff))
J: It's so disturbing. (weird?)
T: °(I feel like I have an)°
B: ((la [ugh))
J: [Isn't that disturbing to you? ←
(0.3)
J: Ne [ver having ←
B: [(What.)
J: a b: (1.0) break. ←
(0.7)
J: A respite, or whateve(h)r.=A(h)lie(h)n? (0.5) Girl? ←
B: ((la [ugh))
J: [From the (0.4) from the noise? ←
(1.0)
T: (I feel like you guys are) [really (.) close.
J: [Doesn't that bother you?
T: Looks like ([ )
J: [Will somebody a(h)nswer my(h) que(h)stio(h)n?

In this fragment, J offers an account of why she is grouchy and provides an assessment of the noisy circumstances in which they are living (there was construction outside their window all summer). The preferred response to assessments is agreement, but there is in fact no uptake of her utterance by the recipients. She tries again with another assessment (*it's so disturbing*), which is met with a sotto voce comment from T on another topic (she is wiping something off of her face) and laughter from B – no agreement. J tries again with the question *Isn't that disturbing to you?* which comes to possible completion and receives no uptake from the participants. J extends the utterance with *never*

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having a b: (1.0) break., which also comes to possible completion with no uptake from the recipients. J continues again with *a respite, or whateve(h)r*, once again with no uptake. She again extends the utterance with *A(h)lie(h)n?*, a teasing vocative addressed to B (who was recently hallucinated to be an alien by T), with no uptake, and then another extension *Girl?* again address to B. B responds with laughter but does not answer the question, and J once again extends the utterance with *From the (0.4) from the noise?* which again meets with no uptake (T's next utterance is not responsive to the question). The final reconstructed utterance is: 'Isn't that disturbing to you, never having a break, a respite or whatever, Alien Girl, from the noise?' Each new extension reconstructs itself to be a part of the grammatical structure of the utterance-so-far and simultaneously interactionally 'deletes' the prior places of possible completion (which were in fact met with the dispreferred lack of response). Contingency of analysis and fluidity of grammatical interpretation are thus crucial in enabling the interactional construction of grammar.

We have seen in this section that grammar is shaped by the force of interactional construction. In the next section we look at the effect that language as a public embodiment of action has on grammar.

Grammar is shaped by being a public embodiment of action

It has been known for many decades that language accomplishes action. Malinowski (1978 [1935]) described language as follows:

> The fact is that the main function of language is not to express thought, not to duplicate mental processes, but rather to play an active pragmatic part in human behaviour . . . Words are part of action and they are equivalents to actions. (vol. 2, pp. 7–9)

Austin (1962), in his early writings on speech acts, focused on the ways in which people perform actions with words. And of course Searle, in more recent work on speech act theory, places action at the center of attention.

What is new in interactional approaches to language, as opposed to these philosophical approaches to language, however, is a focus on real-time language use in conversation rather than on invented, static sentences with hypothesized meanings. And this shift in data has brought with it a shift in our understanding of action. Action is now seen to be embodied, temporally organized, and interactionally achieved (Schegloff, 1995, 1996a).

What that means is that utterances can be understood as temporally unfolding opportunities for co-participation (Ford et al., 1996, 2002; Goodwin, 1979, 1981; Hayashi, 2003). That is, every moment of an utterance-in-progress confirms or rejects, carries forward or redirects, elaborates or changes the projections of the grammatically embodied action-in-progress. Thus every moment in an utterance-in-progress holds within itself new possibilities for understanding, and, hence, for co-participation. For example,

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a recipient may co-participate in an utterance-in-progress by nodding, or smiling, or saying *mm*; when that same utterance comes to possible completion, the recipient may co-participate by responding with a relevant next action. Or a speaker may design an utterance so that an opportunity is provided in an utterance-in-progress for the recipient to complete that utterance, and thereby display a certain kind of alignment with the speaker. Consider again example (13) below:

(13)
J: I know. My body is:
(0.8)
T: wacked out:t. ←
J: Mhm, wacked out.

Thus, each new moment in the course of an utterance provides a different opportunity for co-participation than does the next moment.

What does this fact reveal about the organization of grammar? First, that grammar is organized so as to allow for projection – with varying strengths and scopes, depending on the language – of possible trajectories for the course of the unit or utterance. In the following excerpt, for example, T is illustrating the effects of botulism by telling about what happened to a can of beets (J's utterances are engaging in sound play with T's production of the word *pantry*), and the sequence comes to possible closure with T saying *It was really dramatic*:

(14)

T: ((click)) This can of beets exploded one time (in) my (0.9) pantry.
J: ( )
[
T: ((laugh))
J: (My) beets exploded in my (.) pan (0.2) tree. [((laugh))
T: [It was beets though
[so it was like this re:d [like (stained) explosion>
J: [Pant-ree. [Uuuuh
(1.5)
T: It was really dramatic. ←

When we hear *It* we can predict that a verb is coming; when we hear *was*, we can predict that either a main verb is coming or a predicate adjective phrase/predicate nominal phrase is coming; by the time we hear *really*, we know that we are in a predicate adjective phrase which will come to possible completion with the production of an adjective; when we hear *dramatic*, we may have come to a place of possible completion of the utterance. By its frequent collocations and resulting habitual constituencies, English grammar allows for projection of what is to come.

Now, we do know that not all languages allow projection to the same extent that English does. Detailed studies of Japanese, for example, have revealed that conversational Japanese grammar does not project as strongly as English grammar from the beginning of an utterance; due to its postpositional structure,

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frequent 'omission' of clausal elements, and flexible word order early in the clause, beginnings of Japanese utterances often do not strongly project possible grammatical continuations (see Fox et al., 1996; Hayashi, 2003; Tanaka, 1999). Nonetheless, even in Japanese some projection is possible, as evidenced by the occurrence of anticipatory completions (Hayashi, 2003).

Second, as we also saw earlier, grammar must be organized so as to be a public embodiment of action. One of the properties of grammar that allows it to function as a public embodiment of action is the existence of grammatical formats fitted to particular social actions. The work described earlier on Micro-syntax has begun to elucidate the ways in which grammar is fitted to sequentially specific social actions.

Moreover, grammar is not just a system existing in the mind, but is a physically embodied, publicly available display (Fox, 2002; Hayashi, 2003; McNeill, 1992). Gestures, eye gaze, head movements, body orientations, as well as vocal prosody are always visually and/or auditorily available to recipients. There is never a moment in co-present interaction in which at least some of these are not available. Such displays are an integral part of the production of any utterance, constituting crucial sets of practices for the interpretation of sequentially-situated action (Goodwin, 1979, 1981, 1986; Goodwin and Goodwin, 1987; Schegloff, 1984, 1998; Streeck, 1993). A few examples from the literature will suffice to give the flavor of this perspective.

In his article on body torque, Schegloff (1998) finds that a body positioned so that 'different or divergent orientations of the body segments above and below two major points of articulation – the waist and the neck' (p. 540) constructs a framing for an interaction as projecting change and thereby as subsidiary to another activity. This embodied framing provides a context of interpretation for the actions of the utterances produced within the framing.

In his study of anticipatory completion in Japanese, Hayashi (2003) noticed that utterances produced with silences and filled pauses but with the speaker looking away from the recipient were not treated as inviting anticipatory completion by the recipient, while such utterances produced with the speaker bringing his/her gaze to the recipient are typically treated by the recipient as inviting anticipatory completion. Gaze direction is thus constitutive of the action and interaction of the utterance-in-progress.

Turning to prosody, there are many studies exploring the practices by which prosody constitutes the action of a turn. Couper-Kuhlen (2001) observed that high pitch on the first accented syllable of an utterance indexes that utterance in a phone call as producing the reason for the call. Local (2005) found that utterances offered as anticipatory completions in English show a particular constellation of phonetic properties that frame them as incursive into the turn space of another: they are low-volume, relatively fast in tempo, with a narrow pitch range. Curl (2002) noticed that repairs in English after next-turn repair-initiators display phonetic properties that display where in the sequence the trouble-source turn occurred.[3] All of these studies suggest that prosody is constitutive of the social action accomplished by the turn and part of the grammatical 'format' of the turn.

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Other arenas of human conduct

I think it is not difficult to find parallel organizations for what I have described here in other arenas of human behavior. For the purposes of this article I will limit discussion to just a few of the principles noted earlier for language.

FREQUENCY EFFECTS

It is clear that many, if not all, aspects of human behavior change in organization as their frequency increases. Dreyfus and Dreyfus (1986), for example, argue that the knowledge of an expert is organized quite differently than the knowledge of a novice (consider the motions of a skilled driver in contrast to the motions of a novice). Paved roads often arise when a dirt road becomes heavily traveled; and consequently, after a road has been paved, traffic tends to increase on that road. Actions that must be taken frequently by individuals – such as paying a toll on a toll road – may become reduced in structure, for example by the use of electronically activated toll passes (with which a driver hardly needs to slow down).

Emancipation also takes place outside of the realm of language (Haiman, 1994). For example, while shaking hands apparently once had the function of showing that the participants had no weapons in their hands and were therefore meeting on friendly terms, all that remains of this highly frequent gesture is the sense of 'friendly terms', or perhaps just 'meeting'.

TURNS

Many kinds of human interaction are organized by turn-taking. Even events that are not, strictly speaking, speech events, such as purchasing at stores, driving through intersections, and getting on a bus, are regulated through the practice of one-at-a-time. While such turns may not be organized through the resources of grammar, they nonetheless have structure and show all the core properties of turns described above: they occur in sequences (although the sequences may vary in complexity); they exhibit temporality and unidirectionality; and they provide unfolding opportunities for co-participation.

Consider the case of driving through a four-way stop intersection. Let's suppose that four cars approach the intersection in some sequence. Each approach has a temporal organization, as the car moves closer and closer to the intersection, comes to the intersection, stops, and then moves in some direction out of the intersection. The approach is unidirectional, in that the intersection is organized for cars to move ever closer to the stop sign until reaching it, and then they must proceed through. There is a series of turns, such that after one car goes another car can go, and this series can be thought of as a sequence. And each turn provides unfolding opportunities for co-participation by being visibly available to the other drivers who can organize their behavior according to what they perceive and how they interpret it. For example, a turn whose first component is not yet complete – the car is just approaching the stop sign – can provide for co-participation by being used by another driver to indicate *I can go now*, while a turn whose second component is not yet complete – the car is now

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proceeding through the intersection – provides opportunity for co-participation in the form of honking, or not going. Each turn constitutes a social action and of course is rich with sequentially embedded meaning.

Conclusions

In this brief overview of the findings on grammar and language use in interaction I hope to have opened a window onto the new philosophy of grammar that is developing in the fields of Conversation Analysis, Interactional Linguistics and usage-based approaches to grammar. In this new philosophy, grammar is organized by dynamic and emergent practices; it is a publicly available embodiment of unfolding actions situated in turns and sequences; it is contingent, providing for extendability and reconstruction. In this view, then, grammar is strongly shaped by interaction, which is its birthplace and its natural home.

But one could ask at this point, what about the grammatical practices that have arisen through long years of literacy in a society? Is written language also shaped by interaction?

There are two parts to the answer to this important question. First, there are clearly other factors at work in shaping grammatical practices than the seven interactional principles I have elaborated on here. One such factor is the speed of processing necessary. Writers and readers typically have no time constraints placed on their production and comprehension, a fact which presumably allows more complex syntactic structures to arise, on the assumption that highly complex sentences might take more time to process than simpler ones. On the other hand, speakers and recipients in real-time conversation have immense time pressures on them: delays of more than a second or two in pursuing the continuation of an utterance are rarely tolerated by recipients, and recipients must be ready to start up a turn which is in some way responsive to the current turn, without delay, as soon as the speaker has come to possible completion of current turn. This time pressure, and the fact that TCUs are allotted one at a time, create a tendency in conversation towards shorter and syntactically simpler utterances, while the lack of time pressure in writing/reading creates a tendency in written language towards longer and syntactically more complex sentences.

Second, some of the principles mentioned above are simply not at work in writing. For example, I mentioned above that turn-taking in conversation shapes grammatical practices in specific ways. In writing there is no overt give and take between writer and reader. This fact means that practices associated with turn-taking may be freed up to serve other functions in writing; and it means that new practices may arise to handle the forces that are at work in the writing/reading process. For example, sentence beginnings and endings may not need to be shaped by the contingencies of turn-taking, but by the needs of complex textual coherence.

This is not to say that writing is non-interactional. Writing and reading are both highly interactional, but the interaction is subtlized, that is, made internal to the writer or reader. The writer must imagine the responses of a reader at each moment, and the reader must invoke an inner dialogue with

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the writer. Our experiences as conversationalists are clearly foundational to this process of subtilization, as are overt interactions regarding a written piece with editors, teachers, colleagues, friends, etc. As writers we learn to anticipate imagined responses from hypothetical readers and these anticipations shape our grammatical practices. It is clear, though, in spite of this subtlized form of interaction, that writing alone, at leisure, for imagined and potentially unknown readers is a different grammatical enterprise than is designing an utterance, in real-time, for a specific, known, and co-present participant whose response is imminent. The topic of interaction and the grammar of written language thus needs to be taken up as a separate investigation, which I leave to future research.

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NOTES

1. See also Sorjonen (2001) for an extensive discussion of responding turns (in Finnish).
2. Of course, repair is also needed to repair problems with planning and processing.
3.
> Trouble source turns which are fitted in sequence are repaired with repetitions that are louder, have expanded pitch ranges, longer durations, and long-domain changes to the articulatory settings (compared to the trouble source turns) – the 'upgraded' phonetic pattern. Trouble source turns which are disjunct at the place in structure where they occur are repaired with repetitions that are quieter, have non-expanded pitch ranges, shorter durations and no major differences in articulation when compared to the trouble source turns. (p. iii)

REFERENCES

Austin, J. (1962) *How to Do Things with Words* (The William James Lectures delivered at Harvard University in 1955), ed. J.O. Urmson. Cambridge, MA: Harvard University Press/Oxford: Clarendon Press.

Biber, D. and Conrad, S. (1999) 'Lexical Bundles in Conversation and Academic Prose', in H. Hasselgard and S. Oksefjell (eds) *Out of Corpora: Studies in Honour of Stig Johansson*, pp. 181–90. Amsterdam: Rodopi.

Bybee, J. (2002) 'Word Frequency and Context of Use in the Lexical Diffusion of Phonetically Conditioned Sound Change', *Language Variation and Change* 14: 261–90.

Bybee, J. (forthcoming) 'Sequentiality as the Basis of Constituent Structure', in B. Malle and T. Givon (eds) *The Rise of Language Out of Pre-language*. Amsterdam: John Benjamins.

Bybee, J. and Hopper, P. (eds) (2001) *Frequency and the Emergence of Linguistic Structure*. Amsterdam: John Benjamins.

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Chafe, W. (1976) 'Givenness, Contrastiveness, Definiteness, Subjects, Topics, and Point of View', in C.N. Li (ed.) *Subject and Topic*, pp. 25–55. New York: Academic Press.
Chafe, W. (ed.) (1980) *The Pear Stories: Cognitive, Cultural, and Linguistic Aspects of Narrative Production*. Norwood, NJ: Ablex.
Chafe, W. (1994) *Discourse, Consciousness, and Time: The Flow and Displacement of Conscious Experience in Speaking and Writing*. Chicago, IL: The University of Chicago Press.
Cole, P., Hermon, G. and Tjung, Y.N. (2005) 'How Irregular is WH in Situ in Indonesian?', *Studies in Language* 29: 553–81.
Couper-Kuhlen, E. (2001) 'Interactional Prosody: High Onsets in Reason-for-the-Call Turns', *Language in Society* 30: 29–53.
Couper-Kuhlen, E. and Thompson, S. (2005) 'The Clause as a Locus of Grammar and Interaction', *Discourse Studies* 7: 481–505.
Couper-Kuhlen, E., Ono, T. and Vorreiter, S. (2003) 'Incrementing in Conversation. A Comparison of Methods in English, German and Japanese', paper delivered at the 8th International Pragmatics Conference, Toronto.
Curl, T. (2002) 'The Phonetics of Sequence Organization: An Investigation of Lexical Repetition in Other-initiated Repair', PhD dissertation, University of Colorado, Boulder.
Curl, T. (2006) 'Offers of Assistance: Constraints on Syntactic Design', *Journal of Pragmatics* 38: 1257–80.
Dreyfus, H. and Dreyfus, S. (1986) *Mind Over Machine*. New York: Free Press.
Du Bois, J. (1987) 'The Discourse Basis of Ergativity', *Language* 63: 805–55.
Egbert, M. (2002) 'Der Reparatur-Mechanismus in deutschen and interkulterellen Gesprachen', Habilitation, Universitat Oldenburg.
Fincke, S. (1999) 'The Syntactic Organization of Repair in Bikol', in B. Fox, D. Jurafsky and L. Michaelis (eds) *Cognition and Function in Language*, pp. 252–67. Stanford, CA: CSLI.
Ford, C., Fox, B. and Thompson, S. (1996) 'Practices in the Construction of Turns: The ''TCU'' Revisited', *Pragmatics* 6: 427–54.
Ford, C., Fox, B. and Thompson, S. (2002) 'Constituency and Turn Increments', in C. Ford, B. Fox and S. Thompson (eds) *The Language of Turns and Sequences*, pp. 14–38. London: Oxford University Press.
Ford, C., Fox, B. and Thompson, S. (2003) 'Social Interaction and Grammar', in M. Tomasello (ed.) *The New Psychology of Language*, vol. 2, pp. 1489–522. Englewood Cliffs, NJ: Lawrence Erlbaum.
Fox, B. (1987) *Discourse Structure and Anaphora*. Cambridge: Cambridge University Press.
Fox, B. (1994) 'Contextualization, Indexicality, and the Distributed Nature of Grammar', *Language Sciences* 16: 1–37 (special issue edited by P. Davis).
Fox, B. (2000) 'Micro-syntax in English Conversation', paper presented at the conference Interactional Linguistics (sponsored by EURESCO), September, Spa, Belgium.
Fox, B., Hayashi, M. and Jasperson, R. (1996) 'Resources and Repair: A Cross-linguistic Study of the Syntactic Organization of Repair', in E. Ochs, E. Schegloff and S. Thompson (eds) *Interaction and Grammar*, pp. 185–227. Cambridge: Cambridge University Press.
Givon, T. (1979) *On Understanding Grammar*. New York: Academic Press.
Givon, T. (1983) *Topic Continuity in Discourse*. Amsterdam: John Benjamins.
Givon, T. (2002) *Biolinguistics: The Santa Barbara Lectures*. Amsterdam: John Benjamins.
Gomez de Garcia, J. (1994) 'Communicative Strategies in Conversational Kickapoo', PhD dissertation, University of Colorado, Boulder.

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Goodwin, C. (1979) 'The Interactive Construction of a Sentence in Everyday Conversation', in G. Psathas (ed.) *Everyday Language: Studies in Ethnomethodology*, pp. 97–121. New York: Irvington.

Goodwin, C. (1981) *Conversational Organization: Interaction between Speakers and Hearers*. New York: Academic Press.

Goodwin, C. (1986) 'Gesture as a Resource for the Organization of Mutual Orientation', *Semiotica* 62(1–2): 29–49.

Goodwin, C. and Goodwin, M.H. (1987) 'Concurrent Operations on Talk: Notes on the Interactive Organization of Assessments', *IPrA Papers in Pragmatics* 1(1): 1–55.

Haiman, J. (1994) 'Ritualization and the Development of Language', in W. Pagliuca (ed.) *Perspectives on Grammaticalization*, pp. 3–28. Amsterdam: John Benjamins.

Hayashi, M. (2003) *Joint Utterance Construction in Japanese Conversation*. Amsterdam: John Benjamins.

Helasvuo, M.-L. (2001) *Syntax in the Making*. Amsterdam: John Benjamins.

Hopper, P. (1987) 'Emergent Grammar', *Berkeley Linguistics Society* 13: 139–57.

Hooper, J. and Thompson, S. (1973) 'On the Applicability of Root Transformations', *Linguistic Enquiry* 4: 465–98.

Karkkainen, E., Sorjonen, M.-J. and Helasvuo, M.-E. (forthcoming) 'Discourse Structure', in T. Shopen (ed.) *Language Typology and Syntactic Description*.

Lerner, G.H. (1996) 'On the Place of Linguistic Resources in the Organization of Talk-in Interaction: "Second Person" Reference in Multi-party Conversation', *Pragmatics* 6(3): 281–94.

Levelt, W. (1982) 'Zelfcorrecties in het spreekproces', *Mededelingen der Koninklijke Nederlandse Akademie van Wetenschappen* 45: 215–28.

Local, J. (2005) 'On the Interactional and Phonetic Design of Collaborative Completions', in W. Hardcastle and J. Beck (eds) *A Figure of Speech: A Festschrift for John Laver*, pp. 263–82. Englewood Cliffs, NJ: Lawrence Erlbaum.

Malinowski. B. (1978 [1935]) *Coral Gardens and Their Magic*. New York: American Book.

Manes, J. and Wolfson, N. (1981) 'The Compliment Formula', in F. Coulmas (ed.) *Conversational Routine: Explorations in Standardized Communication Situations and Prepatterned Speech*, pp. 115–32. The Hague: Mouton.

McNeill, D. (1992) *Hand and Mind*. Chicago, IL: Chicago University Press.

Mithun, M. (1987) 'Is Basic Word Order Universal?', in R. Tomlin (ed.) *Coherence and Grounding in Discourse*, pp. 281–328. Amsterdam: John Benjamins.

Nicita, L. (2002) 'Cognitive Verbs in Spanish: A Discourse Profile of "Acordarse", "creer", "saber" and Related Verbs', PhD dissertation, University of Colorado, Boulder.

O'Dowd, E. (1998) *Prepositions and Particles in English: A Discourse-Functional Account*. New York: Oxford University Press.

Raymond, G. (2000) 'The Structure of Responding: Type-conforming and Nonconforming Responses to Yes/no Type Interrogatives', PhD dissertation, UCLA.

Schegloff, E. (1984) 'On Some Gestures' Relation to Talk', in J.M. Atkinson and J. Heritage (eds) *Structures of Social Action*, pp. 266–98. Cambridge: Cambridge University Press.

Schegloff, E. (1995) 'Discourse as Interactional Achievement III: The Omnirelevance of Action', *Research on Language and Social Interaction* 28(2): 185–211.

Schegloff, E. (1996a) 'Issues of Relevance for Discourse Analysis: Contingency in Action, Interaction and Co-participant Context', in E.H. Hovy and D. Scott (eds) *Computational*

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and Conversational Discourse: Burning Issues – An Interdisciplinary Account, pp. 3–38. Heidelberg: Springer Verlag.
Schegloff, E. (1996b) 'Turn Organization: One Intersection of Grammar and Interaction', in E. Ochs, E. Schegloff and S. Thompson (eds) *Interaction and Grammar*, pp. 52–133. Cambridge: Cambridge University Press.
Schegloff, E. (1998) 'Body Torque', *Social Research* 65(3): 535–96.
Schegloff, E., Jefferson, G. and Sacks, H. (1977) 'The Preference for Self-Correction in the Organization of Repair in Conversation', *Language* 53(2): 361–82.
Sorjonen, M.-L. (2001) *Responding in Conversation*. Amsterdam: John Benjamins.
Streeck, J. (1993) 'Gesture as Communication I: Its Coordination with Gaze and Speech', *Communication Monographs* 60: 275–99.
Tanaka, H. (1999) *Turn-taking in Japanese Conversation*. Amsterdam: John Benjamins.
Tao, L. (1995) 'Repair in Natural Conversation of Beijing Mandarin', *Yuen Ren Society Treasury of Chinese Dialect Data* 1: 55–77.
Thompson, S. (1987) 'The Passive in English: A Discourse Perspective', in Robert Channon and Linda Shockey, eds, *In Honour of Ilse Lehiste*, pp. 497–511. Dordrecht: Foris (Netherlands Phonetic Archive 6).
Uhmann, S. (2001) 'Some Arguments for the Relevance of Syntax to Same-sentence Self-repair in Everyday German Conversation', in M. Selting and E. Couper-Kuhlen (eds) *Studies in Interactional Linguistics*, pp. 373–404. Amsterdam: John Benjamins.
Wei, Z. (1998) 'Repair in Chinese', PhD dissertation, University of Hong Kong.
Wouk, F. (2005) 'The Syntax of Repair in Indonesian', *Discourse Studies* 7: 237–58.
Yang, H-J. (no date) 'Self-repair in Korean', manuscript.

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