ABSTRACT: This article presents a developmental perspective on text construction, understood as managing information within and across sentence boundaries. The article claims that the systematicity in non-standard constructions in basic writers' texts reflects student awareness of three obligatory areas of information management in texts: topic management, reference tracking, and maintenance of given-new information chains. A taxonomy is presented that describes these obligations, shows how developing writers innovate to meet them, and compares these constructions to those of mature writers. The categories in the taxonomy are not traditional but instead describe textual functions relating to information management. Because these non-standard constructions are principled, explicit instruction is necessary to help students perceive that such constructions are not appropriate for academic writing.

As university professors who teach undergraduate writing and the "Introduction to Grammar" course required of pre-service English teachers, we have had an ongoing concern about the kind of knowledge teachers need to have about grammar and about how that knowledge should inform classroom teaching. As linguists, we have long recognized the shortcomings of traditional grammar. Of course, we know that this concern is not new. From the 1920s through the early 1960s, linguists repeatedly called for English teachers to abandon traditional descriptions in favor of more linguistic ones. The linguistic critique emphasized that descriptions of English offered by traditional grammar have significant shortcomings: its terminology is confusing,
and more important, its definitions do not reflect what native speakers of the language actually know.

In the last twenty years, there have been renewed attempts to reform English grammar teaching using insights from linguistics. Robert DeBeaugrande and Rei Noguchi have offered new ideas about the relation between the tacit grammatical knowledge possessed by all native speakers and the use of standard English. This work definitely represents a step forward in the teaching of grammar. However, we need to do more than show students that they can apply heuristics derived from their tacit knowledge of grammar to resolve some common sentence-level issues.

We need a developmental perspective focusing on the principles of language and text underlying student use of non-standard constructions. This kind of developmental perspective is important for pedagogy because the best teaching practices begin with what students know and proceed to what they need to know. For such a pedagogy, the perspective of traditional grammar is insufficient. Although sentence-level descriptions are very important, teachers need a perspective on grammar which can extend beyond the sentence and which reflects learner understandings. In this article, we propose such a perspective for understanding some of the most complex non-standard sentences students write.

**Shortcomings of Traditional Grammar**

Many of the rules and descriptions of traditional grammar fail to describe adequately the facts of written English, even at the most general level. For example, Christine Hult and Thomas Huckin in *The New Century Handbook* describe the subject of the sentence as “... a noun, a pronoun, or a noun phrase (a noun plus its modifiers) that identifies what the sentence is about. Usually it precedes the main verb” (510). Although this definition would allow the identification of many grammatical subjects, it would fail in ordinary cases such as:

1. It is raining.
2. It is true that many people lost money in the stock market.
3. There are many people in the park today.
4. To eat a high fat diet is foolish.

Not only does this definition fail to identify many ordinary cases of sentence subjects, it is also impenetrable to students unschooled in traditional grammar. This problem is made clear by Patrick Hartwell, who describes many of the definitions and descriptions of traditional grammar as COIK, “clear only if known” (119). For instance, to even
begin making use of this inadequate definition, a student would have to be able to identify nouns, pronouns, noun phrases, modifiers, verbs, and main verbs. Unfortunately for the student, traditional definitions of each of these categories also fail to capture many ordinary cases. As Hartwell makes clear, traditional definitions are useful only to those who have already overcome their vague formulations. It is no wonder that traditional grammar frustrates many students.

Reform Efforts in the Teaching of Grammar

As early as 1927, American structuralist linguist Charles C. Fries, in an attempt to reform English language teaching in the schools, critiqued traditional grammar teaching, observing that such pedagogy ignored advances in linguistics that had occurred during the preceding 100 years. His critique recognized the inadequacy of many traditional descriptions. With his influential 1952 book, *The Structure of English*, Fries again called for reform in the schools. Throughout the 1950s, a number of structuralist linguists answered Fries' call, but their efforts were ultimately rejected by English teachers because linguists were not able to demonstrate that student awareness of more accurate sentence-level descriptions would lead to improved writing skills. Robert Connors and Geneva Smitherman provide reviews of this debate as it occurred in the pages of *College English* and *College Composition and Communication* during the 1950s and 1960s.

In the last twenty years, reform efforts have been taken up again, most notably by Robert DeBeaugrande and Rei Noguchi. These linguists suggest means for overcoming the opaque or COIK nature of many traditional definitions for sentence-level grammar. Instead of criterial definitions for such concepts as "sentence" and "main verb," they propose operational ones. For example, typical traditional definitions define "sentence" as a group of words containing a subject and a predicate and expressing a complete thought. All of these criteria are problematic for naive native speakers of English seeking to identify sentences, which is a necessary step as students try to edit their texts for fragments and run-ons. DeBeaugrande and Noguchi resolve this problem by defining a sentence as any string of words that can be changed into a yes-no or a tag question. Generally speaking, formation of yes-no questions involves taking the first auxiliary verb and moving it just to the left of the subject (e.g., "Mary can speak French" becomes "Can Mary speak French?"). Formation of tag questions involves reversing the positive/negative polarity of the sentence, adding to the end of the sentence a copy of the first auxiliary as well as a copy of the subject but in its appropriate pronoun form (e.g., "Mary
can speak French, can’t she?”). Yes-no questions and tag questions are only possible from full sentences. Such operations avoid the vague criteria of traditional grammar by asking students to manipulate sentences in ordinary ways. For sentences containing a dependent clause, the same strategy can be used to distinguish the verb in the dependent clause from the main verb. In this case, it is only the auxiliary verb of the main clause which is moved for making such questions. In other words, the operations proposed by DeBeaugrande and Noguchi allow students to use their tacit knowledge of sentence grammar to identify sentence-level categories instead of trying to apply traditional definitions.

The approach taken by DeBeaugrande and Noguchi is important because it shows students how to use their own language knowledge to address sentence-level issues such as agreement or fragments. In addition, it offers a more student-centered approach to teaching grammar. In spite of these strengths, this work has not addressed a stubborn problem which confronts English teachers, namely, how to understand why students use many of the inappropriate sentence constructions they do in the first place.

Because we believe that the teaching of grammar in a writing class must be based on problems students have with constructing texts, teachers need insight into how sentence-level grammar contributes to managing information within and across sentence boundaries, a core element of text construction. In traditional grammar handbooks, there is little recognition of grammatical concerns extending beyond the sentence. Grammar handbooks typically have sections on so-called “mixed constructions,” which Hult and Huckin define as a “sentence that starts out one way but finishes in another” (885). For example,

5. In the world created by movies and television makes fiction seem like reality. (658)

The discussion that follows this example offers appropriate revisions, but it is striking that no attempt—other than imputing lack of attention—is made to account for the student’s textual intentions. To do so requires descriptions of grammatical categories whose scope extends beyond the sentence and which function to manage information within and across sentence boundaries. In addition, responding to such constructions requires a developmental pedagogy. It is implausible to assume that the student who wrote 5 believed that he or she had failed to communicate effectively. Instead, we should assume that the absence of revision reflects the student’s belief that he or she was following principles of information management and communication.
Student Language from a Developmental Perspective

We are not the first to argue that teachers must do more than be "astonished and baffled" by sentences such as 5 when they occur in students' writing. This very point was made by David Carkeet (682), who wrote one of the earliest papers in the literature calling for teachers to adopt a developmental perspective on such sentences. This literature is premised on the notion that even such non-target-like structures as mixed constructions are principled, although they may be used by beginning writers who have had little experience with the demands of academic writing. Mina Shaughnessy's *Errors and Expectations* is the foundation of much of this work and remains vital today. She observed not only that beginning writers learn by making mistakes but also that these mistakes are largely systematic (5). Shaughnessy urges teachers to understand the reasons behind student errors.

Carkeet, writing in the same year as Shaughnessy, speculates that writers of such sentences perceive them "as strings made up of discrete chunks having little or no relation to each other. Each chunk has integrity, but that integrity is lost when the chunk is viewed as part of a whole" (685). Carkeet speculates that the cognitive demands of the writing process, especially for students with little practice in "disciplined" writing, may cause such constructions (686). Ellen Barton et al., in their study of types of "awkward" sentences, offer a similar account of their source. They suggest that "awkward" sentences result from writer "mismanagement" of syntactic structures and related "idea" structures. When student writers produce these sentences, it is because they have difficulty fitting complex ideas into the corresponding more complex syntactic structures (95).

David Bartholomae, Eleanor Kutz, and Charles Coleman appeal to two fundamental concepts in the study of second language acquisition, error analysis and interlanguage, as the basis of a framework to understand non-standard constructions of native English speakers. Although error analysis looks for systematicity in the non-target-like forms that students use, at best it can only identify systematic differences between what a student does and the target language. An interlanguage perspective looks for the principles underlying students' non-target-like constructions. As Kutz notes, from an interlanguage perspective, the students' sentences are systematic, rule-governed, and predictable (392). As a consequence, there are no "errors" if we analyze student production from an interlanguage perspective. Especially important for the framework we propose, Kutz suggests that from an interlanguage perspective, students might "return" to earlier principles when they encounter discourse demands which cannot be adequately met by their present knowledge (393). All of this work is important
because it shows the inadequacy of traditional categories for understanding what students do as developing writers.

From our perspective, Coleman's analysis of sentences like mixed constructions is the most important. Coleman considers two types of structures in the writing of speakers of African-American vernacular English (AAVE): "by strings" and topic-comment sentence structures. With regard to "by strings," Coleman notes that eliminating by would make the sentence grammatical.

6. By making English the official language would take away one's constitutional rights. One would not have freedom of speech, choice, writing or the press if this was to happen. (490)

Coleman observes that such strings appear to be marking either an agent-action or a causative relationship. Citing claims that prepositions in AAVE have different uses than in standard English, Coleman suggests that these "by-strings" may be a feature unique to AAVE. We are not certain that sentences like 6 occur only in the writing of speakers of AAVE. For example, Lynn Troyka uses a "by string" as identified by Coleman as an example of a mixed construction (326); Diana Hacker uses a "by string" as an example in an exercise on repairing mixed constructions (212); Andrea Lunsford and Robert Connors also have an example of a "by string" in a similar exercise (311). If "by strings" were only prevalent in the writing of speakers of a particular variety, we would not expect to see examples in so many handbooks. That these strings all begin with by is certainly interesting; however, it is unclear to us that "by strings" are much different than the second type of construction Coleman discusses: topic-comment structures.

In traditional terminology, the structures discussed in Coleman as topic-comment would be labeled run-on, or fused, sentences. In the following sentence discussed by Coleman, we have labeled the "topic" and "comment" parts of the string.

7. To work hard and become successful is great. [topic Letting it take away your time with your friends and families] [comment it's not worth it.]

Coleman observes that the student who wrote 7 did not use punctuation to signal the topic-comment organization. He correctly notes that topic-comment constructions like 7 exist in other languages and suggests that this type of structure exists in AAVE.

We agree that 7 is a topic-comment construction but we believe that this construction does not reflect a particular non-standard variety of English. Instead, it is the extension into writing of a very frequent construction in the oral language of all English varieties.
Douglas Biber et al. in *The Longman Grammar of Written and Spoken English* describe differences of spoken and written English. They observe that structures like 8, which they label "prefaces," are very common in spoken English.

8. Sharon, she plays bingo on Sunday night. (957)

They note prefaces serve to establish a topic in the discourse. We consider the structure in 7 to be a preface which uses the following *it* in the comment to repeat the topic. All of the other examples in Coleman can be analyzed the same way. Rather than attributing topic-comment structures to any particular variety of English, we believe they represent a developing stage in the writing of many students. In fact, this is exactly the kind of evidence needed to support Kutz's claim, cited above, that earlier forms are always available to a student. It is not surprising that when students need to announce a new topic and they lack (or lack confidence in using) the appropriate grammatical means in the written language, they return to earlier principles, especially those available in the oral language. Because prefaces are a feature of the spoken language, this structure is always available for introducing a new topic and for commenting upon it.

### A Framework for the Grammar-Text Interface of Developing Writers

Coleman suggests examining these two kinds of structures, both of which can be classified as mixed constructions, from an interlanguage perspective. We agree, but believe that there is a wider range of non-target-like structures produced by developing writers as they strive to manage the information in their texts. We propose three obligatory areas of information management in text: topic management, reference tracking, and maintenance of given-new information chains. We believe that all writers know that they have these obligations to manage information in their texts. The systematicity that Shaughnessy observed is a reflection of the efforts of developing writers to realize their obligations. We propose a taxonomy to describe these obligations and show how developing writers try to meet them. The categories in the taxonomy do not have traditional labels but use labels based on textual functions relating to information management. It is important to note that textual functions do not have a one-to-one relationship with grammatical forms. Our observations on the kinds of constructions writers use to manage information are, therefore, suggestive and not complete. We cannot list all the possible constructions writers can use to realize these textual functions.
Except where noted, all of the examples from developing writers come from first year students at comprehensive regional universities in Kentucky and Missouri. All students are native speakers of English. We have not edited these examples. For clarity, some phrases have been bolded.

I. Topic announcing structures
   A. Presentationalns
      Mature writer: expletive there constructions
      1. There are many cuts expected in next year's budget.
      Developing writer: fragments, imperatives, questions
      1. In the writings of Erich Fromm, Solomon Asch, Shirley Jackson and Philip Zimbardo. Each of these people were professors at well known colleges or their experiments and studies have been to determine the reasons that human kind, obey and disobey.
      2. The time of my life when I learned something, and which resulted in a change in which I look upon life things. This would be the period of my life when I graduated from Elementary school to High school. (Bartholomae 255, citing the work of a developing writer)
      3. In conclusion, start with the major things like the internet, and everyone else do their part, little by little the problem will start to vanish.
      4. Personal freedom or personal safety, which should have more protection?
   B. Prefaces
      Mature writer: (only in the oral language)
      Developing writer: topic followed by a co-referential pronoun or full noun phrase.
      1. Teenagers, especially, are almost for sure they are going to do it their mind is set on it.
      2. In the case of Olmstead v. U.S. the investigators for this case were discovered to have broken the law in order to obtain critical information in the trial. (Beginning of paragraph)
      3. In the case of wiretapping, I think the government has the full right to it. (Beginning of paragraph)
C. Focus constructions (structures which present new information)
Mature writer: it-clefts
1. It is **not surprising** that the budget will be cut next year.
Developing writer: imperatives, rhetorical questions
1. I think that the government has all the control in order to catch someone if they are doing illegal stuff, and that includes tapping into someone's phone line. *Think about it* someone is going to do something, . . .
2. School violence, will it ever stop?

D. Topic-comment constructions
Mature writer: sentences in which the relationship between the subject and predicate is grammatically linked
1. The fear that budgets would be cut is coming to pass.
Developing writer: mixed constructions
1. [topic In many different newspapers and news programs that I watch or read that September 11] [are comment talking about how the Americans are not going to have safety and freedom at the same time].

II. Reference chains
A. Noun phrase displacement
Mature writer: traces (In the sentence below, which, whose antecedent is "technology stocks," is interpreted as the object of *invest in*. This position is marked by *t*, which linguists call a pronominal trace. The subscripts mark the reference chain between antecedent and pronouns.)
1. Technology stocks, which, many invested in *t*, have not rebounded.
Developing writer: repeated pronouns or full noun phrases.
1. [One of the young boys], was my crush, **who** I had liked **him**, since second grade.
2. For the teacher, he must refuse authority to stop the experiment. To not refuse it he must obey his experimenter and continue to inflict pain to his learner, **which**, he can visually see [how painful the shocks have become].
B. Reference tracking
Mature writer: unambiguous reference to other words
Developing writer: inconsistent reference to other words

1. A person has to be of a certain status or certain rank to be included in the big part of society. In the upper-middle class a person has to show their wealth by having a big fancy home or a fancy car. If that person does not have either of the two they are not considered as apart of the upper-middle class. All of the people who do have the nice cars and the fancy homes do not consider that person of their rank so they discard them.

III. Information sequencing
A. Given-new information chains
Mature writer: constructions such as passive voice and pre-posing used to change word order for the purpose of maintaining appropriate given-new information chains.

1. Most of his proposals were accepted by the committee.

2. Most of his proposals the committee accepted.

Developing writer: question-answer pairs, non-standard punctuation practices to mark boundaries within and between propositions.

1. A person has to prove themselves to the public for what reason? To be in a certain position in society or is it just to belong and be known. Being different is the best part of being a human. To be totally different from everybody else and know that there is no two people alike. Being a person makes them different so what does it matter what they drive or how big their house is.

2. One of the biggest problems that my brother has. Is this complex about how he stands up on his pedestal and everybody is below him.

3. Street racing is like skateboarding on a bigger scale, those who don’t participate in the “sport” will have to deal with those who do. There was no place for skateboarders to go in small towns, until the skateboarders talked to the city committee. Street racing is the same thing, nothing will happen until some one decides to face facts and the facts are that people love to be competitive. People love to
do whatever it takes to get to the top, the problem is that people are starting to get dangerous and innocent people are getting hurt.

4. Some of the greatest thinkers in the history of mankind, were those that have went against authority and made their own decisions.

Implications of the Framework for Analyzing Developing Writing

The claim behind the proposed taxonomy is that although developing writers produce non-standard constructions, their textual “errors” are best understood as principled attempts to manage information and not clumsy attempts to construct a “standard” text. That developing writers are aware of their communicative obligation to manage information is often apparent in the constructions they use, many of which rarely, if ever, occur in standard texts. For example, mature writers rarely introduce topics using fragments or questions as presentationals. The use of prefaces, constructions which function to introduce topics in speech, demonstrates the developing writer’s communicative awareness. Mature writers generally do not use rhetorical questions to shift focus. When they do so, their style is clearly marked. When developing writers use mixed constructions, never found in mature texts, they are responding to principles of how information is organized in text.

We claim that the non-standard constructions students use to manage information are innovative responses to textual demands. As such, they are evidence of students striving in purposeful ways to construct communicative texts. Rhetorical questions and non-standard punctuation practices are good examples. Faced with the task of introducing a new focus within the topic, the student can make use of a rhetorical question instead of using a cleft construction, which he or she may be unfamiliar with. The rhetorical question is a useful tool to introduce a focus without having to make it explicit because the answer to any question is focused information. In other words, students who use this construction for this purpose certainly know what they need to do. The issue which confronts their teachers is how best to guide them to more appropriate constructions.

The use of non-standard punctuation to indicate the boundaries within and between propositions is another case in point. The non-standard punctuation usage of students, although not reflecting syntactic principles, is not random. Instead it serves to mark proposition boundaries or topic from comment within a proposition. Rather than
demonstrating student carelessness, this kind of non-standard punctuation reveals innovative attempts to communicate as clearly as possible with the resources the student has.

Pedagogical Implications

We have argued that the non-standard constructions students use to manage information in their texts are innovative and principled attempts to manage information flow. Because student texts reflect student principles of information management, students have great difficulty in perceiving that such sentences are deviant from a mature-writing perspective. Read-aloud editing can help students notice many surface errors but is not as helpful in identifying errors in topic management, reference, or information sequencing. We believe that explicit instruction is necessary for students to perceive that the non-standard constructions they may use to manage information are not appropriate for academic writing.

We advocate a pedagogy that follows in a straightforward manner from our taxonomy of information management in texts. More generally, we urge teachers not to assign only personal narratives. Because the topic of personal narratives is the protagonist, they can be written with few, if any, topic changes. Assignments which oblige the student to shift topics or to shift focus within a topic facilitate greater awareness of the language needed to do so appropriately in academic writing. Of course, argumentative topics require such shifts, but so do more straightforward tasks such as descriptions. A description of a room, for instance, requires the writer to shift focus as he or she moves from one part of the description to another.

A developmental pedagogy of text construction should be based on an appreciation of principles underlying student writing. The taxonomy we propose suggests making explicit comparisons between student texts and mature texts. For example, a paragraph from a student paper which introduces topics inappropriately either through use of prefaces, fragments, or mixed constructions is compared to a text which introduces topics appropriately. Students realize that while topics are introduced in both texts, different grammatical structures are used in academic writing than in the student text. The key instructional point is that the principles of topic management be made explicit through the comparison between the grammar constructions of the student text and the mature writing text. Similar comparisons should be made in regard to reference tracking and information sequencing. When students can recognize that their constructions are inappropriate in an academic context, then the teaching of revision strategies can begin.
Conclusion

We have argued in this article for teaching English grammar to developing writers from a principled student perspective, one which reflects students’ keen awareness of principles of information management and communication. In 1985, Hartwell argued that teaching “school grammar” would not lead to improvement in writing skills because the categories of school grammar do not reflect what students tacitly know about the language and because there is no relation between learning these categories and writing. The efforts of structuralist linguists in the 1950s and 1960s to reform English language teaching also foundered on this point. While acknowledging that the work of DeBeaugrande and Noguchi is very important, we contend that effective grammar teaching in a writing class must be informed by a student perspective which sees non-standard constructions not as errors but as reflections of developmental principles which inform student text construction.

It is interesting that Hartwell argues against the explicit teaching of grammar, suggesting that most errors, including fragments, are best understood as performance errors—mistakes in punctuation (120). Moreover, citing Bartholomae, Hartwell claims that “by reading aloud, [most students] will correct in essence all errors of spelling, grammar, and, by intonation, punctuation, but usually without noticing that what they read departs from what they wrote” (121). While many surface errors can be self-corrected, we believe that the constructions we have discussed are not performance errors and are not easily self-corrected because they reflect underlying principles that developing writers have. It is striking that the one error that Bartholomae’s student did not self-correct is a mixed construction (261-262). Because such constructions reflect underlying principles, we also disagree with Kutz’s claim that these kinds of student errors will “disappear” as an effect of extensive reading and writing (395).

Innovative constructions reflect clear developmental principles of managing information in texts. We encourage grammar instruction in writing classes which draws students’ attention to these innovations and demonstrates why these constructions are not effective from a mature writing perspective. Grammar instruction which is rooted in traditional categories and considers non-standard constructions as wrong rather than as purposeful and communicative will fail the student. We suspect it has already had that effect. All of the examples in our taxonomy were written by students who have had at least twelve years of formal education. However, instruction that looks positively at student innovations might succeed. Through our taxonomy, we suggest an outline of the pedagogical content needed to stay in step with student development.
Our discussion of grammar and error is unusual, but traditional approaches do not help students with persistent errors of the type we describe. Traditional pedagogies start from the assumption that what students do is wrong. We advocate a pedagogy for teaching grammar that understands students’ non-standard constructions as the student does—as both innovative and principled attempts to reconcile the writer’s understanding and skill with reader need.

Notes

1. Similar discussions about mixed constructions can be found in Hacker (207-211), Lunsford and Connors (307-311), and Troyka (325-326).

2. The term interlanguage was first proposed by Larry Selinker to describe the grammatical principles that second language students have about language learning. Despite the use of the prefix inter- an interlanguage must not be thought of as a grammar between the student’s first language and the second language but as a principled grammatical system itself.

3. Mel’cuk notes that all three of these areas are necessary for developing a framework for what he calls communicative organization or information packaging.

4. All students whose words are cited have granted their consent. Consent forms are on file with the authors.

5. In the taxonomy (IA, Developing Writer 2), we have included an example of developing writing which Bartholomae presents as evidence that basic writers are not “immature.” He claims that such structures are “intentional” and evidence that the student is “using writing as an occasion to learn” (254). Bartholomae does not offer an explanation of the principles underlying this construction.

Works Cited


