X-WORD GRAMMAR:
OFFSPRING OF SECTOR ANALYSIS

First a confession. I was one of those eighth-grade oddities who loved grammar. I could construct Reed-Kellogg diagrams the way other children made magnificent castles with Erector Sets. I never confused restrictive and non-restrictive clauses, and I had no problems with predicate nominatives and predicate adjectives. Nor did I see any relationship between grammar and writing. I didn’t really need to. My parents were native speakers of Standard English, and my schooling was suburban middle class. Formal grammar was more a self-indulgence than a necessary area of study.

Virtually none of my students in fifteen years’ teaching have been able to afford such a luxury. Standard English has been their second language, their second dialect or some seemingly unreachable goal. Some have come into my classroom never having written a whole English composition in their lives. My present students, most already out of their teens, feel severely pressed. If they are to study formal grammar at all, it must be immediately applicable to their writing and show results fast.

CHOOSING A GRAMMAR

My classroom needs are best met by sector analysis, the system of tagmemic analysis developed by Robert L. Allen of Teachers College, Columbia University, and by its offspring x-word grammar, which may be defined as “the classroom applications of the sector analysis of English to written sentences.” More will be said about both of these shortly, but first I should be clear as to what I see as the purposes of studying formal grammar and the criteria a basic writing teacher might apply in choosing a particular grammar.

Consciously or unconsciously, teachers choose to teach grammar for
purposes of affect, editing, or style. The first of these—having a language look more sensible, more likable through the study of its grammar—is probably not a top priority. I think it is critical. What point is there in teaching grammar if it makes the language look like a rule-infested morass? If this first purpose is overlooked, it is often in favor of the second—editing. Most writers for whom Standard English is a second language or dialect and most developmental or remedial writers appear to need some systematic framework in which to check the accuracy and acceptability of their written sentences. And, with the exception of “naturally talented writers,” whatever and whoever they may be, everyone can use some help with style, particularly the accessible kind of style that derives from varied and balanced use of structures.

With these purposes in mind, we might look briefly at the place most of us started: Latinate, or traditional, grammar. I taught traditional grammar in high school English classes for two years, which was long enough to show me what didn’t need. First of all, only a few students learned the grammar well; more disliked it intensely, and nearly all came to see English as a Gordian knot. Secondly, it simply did not help students with their writing in terms of correctness or style. It wasn’t me; I taught those rules and diagrams lovingly. It was the grammar. Latinate grammar suits Latinate languages, and English is a Germanic language. It is hard to believe that so important a world language has for centuries been squeezed into a grammar not its own like a prizefighter wearing tutu and toeshoes.

And what of modern grammars? All claim to be descriptive rather than prescriptive, which is an enormous advance right there, yet some are so abstract and theoretical that a teacher dare not take them into the classroom. One of the most thorough discussions of modern grammars from a teacher’s point of view is found in Robert L. Allen’s English Grammars and English Grammar. Each of the major grammars to make its appearance during the past four decades is examined critically, though certainly not without bias: structural linguistics, which had some revolutionary effects upon the study of oral language but did not see written language as more than a secondary visual representation of speech; transformational-generative grammar, which insisted upon language as system instead of language as speech and stayed beyond the reach of classroom teachers (justifiably, I believe) by plunging so deep into the derivations of language that neither the actual utterances nor the practical speech-forming processes of a speaker were described; stratificational grammar, which, unlike other grammars, embraced
semantics from the start but discouraged teachers with its complex strata and diagrams resembling the circuitry of a transistor radio; and tagmemic grammar, which, because it has been scorned or ignored by American linguists as too superficial in approach, has been quite inaccessible to teachers.

None of these modern grammars, even the popular ones, have really caught on—at least not with teachers. Handbook after handbook still comes out with a grammar section starting with the eight parts of speech. I think there are valid, if regrettable, reasons. First, supplanting traditional grammar is like replacing apple pie, however poorly baked, with sacher torte; we know what we grew up with, and we don’t give it up so easily. Second, it is as hard for linguistic scholars to make time for deep classroom immersion as it is for teachers to do scholarly research. Much-needed translation of theory into practice is slow in coming. The third reason may not be as obvious as the first two, but it brings us back to where the discussion of purposes for studying grammar began. The open letter at the beginning of my textbook *X-Word Grammar: An Editing Book* reads, “Dear Student . . . The purpose of this book is to have you like the world more.” This is not just a nicety; it is a serious intention based on four years’ study of the Aesthetic Realism of Eli Siegel and nearly as many years’ testing of the proposition that the purpose of all education is to like the world. This is a large concept which cannot be discussed fully here, but I sincerely believe that no grammar, whatever its qualities, and no grammar teacher, whatever his skills, can affect students in a deep and pleasing way unless there is a relationship made between the form and content of language, students’ own lives, and the whole world. Grammar has not yet been seen as kind, but it can be, and I think this will make a great difference in the way students learn it.

Following is a brief list of criteria a Basic Writing teacher might use in choosing a grammar.

1. The grammar should describe modern Standard English—not Latin, not all the languages of the world.
2. It should pertain explicitly to the written form of the language.
3. It should take meaning into account.
4. It should be complete and accurate enough to hold up to a linguist’s examination but also be translatable to classroom terms and techniques. In other words, there should be a full version for the teacher as well as an abridged, practical version—or at least the possibility of one—for the student.
5. It should be teachable—or better, learnable—through the use of students' intuition, or "ear," for what sounds right or wrong.

6. The student version should minimize terminology, symbols, and abstractions.

7. It should be immediately applicable to students' own sentences.

8. It should yield some improvements in student writing very quickly.

SECTOR ANALYSIS AND X-WORD GRAMMAR

The basic assumptions of sector analysis about linguistic analysis in general, the analysis of English in particular, and the value of studying or teaching English grammar are clearly stated in Part Four of English Grammars and English Grammar. (1) Written English and spoken English are different but overlapping systems of the English language, each with its own conventions or "rules." (2) If a new grammar of English is to have any real value for the teacher, it must be teachable even to elementary school students and to those who may not already have had any formal study of traditional grammar. (3) A grammar having any relevance for the teaching of reading and writing must emphasize not words but constructions—the larger syntactic units that combine in different ways to make up an infinite number of sentences. (4) The grammar must deal with specific kinds of directed relationships—that is, not just relationships between two or more elements but to something else. For example, in the sentence Percy put the hat on the table in the hall, it is not enough to say that on and in are prepositions introducing phrases; it must be pointed out that in introduces the smaller phrase in the hall while on introduces the larger phrase on the table in the hall, which has the smaller phrase embedded in it. (5) The grammar must allow for differing interpretations of potentially ambiguous sentences like My brother wrote a poem on Thanksgiving Day. (6) English sentences have one basic, overall order of positions on each layer of analysis, and all native speakers of the language share a feeling for these basic sequences whether the positions are filled or unfilled in any real sentence. (7) Finally, meaning is an integral part of language and thus cannot be ignored, and the best descriptions of language will usually proceed from forms (which are overt) to meanings (which are covert), rather than from meanings to forms although the former may often guide one to the recognition of the latter.

The last of the assumptions above identifies sector analysis as a tagmemic grammar. A tagmeme is a form-function correlation which
signals meaning only in context, never in isolation. The word record, for example, cannot even be pronounced without diacritical marks until it is put into a context: A record is kept by a person whose job it is to record. The form in each occurrence of record is simply a single word; the functions of the two are different, however. Thus the form-function correlation noun: record signals a different meaning from verb: record.

Although the example above deals with an individual word, the most attractive linguistic feature of sector analysis is that it takes on large chunks of language right from the outset. The analysis of real sentences does not string out a lot of individual words, nor does it “start from the bottom and build up” from any kind of a kernel or model. On the contrary, it starts right from the top and peels a sentence down layer by layer stripping away one or more construction-types-within-positions after another until the level of individual words is reached. For example, the sentence Now is the time for all good men to come to the aid of their party represents one particular form, or construction type, in one particular position, or sector. The construction type is a trunk (or independent clause), and it is found in the only position it can fill, which is called the trunk position. There are empty positions as well, which could be filled by such things as whether we like it or not, gentlemen, unfortunately and other construction types. The first level or layer of analysis, then, is simply “trunk in trunk position.” On the next level down, we look at the positions in the construction type “trunk” to see what new construction types fill them. The two positions available are subject and predicate. One is filled by the single word now, and the other by a larger construction type, the predicate is the time for all good men to come to the aid of their party. Down another level, we look at the two positions in the predicate to find that the x-word position is filled by the x-word is while the predicatid position is filled by a predicatid (which means “everything left over in the trunk once the x-word is cut off”). One more level. The predicatid has positions available for a verb, an object, and various types of complements. In our sample sentence only a complement position is filled, and it is filled by a construction type called a cluster. This cluster, the time for all good men to come to the aid of their party, like any other cluster, could be put into other positions besides complement—subject and object being the most obvious ones.

In a teacher’s study of sector analysis, much time is devoted to the kind of “layering down” described above. There are fewer than ten construction types and only fixed, predictable positions in each of them, so the basic analytic techniques do not take long to acquire. Nevertheless, these are definitely techniques for the teacher’s
examination of English, not the basic writing student’s. This is where x-word grammar or some other student version of sector analysis is necessary. At some points the two are the same; at others they appear to be more different than they actually are. I do not think that x-word grammar actually contradicts sector analysis, but it should be kept in mind that there is always a “whatever-works-in-the-classroom” factor operating as x-word grammar develops further, so there are bound to be areas which are less comprehensive, less sound linguistically while at the same time more practical than corresponding areas of the parent grammar. Above all, x-word grammar should not be taken as a mini-version of sector analysis as a linguistic system; its purposes are different, and it should be judged according to pedagogical rather than linguistic criteria.

X-words are the twenty first auxiliary verbs of English. They are the only words which can start the actual question part of a yes-no question, and they are found in every written statement or question. If you can think of a statement which doesn’t appear to have an x-word, turn it into a yes-no question or a negative statement, and the x-word will show itself. In fact, if you would like to start an examination of x-word grammar exactly as many students do, make a list of twenty questions that can be answered ‘yes’ or ‘no.’ Start each question with a different word, but do not repeat any of these words in their negative forms, and do not use the obsolete (or obsolescent) x-words ought, dare and need.

The x-words are a beautiful starter and focal point in the grammar, first because they are ubiquitous in English and form a unique and very tidy category, second because students already know them although they have never looked at them as a category, and third because many Basic Writing students’ problems show up right around the x-word positions: subject-verb agreement, negation, word order, tense, missing or repeated subjects, verb forms and certain kinds of fragments. X-words, like a number of other categories of function words, need never be defined for students; they are simply part of a closed list of twenty items. Four of them—is, was, has, does—are used with the third-person singular which has given many students such headaches, and these four conveniently end in the letter -s. None of the other sixteen x-words do. Each x-word dictates, without exception, the form of any verb following it. The only five x-words that offer any choice of verb form are am, is, are, was and were, and this very limited choice represents the important difference between active and passive voice, for example is eating versus is eaten. All contractions except purely literary ones have an x-word as one of their components. The term “subject” is defined simply as “the
position between the two x-word positions," which is easy to find just
by making a yes-no question because the x-word moves from the right of
the subject to the left. Every x-word has a subject which it must agree
with. Verbs, on the other hand, lose most of their grammatical meaning
once their x-words are removed; they indicate neither number nor
person nor tense without their x-words.

Prodigies though they are, the x-words are not all there is to x-word
grammar. The grammar focuses on five basic editing skills: (1) making
yes-no questions (to check basic sentence structure), (2) identifying
sentence patterns (to check sentence variety and punctuation), (3)
matching subject/x-word/referent (i.e. matching four singular x-words
and four plural x-words with their subjects and the pronouns that refer
to them), (4) matching x-words and verb forms, and (5) matching tenses
and time signals. A teacher using x-word grammar conscientiously can
expect marked changes in students' free writing. The first improvement
is in basic sentence structure: fragments disappear almost immediately,
run-on sentences (also called comma splices) take only a little longer,
and sentence variety increases from the first work on basic sentence
patterns. Punctuation begins to improve at about the same time because
all of the basic punctuation rules of x-word grammar—there are only
eight—derive from sentence structure. Subject-verb agreement and the
related area of referent agreement improve slowly but steadily. Work on
verb forms and verb tenses seldom shows automatic or immediate results
but provides a base for patient and eventually result-producing practice.

Perhaps the most colorful and enjoyable area of x-word grammar is
basic sentence patterns. Sector analysis posits one basic pattern in which
the major positions, or sectors, are filled or left vacant to form real
sentences, whereas x-word grammar uses seven basic patterns to
represent the core structure of students' expository writing. These seven
patterns can be compared to the digits zero through nine in that they can
be combined to form an infinite variety of real sentences.

TRUNK
LINKER AND TRUNK
FRONT SHIFTER AND TRUNK
TRUNK AND END SHIFTER

Bluebeard had many wives.  
However, he never found marital bliss.

Though Bluebeard had many wives, he never found marital bliss.

Bluebeard never found marital bliss though he had many wives.
Bluebeard had many wives, but he never found marital bliss.

Bluebeard had many wives but never found marital bliss.

Bluebeard, who had many wives, never found marital bliss.

Only seven construction types come into heavy use in x-word grammar:

1. Clause
   though Bluebeard had many wives

2. Trunk
   Bluebeard had many wives/he never found marital bliss

3. Predicate
   had many wives/never found marital bliss

4. Predicatid
   have many wives/having many many wives/never finding marital bliss

5. Phrase
   in his life/on time/at 10:00/never finding bliss

6. Cluster
   his life/many wives/a son/each week

7. Word
   life/wives/bliss/week/have/be/his/many/a/one/of/the

Eight punctuation rules suffice for students' expository essays, and most of these rules can be expressed in terms of the sentence patterns themselves.

1. LIST
   Use commas in a list of three or more items.

2. FT
   Use a comma at the end of a front shifter with a verb or x-word in it.

3. T+T
   Use a comma before the joiner between two whole trunks.

4. TI
   Use commas on both sides of an insert.*

5. LT
   Use a comma after a linker like However, Therefore, Nevertheless.

*Only what traditional grammar calls “non-restrictive clauses” are among the many things which can fill an insert position in sector analysis. “Restrictive clauses” are always necessary identifying information and are therefore embedded into larger constructions. My students have had little difficulty seeing that a sentence like “Women who talk too much annoy me,” which is only a TRUNK, can change in meaning—and offensiveness—by the use of a pair of commas to mean TRUNK WITH INSERT, i.e. “All women annoy me,” and the extra information is that all women talk too much.
6. “Q” Use a comma to start and end a quotation.

7. T;T Use a semi-colon instead of a joiner between two whole trunks.

8. T: Be sure you have a whole trunk before you use a colon to signal a list or an explanation coming up.

X-word grammar recognizes three forms of any verb—the base form, the -ing form and the participle (e.g. EAT, eating, eaten)—but acknowledges four other forms that combine a base form with another word: \( to + \) base form = infinitive (e.g. to EAT) and do, does or did + base form = do-form, does-form or did-form (e.g. eat, eats, ate). Tenses are either past or non-past and are called by names of the x-words they use: the did tense, the was/were tense, the had tense, the do/does tense, the am/is/are tense and the have/has tense. The future tense is an exception since it uses various x-words, and the systematic patterning of x-words found in what traditional grammar calls conditional tenses comes under the rubric of future, general and past if tenses.

Most of the terminology of x-word grammar has already appeared in the brief summary above. Most of the terms are shorter and more visually or functionally descriptive than their traditional grammar counterparts. And there are simply fewer of them in the first place. There are fewer definitions of terms because many items, like x-words, joiners, includers, prepositions, and linkers, make up closed lists which are part of students' reference materials and because others, like nouns, verbs, and adjectives, are defined only in context according to their form-function correlations.

X-word grammar has no theoretical underpinnings of its own but generally goes along with the assumptions and assertions of the parent grammar, sector analysis. It has not been tested systematically but has instead developed and expanded gradually through daily classroom application, feedback, and revision, as well as a considerable amount of teacher exchange and criticism, mainly in adult manpower programs and colleges in the New York metropolitan area. Scholarly criticism is of course desirable, but until it is offered, teachers should trust their students and themselves as critics.

CLASSROOM APPLICATIONS

Sector analysis was adopted by the Hunter College Developmental English Program in 1972, and the experimental edition of Allen, Pomptian and Allen’s Working Sentences, the first college text of the grammar, was tested and revised in this setting.
The Developmental English Program has five writing courses leading to Freshman Composition.

For Bilingual Students: 17.003 → 17.004 → 17.005 → Freshman Comp
(six hours) (six hours) (three hours)

For Native Speakers of English: 17.014 → 17.015 → Freshman Comp
(three hours) (three hours)

The “four” level (17.004 and 17.014) has the heaviest dose of grammar. Both native English speakers and bilingual students use the revised edition of *Working Sentences* as their core text. The next level up uses the experimental edition of *X-Word Grammar* and, as much as is possible, limits grammar to brush-up editing techniques.

Teachers' approaches to the grammar vary considerably, but all are working toward a two-hour essay final examination which is read by two or more readers using a single, standardized score sheet. At all levels there is a heavy emphasis on grammatical correctness.

At the “four” level I use additional materials to supplement *Working Sentences*. Approximately one-sixth of my students' in-class time is spent working on a set of materials called *The Grammar Discovery Tasks*, which is a box of 160 four-by-six cards comprising twenty-four tasks designed to have students use their knowledge of, and intuition about, English to establish categories, formulate principles, and apply both to samples of their own writing. Using these tasks, students work in groups of four, pooling their resources to examine some basic features of English: the twenty x-words and hidden x-words, the seven basic sentence patterns, simple punctuation rules, how noun signals work with countable and uncountable nouns, how eight x-words agree with their subjects, how families of x-words determine the form of following verbs, how x-words carry time meaning and match particular time signals.

When students begin to use these tasks, they form a group of four and choose a reader-recorder to take Task #1 from the box, read it to the group, and write down what the group comes up with. Task #1, which asks students to come up with the twenty x-words in yes-no questions and negative statements, would be a slow task for one person; the combined suggestions and checking of four students generally results in a correctly completed task in twenty minutes to half an hour. This is true of most of the tasks that call upon all four members of the group to work together. Every third task, however, is an individual, written
follow-up to the two tasks preceding and is checked by another member of the group. Thus the working arrangements are small group, paired and individual.

The other main supplementary materials I use are the Cuisenaire rods, or Algebricks, more familiarly associated with the teaching of modern math and Silent Way oral language. These rods were first used to teach grammar by the English as a Second Language staff of Borough of Manhattan Community College. For their purposes the rods represent sentence positions; for mine they represent construction types, and their configurations represent filled positions. TRUNK + TRUNK (T+T) and TRUNK WITH TWO PARTS (T=) look like this:

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Bluebeard had many wives

but

he never found marital bliss.
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Bluebeard had many wives

but

never found marital bliss.

Students have their own bags of rods and can experiment with various combinations of the sentence patterns and construction types. In a way they are diagramming sentences but without ever putting pen to paper except to record sentences themselves. Although the “peeling down” of sentence layers has not proven necessary in a basic writing class, it can be done with rods alone. A reading teacher more interested than I in the levels at which particular structures were embedded once peeled a complex sentence down to its seventeenth layer in a blaze of colored sticks!

In addition to classroom applications, x-word grammar editing techniques are valuable in tutoring and student conferences. Often much teacher or tutor time is spent in explaining errors and rules. If, instead, the student is asked to do something to find and correct his errors, the teacher or tutor can look on in silence unless a problem arises. For example, there is no need to explain fragments; most of the common explanations are inaccurate anyway. If a student is still writing fragments after he has learned the x-words and basic sentence patterns, the teacher or tutor can assume that he simply has not yet tried the yes-no question technique. This happens frequently because the technique seems too simple for what the student’s notion of grammar is. If a student tries it under supervision, however, he may leave the conference or tutoring session surprised but gratified at the extent to which he can edit a particular problem entirely on his own.
Over twelve years I have met a mixture of relief, surprise, and gratification among students as they discover (1) that English makes sense, (2) that many rules do not have exceptions, (3) that they can use their own intuition to figure things out without being told, (4) that they can apply the grammar immediately to their own sentences, and (5) that many basic problems can be solved fairly quickly and painlessly. Until controlled experimentation and scholarly back-up come along, this is sufficient justification for me to use x-word grammar.

GRAMMAR IN ITS PLACE

If I had my wish as regards the place of grammar in the curriculum, I would have elementary school children learn a certain amount of x-word grammar, not for editing but for gradually expanding their power to manipulate larger and increasingly complicated “chunks” of the written language. High school students might look at some of the conventions and requirements of formal English writing, and, particularly if Standard English is their second dialect or second language, learn a handful of editing techniques. College students or high school students who do not need editing techniques might study grammar only as it relates to style. For example, it would be a pleasure to start out the grammar work of a college-level writing course with “super-sentences” (called “one-and-a-half-sentences” in sector analysis), which asks students to take five little trunks, cut them in half, discard all but one subject and one x-word, and put everything together using no joiners (and, but, so, or) and no includers (when, because although, etc.).

The average American housewife is bored.
The average American housewife is bored.
She doesn’t have enough to do.
She will soon set out in search of a job.
She will leave her over-indulged family.
They will stare at a pile of dirty dishes.

Bored at not having enough to do, the average American housewife will soon set out in search of a job leaving her over-indulged family staring at a pile of dirty dishes.

Or if a student prefers inserts in the middle of the trunk and fewer-ing forms:

The average American housewife, bored at not having enough to do, will soon set out in search of a job leaving her over-indulged family to stare at a pile of dirty dishes.
Some grammar might also turn up in reading courses. For example, if students were expected to distinguish between topics and main ideas, they could rely on the familiar yes-no question technique because topics, including most titles, do not turn into yes-no questions while main ideas, which are statements about a topic, do. Reading comprehension would, to a large extent, consist of digging out meaning from where it is buried in the various sentence levels or layers.

This admittedly ideal spectrum of grammar use points up one of the present disadvantages of sector analysis and x-word grammar. They simply are not widely known. Almost all students meet one or the other for the first time when they are already teenagers or adults, and usually they have learned some traditional grammar even if only fuzzily. Traditions die hard. I find myself slowly but steadily changing from a hardsell zealot to an even more committed but hopefully less offensive softsell advocate of sector analysis and x-word grammar. The change in style is more respectful of what students, teachers and tutors already know; I am no longer yearning for grammatical cataclysm.

One other cautionary word is in order. Although English as a second language teachers disagree quite widely on this matter, there seems to be some justification to avoiding the use of sector analysis or x-word grammar with beginning and intermediate English learners. Such things as basic sentence patterns are, from a certain point of view, too easy to pick up, and it is distressing to read a composition that substitutes clever structural arrangements for idiomatic English. For example . . .

Some student has difficulty to learn english, and neither do I. However, when I will dominate english, my good teacher will be that who I will thank. Being an important part of the education, people has a right to know the following: x-word, hidden x-word and basics sentence patterns.

If a grammar is as good as it is cracked up to be, it should have a less, not more, prominent place in a given course. I am happiest with its place in my “five” level course, the one just before Freshman Composition. We start with the assumption that writing is first of all thoughts put on paper and do a lot of thinking, talking, drafting, reading back, and drafting some more. Gradually we work on overall organization, paragraph development, sentence-level variety and economy, vocabulary and style, and finally the fine points: editing grammar, mechanics, and other writing conventions. I feel I can afford to hold off on grammar while bigger things are being worked on.
because the grammar I use is efficient, economical, and relatively easy for most students to learn.

SUGGESTIONS TO INTERESTED TEACHERS

The following texts and materials concerning sector analysis or x-word grammar are available.


Although Sector Analysis for teachers is offered only at Teachers College, Columbia University, there are more and more workshop and conference presentations every year. The Rutgers Spring Writing Teachers' Workshop has featured x-word grammar two years' running. Members of Language Innovations, Inc. have done workshops for the City University of New York, the School of International Training in Vermont, the Welfare Education Plan, and state and national conventions. A mini-course in x-word grammar for teachers in the New York metropolitan area is being planned for the fall.