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The general acceptance of Noam Chomsky's theory of transformational grammar has polarized opinion among educators, some viewing it as no more fruitful than the school grammar it replaces, others ascribing to it vital powers for laying open language structure and improving writing skills. To this latter group belongs Paul Roberts, whose popular textbook course, The Roberts English Series, assumes both goals. Whether or not Roberts' presentation of a transformational system does successfully represent Chomsky theory, and, by rules acceptable to that theory, advance the child's facility in composition, becomes the purpose of this study.

Following the introduction, the second section of the analysis examines Books 6 and 9 (of the seven-volume course) for content value, e.g., reading selections, writing assignments, spelling, vocabulary enrichment, and language study, using as a standard the requirements of college boards examinations. Finding the content acceptable from this standpoint, the analysis takes up in its important third section the system of grammar presented by Roberts, focusing particularly on earlier criticisms leveled against him as a popularizer. In the light of authoritative opinion his system, while sufficiently complete to cover general usage, contains a number of explanations and rules unjustified by current theory. Moreover, it lacks selectional restraints necessary to prevent the generation of ungrammatical sentences.

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In the fourth and last section, a comparison is established between Roberts' use of transformational rules and that of three other educators, John Mellon, Francis Christensen, and Richard Ohmann, whose projects in syntactical stylistics have been highly rated. It thereupon becomes obvious that such achievements as they present result not from mere awareness of the rules (as noted in the Roberts books), but from application of the rules in particular exercises. It is apparent, also that to be most effective, writing studies of this kind should coincide with psychological maturation, usually not accomplished until mid-adolescence.

A consideration of various other psychological factors, coupled with Roberts' inattention to certain advances in teaching practice, makes possible for this analysis only a negative conclusion: under ordinary conditions and in itself alone, The Roberts Series cannot hope to achieve its stated goals, neither the presentation of viable theory nor the recognizable improvement of writing skills.

THE ROBERTS ENGLISH SERIES

--AN ANALYSIS

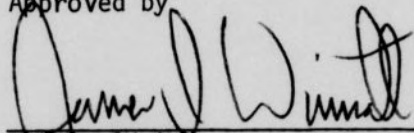
by

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CHAPTER I

THE ISSUES AND THE FISSURE

In the Sunday edition of the Boston Globe for 28 April 1968 appeared a half-page spread on a subject seldom in the headlines: English grammar. The bannered news in this instance proclaimed an action by California's Board of Education, the selection for its public-school English texts of the linguistically-oriented Roberts English Series. Thus from out of the West, the Globe declared, had come deliverance from the old bogey of school grammar that educators have long considered valueless to students. The New Word in linguistic theory, originating at Massachusetts Institute of Technology,¹ opened its arms to enclose not only the familiar outer process transforming thought into spoken language, but a second and far deeper level of grammar, that at which the innate competence of the human mind creates thought. That the benefits of this powerful theory of language should be available to California school children with so little time lag was due to a remarkable series of textbooks by a California professor, Paul Roberts. The adoption of The Roberts Series by a number of educationally-progressive states, the Globe's journalist hinted strongly, provided an object lesson for Massachusetts.

¹Henceforth referred to by its familiar initials.

In Boston "It's Gangway for the New English" may have served to introduce The Roberts Series to the average layman, but throughout the country textbook selection committees knew all about its claims. How convincing these were, cold sales figures show: while the series made its first appearance in 1966, by September 1968 Harcourt, Brace & World had sold one book in the series for every public-school child in California. In several other states, including Florida, Mississippi, Louisiana, and Indiana, the series had been adopted on a listing basis; that is, it is recommended along with a limited number of other books.² Closer at hand, the series is in use by the South Carolina school systems of Columbia and Greenville, as well as by smaller cities of that state. As yet, however, it has found acceptance only in two private schools in North Carolina, neither of which extends beyond the eighth grade.

The general welcome accorded transformational grammar in public schools implies considerably more than a trend to accept a New English to parallel the New Math, a grammar that is complete with principles of formal logic and mathematic notation. It indicates, as mentioned earlier, the widening dissatisfaction over the last quarter-century with most aspects of school grammar. To quote only one of several dozen critics: H. A. Gleason, Jr., in pointing out its "serious degeneration in content, both qualitatively and quantitatively," goes on to make the surprising statement that "Grammar is one of those rare subjects where

²Editorial statement, The Urban Review (June 1968), p. 12.

improvement might sometimes be made by turning the clock back half a century."³

The reasons for this declining status of school grammar from its earlier position of respect are well-known. Until recently, the lack of interest in grammar on the college level has resulted both in poorly-prepared teachers and uninspired textbooks, neither able to do much more than list the "Shalt nots" of prescriptivism. From a concentration on relatively few items of the body of grammar, these few receiving renewed attention from one year to the next ("functional grammar"), has come the loss of any concept of grammar as a system. No system depending on orderly processes can be learned if its demonstration is limited to those features most often transgressed. Taught thus at random, grammar has come to resemble an unpalatable tonic, to be administered only when needed.

The utilitarian view of school grammar--that only those features be taught which are most misused--has stimulated various projects seeking a more positive justification of its place in the curriculum. Doesn't grammar have more to offer than a preventive measure for comma splices and dangling modifiers? Can't it in some way benefit a student's writing skills, enabling him, for instance, to overcome his dependence on short, choppy sentences or those made coordinate by the omnipresent and? Can it be presented in some way to free the child from his fear of "making a mistake," so that he can learn to think on his feet? What kind

³H. A. Gleason, Jr., Linguistics and English Grammar, New York 1965, p. 3.

of teaching can change the unacceptable expressions of the disadvantaged youngster and blur the distinctions of class? Can grammar actually provide a sort of viewing glass to search out some understanding of language itself, the measure of both the individual and the collective mind?

For answers to questions like these, minor miracles though they would seem to require, the classroom use of transformational grammar is being examined. Such a series of texts as those at issue here, however, designed to extend over a period of seven years, is as yet unique. How The Roberts Series compares with the ideal, what it can be expected to accomplish, at the cost of what loss, becomes therefore the concern of this paper. The method by which a valid measurement may be obtained will be apparent shortly. First, let us discuss various details, biographical and professional, concerning Noam Chomsky and Paul Roberts, the one the father of transformational theory, the other its chief popularizer.

Few modern grammarians have grown up in such a climate of language study as did Noam Chomsky. His father William, who emigrated from Russia in 1913, was a professor at Gratz Teachers College in Philadelphia when Noam, the oldest son, was born there in 1928; while the boy was growing up his father depended on him to read proof for the thirteenth-century Hebrew grammar that became his greatest interest. From the age of ten Noam was actively engaged in the historical processes of language, a background that enabled him to offset the pressure put on him later at the University of Pennsylvania by such structuralists as Zellig Harris. Interestingly enough, he also read

proof for Harris.⁴

After completing his work for the M.A. that he received from Pennsylvania, Chomsky held a junior fellowship in the Society of Fellows at Harvard from 1951-1955, a period during which he worked on what was to be a 900-page manuscript dealing with generative grammar. From this work, "The Logical Structure of Linguistic Theory," one chapter, "Transformational Analysis," served as his doctoral dissertation. Two years after he received the Ph.D. his revolutionary little book Syntactic Structures (1957) exploded over the field of linguistics. So hotly discussed was its theory that by 1965 it had gone through five printings. In the years since Syntactic Structures Chomsky has published four additional books on transformational theory, the two most important of which are Aspects of the Theory of Syntax (1965) and Cartesian Linguistics (1966).

Two non-linguistic works of Chomsky, a formative essay entitled "The Responsibilities of Intellectuals" and a collection of essays, American Power and the New Mandarins (1968), reveal an interest that has been at least as important to him as linguistics, and now, because of this country's protracted and, to him, unwarranted involvement in Viet Nameese affairs, perhaps considerably more so. Even earlier than his association with Zellig Harris, Chomsky's left-wing political views had made him sympathetic to radical movements; as a professor at M.I.T. he has participated in such activities as draft resistance and the 1967

⁴Robert Sklar, "Chomsky's Revolution in Linguistics," The Nation, September 9, 1968, p. 215.

march on the Pentagon. In the aftermath of the latter, incidentally, he shared a jail cell with Norman Mailer.

At about the same time that Chomsky was preparing Syntactic Structures for publication, Paul Roberts was enjoying the warm reception accorded his Patterns of English (1956), the first secondary school textbooks which dealt (although implicitly) with transformations. Roberts, a medievalist who received his Ph.D. from the University of California at Berkley in 1948, had already published a college text on traditional school grammar, Understanding Grammar (1954). Understanding English (1958), extending the theory of clause patterns for which the 1956 work had been recognized, prepared the way for actual transformations. In 1962, then, appeared the first of two pioneering works in the field of transformational grammar, English Sentences; English Syntax followed in 1964. Interspersed among these were a travel book, a book of advice for the college-bound, and a linguistics text in Italian which he wrote from his experience in Rome on a Fulbright grant and as Director of the Cornell-Fulbright Linguistics Program in Italy in 1960.

This impressive list of texts has earned him no better honorific than popularizer, however, a term that persistently follows him, as we shall see. Nevertheless, his facile ability to grasp new trends has gained him considerable recognition among the linguists, as Archibald Hill [author of Introduction to Linguistic Structures (1958)] indicates in a review of English Syntax for the Harvard Educational Review:

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Paul Roberts has earned a reputation as America's best and most prolific linguistic popularizer. He has also earned the reputation for being sure never to write two books from the same point of view.⁵

Hill goes on to point out that while Patterns of English remained close to traditional grammar, its successor, Understanding English (1958), was strongly anti-rationalistic, undoubtedly reflecting the structures of George L. Trager.⁶ English Sentences (1962) united Tragerian phonology with Chomskyan transformations, (from Hill's viewpoint, without success). English Syntax (1964) drops phonology altogether in its presentation of kernel rules and transformations, while the Complete Course⁷ revives at least the pattern of stresses. Hill concludes with an acknowledgment that seems to weight the scales in favor of Roberts, in spite of several equivocal remarks:

Such a succession of changes is at least remarkable, and must be put down to Roberts' desire to bring to outsiders the latest positions in linguistic theory. It is "Neugierigkeit" certainly which drives him, and though it is a quality which may bring faults with it, it also brings very great and uncommon virtues. It is, for instance, not as a reproach that I venture to predict that the next book will take up English as analyzed by computers.⁸

⁵Harvard Educational Review, XXXVI (Winter 1966), 77.

⁶George L. Trager and Henry Lee Smith, Jr. An Outline of English Structure, Washington, D. C., 1957.

⁷Book 9 of the series, containing all the transformational rules.

⁸p. 83.

Hill was not an accurate prophet; the complexities of natural language have successfully defied computer-programmers. Instead of moving ahead into the world of science, Roberts has dropped back into the realm of the third-grader, the level at which he thinks a child can begin to learn the rules of syntax:

At a venture, I would guess that with ideal conditions and two or three hours a week devoted to language study one might arrive in three or four years at a point where it really didn't pay to make further generalizations about the grammar . . . My present feeling is that it ought to be possible to teach all the useful grammar, even under non-ideal conditions, between the third and the eighth, ninth, or tenth grades.⁹

Many educators strongly oppose the teaching of transformational rules as such to elementary and junior high school children, even over a period of seven years. Chomsky, who wrote the introduction to English Syntax and, in the words of Roberts' acknowledgments "contributed most of the new material that has not previously appeared in print," has expressed the opinion that the theory is not for children.¹⁰ Other linguists and some educators have voiced varying opinions, including the former president of National Council of Teachers of English, Albert H. Marckwardt.

Perhaps the most outspoken attack on Roberts and his course has come from Wayne O'Neil, formerly on the faculty of the University of Oregon and more recently a professor of education at Harvard. It was

⁹An Interview with Paul Roberts, Harper, Brace and World promotional pamphlet, p. 6.

¹⁰"Current Scene in Linguistics: Present Directions," College English, XXVII (May 1961), 596.

on the former campus that he initiated (and subsequently renounced) the language part of the Oregon Curriculum Program in English. The eight instructional film strips that he prepared there, showing transformational rules in classroom use, are often included in institutes for training teachers, as is his booklet "Kernels and Transformations" (1965), an amplification of the films. It is obvious that his judgment of The Roberts Series must therefore carry considerable weight. In a harshly-worded denunciation entitled "Paul Roberts' Rules of Order: the Misuses of Linguistics in the Classroom" published in The Urban Review¹¹ he deals expansively with what he rates as the shortcomings of the texts, using as his thesis: "Regardless of how badly English may have been done, Roberts is the way not to do it, not a way to do it better."¹²

Similar apothegms sharpen the tone of the article, obviously slanted to non-grammarians concerned with the problems of the inner city. O'Neil's style trumpets ridicule from the opening pages:

Linguistics by now has a good deal of the educational world thoroughly frightened. It has made outrageous claims to efficacy in the teaching of foreign languages and in what is pretty much the same thing (those in the ling. biz. say), the teaching of second, preferred dialects, and in the reading, writing, literature, etc. You name it and the linguist can do it. There isn't (of course) a shred of evidence that any of these things can be done via linguistics. (p.12)

Having announced that of the books that are "mistakes educationally pedagogically" Roberts is "prototypical and therefore to be concentrated

¹¹June 1968, pp. 12-16.

¹²p. 12. Henceforth, page references to this work will appear in the text.

on," O'Neil proclaims the judgment that, while certain unnamed texts are far from any real innovation, "The Roberts Series, however, marks a step backward in every respect." (p. 13)

Regardless of the strangely personal jabs at Roberts, O'Neil's attack undoubtedly stems from a thorough understanding of the issues. In orienting the reader at the beginning of the article, he surveys the area to be covered:

I want first of all to sketch in what linguistics is all about, then what its relevance might properly be to a school curriculum, finally to present what the new linguistics school-books are about Further, since Roberts claims to be an English series I want to deal not only with its vis-a-vis linguistics, but also with its notions of writing and literature, and finally with its notion of what teaching is all about. (p. 12)

Since these topics are very much in line with those of the present study, it seems useful for me to take O'Neil's article as a point of departure, bringing to bear on the questions that he raises the opinions of various respected educators and the experience of teachers who have actually taught the course. Such a discussion, then, will be divided into three parts. The first must deal with non-grammatical material such as the reading selections, vocabulary lessons, and so on, clearing the way for a discussion of the chief concern of the analysis, the forty-five rules of transformational grammar presented in The Complete Course. The strengths and weaknesses inherent in these rules, together with their standing so far as present theory is concerned, will make up the second section. The third will examine the possible benefits to be derived from an understanding of these rules, to wit, their application and their suitability to the

curricular needs of schoolchildren.

Presumably such an examination will enable this study to arrive at some conclusive findings, primarily centered around Roberts' avowed goal:

This series aims to improve children's writing by teaching in a thorough and sequential way the main features of the writing system--in particular the sound and spelling relationship--and the nature of syntax.¹³

Whether this roseate goal lies within the bounds of achievement by The Roberts Series, or whether it is to be dismissed by educators (in a phrase applied to an earlier linguistic text) as "a case of too much too soon by people who know too little," will constitute the purpose of this study. We shall determine, on the one hand, what basis there is for the exaggerated acclaim by the Globe journalist, and on the other, the fallibility of O'Neil's unexpected sarcasm. As pro-linguistics educators invariably state in their papers, one way or another linguistics manages to liven up the study of English.

¹³Introduction to the teacher's edition of the elementary volumes of The Roberts Series, p. T1. Henceforth, page references to the teacher's edition will be included in the text, preceded by the letter I.

CHAPTER II

READING, WRITING, AND ROBERTS

It is misleading to call it an English series--it does not deal in English. The reading and writing assignments are unrelated to the grammar study and unrelated to each other, except in trivial ways. . . The literature seems only to serve as aesthetic relief from grammar study and to justify calling the texts a complete English course. (O'Neil, p. 14)

Professor J. N. Hook recalled that an English professor at the turn of the century made a list of all the aims of teaching English that he could find anywhere in print. He discovered a total of 1,481, ranging from "improve character" through "teach the evils of alcohol." Over the past decade the introduction of linguistics into public-school English courses has created an additional number of variations for the professor's list. Roberts' formal linguistics,¹ however, while constituting the core of his textbooks, avoids the novel approaches sometimes ventured by individual teachers; his innovations display themselves in the more traditional divisions of the study, as we shall see.

Do Roberts' transformational rules crowd out necessary "English course" material, thus warranting O'Neil's allegations quoted above? It becomes necessary to draw on some acceptable standard of measurement.

¹A term now applied to transformational-generative grammar. A formal grammar is one that does not need any intervention from outside to make it work.

Let us accept, at least temporarily, a highly pragmatic criterion, one that has primary influence on what English courses in secondary schools do include, whether desirably or otherwise: the decisions of the Commission on English of the College Entrance Examinations Board. In 1966, answering the question "What is English?," this commission produced the following definitive statement:

The three central subjects of the English curriculum are language, literature, and composition. The study of language should permeate all the work in English; specifically it should include (a) spelling, (b) the enrichment of vocabulary, less through word-lists than through attention to the contexts of literature read and compositions written, (c) systematic study of word derivations and change in word meanings, (d) mastery of the forms of usage characteristic in the spoken and written discourse of educated people, (e) some competence in modern English grammar. Such study should be for use both in speaking and writing and for the pleasure that comes from the acquisition of knowledge.²

It is hardly necessary to state that, even in school systems in which a relatively small percentage of high school graduates ever reach college, the influence of the college board examinations affects the choice of curricula as early as the junior high school level or even earlier. For this reason, the emphasis placed by the commission not only on language study but on its interaction with literature and composition indicates a definitive and realistic goal, one with which O'Neil seems to agree. Whether or not, then, The Roberts Series makes possible the acquisition of the three main skills as stated by the commission will be the subject for discussion in this chapter, leaving only the more important (both for Roberts and for this study) syntax to

²Quoted by Harold B. Allen in "The Role of Language in the Curriculum," The English Language in the School Program, ed. Robert F. Hogan, Champaign, Ill., 1966, p. 260.

be covered in a chapter of its own.

Let us look again, then, at the statement by O'Neil quoted on the preceding page. Are the reading and writing assignments in the Roberts books unrelated to each other, as he affirms? Are the literary selections simply an aesthetic relief from grammar study, included without regard for any practical purpose? Are they the bland banalities with which American school children so often are fed? It becomes important to consider the criteria used in their choice and to speculate on the aims Roberts' assignments might hope to accomplish. Certainly he had definite goals in mind, according to a publisher's puff pasted in the ninth grade text:

The book is divided into twenty chapters, each beginning with a reading selection which is concerned with language or which demonstrates an important point about language. Accompanied by notes on interpretation and by discussion questions, the passages foster accurate and sensitive reading, demonstrates English being skillfully used, and provide for vocabulary growth and topics for work in composition.

The goal in reading is stated more explicitly in the teacher's edition of the sixth-grade text (p. T4), as follows:

The aim is not to teach him to read with appreciation or to read rapidly--however desirable these skills may be--but simply to be able to discover consistently and accurately what is on the printed page. A large number of even those students who reach college are unable to do this, presumably because they have never been taught to do it, have never been kept steadily to the task. They often get the gist of an argument by reacting to key words here and there, but have no skill in arriving at precise meanings in writing of any difficulty.

The ability to do close reading always presents problems, of course, in various important tests. There is no reason to think, then, that Roberts' goals are other than traditional nor that they fail to

accord with those of the commission.

For a discussion of whether the series realizes these goals it is necessary to examine a fair representative of the elementary-grade texts. Probably a mid-point so far as the bulk of material to be covered is concerned is that of the sixth grade, inasmuch as the real range of important study does not begin until the third grade and continues through the ninth. In the sixth-grade text, as well as in those of the other elementary texts, the reading selections consist principally of poems, primarily because of their brevity and tight construction; also, no doubt, because of the generally accepted viewpoint, voiced by Northrop Frye: "if literature is to be properly taught, we must start at its center, which is poetry, then work outward to literary prose, and from there work outward to the applied languages and business and professions and ordinary life."³

For an adult out of touch with the capabilities of the average eleven-year-old in the sixth grade the maturity of the poems chosen by Roberts appears surprising. A random assortment shows Shelley's "Ozymandias," Hardy's "When I Set out for Lyonesse," Frost's "The Runaway," Carroll's "The Jabberwocky," e.e. cummings' "In Just-Spring," and so on. The teacher's manual (on which the pages of the child's text are reproduced in diminished size) suggest that the teacher respect the child's taste; the youngster should not be required to like the selection; he should only understand it.

³The Educated Imagination (Bloomington, Ill., 1964), p. 96.

Toward this aim Roberts unfailingly directs the child to the dictionary and the encyclopedia, meanwhile furnishing the teacher with voluminous background material. For poems like "The Charge of the Light Brigade" and "The Destruction of Sennacherib" the lesson virtually becomes a history lecture. Linguistics and orthography have their turn in the broad dialect of "Auld Lang Syne" and the variant spelling of Quiller-Couch's "The Harbor of Fowey"; the ground for later understanding of symbolism is prepared by three Greek myths, "The Trojan Horse," "Odysseus and Polyphemus," and "Daedalus and Icarus."

Other prose selections are similarly multi-purposed. Churchill's "Days at Harrow" (from the Autobiography), highly amusing in itself, demonstrates some of the differences between British English and that spoken by Americans, as well as the importance in such schools of Latin and Greek. Equally dated now, perhaps, the traditional English characteristics by which the empire was built are presented to the sixth-grader in excerpts from the diary of the leader of the tragic British expedition of 1912 to the South Pole. Roberts, supplying the teacher with the background of Scott's race with Peary, makes this comment:

The British virtues of quiet courage, of playing the game, are often burlesqued, but it is hard not to be moved by their exemplification in such a situation as this one: Oates supported by the reflection that his regiment will be pleased with his way of dying, Scott continuing to write in rather precise English as he freezes to death. (p. T273)

If she pleases, the teacher can take further note of an ironic touch guaranteed to make the children Anglophiles:

The British preferred ponies to dogs for sledge hauling, and this was one of the reasons the Norwegians beat them

to the South Pole . . . The Scandinavian method, adopted also by the American Peary,⁴ was to work the dogs to death and then eat them. The British preferred to bring the animals back alive. (p. T271)

Certainly the prose selection promising the most varied complications for the teacher is Lincoln's "Second Inaugural," entailing as it does an introductory discussion of the Civil War and a concluding session on the splendid stylistic parallels of phrases such as "With malice toward none, with charity for all, with firmness in the right. . . ." and so on. In this connection, it should be noted, Roberts comments in the teacher's edition on a point we shall discuss later:

One reason that prose of this sort is difficult to read is that many of the sentences are long and highly transformed. Use the principle of kernel-and-transformation to clarify the meaning. That is, show or elicit the simple structures underlying the more complicated ones. For example, underlying "this second appearing" in the first line is a kernel structure like "Someone appeared a second time." (p. T184)

Not only does it appear, then, that each reading selection in the sixth-grade text was chosen for a manifold purpose and with a fair amount of linkage in theme, but there is also continuity from one year's text to the next [apparent in the wall-chart which O'Neil derides (p. 16)]. Thus an examination of the reading selections in the ninth grade's Complete Course will show not only a unity of theme within the book but also a carry-over of specific works and/or authors. Where the sixth-graders read about Churchill at Harrow, the ninth grade (having studied his "Report on Dunkirk" the previous year) learns from

⁴Peary has his day in court in the selection entitled "The Conquest of the North Pole," which, with "Columbus," "The Vikings" and one or two others, carries out the theme of discovery and exploration.

the Autobiography about "A First Day at School," including the British monetary system and Latin declensions. "The Jabberwocky" makes its appearance again, this time in the context of the semantically satirical Humpty Dumpty scene from Through the Looking Glass. "The Harbor of Fowey," also repeated, serves now as a point of departure for an explication of the unexpected similarities in English spelling, and thus bears out the book's general theme of language study.

Within this theme, however, a broad variation of topics present themselves on a surprisingly advanced level. A number of selections can be found on college reading lists: Margaret Schlauch's "Family Relationships among Languages" and Charlton Laird's "The Spread of Indo-European," excerpts from Thomas Pyle's Words and Ways of American English and H. W. Fowler's Modern English Usage, Swift's "A Voyage to Laputa" offset by H. L. Mencken's The American Language. More recent studies are represented by S. I. Hayakawa's Language in Thought and Action and George Orwell's "Newspeak" (from 1984).

Obviously O'Neil is mistaken in his charge that the reading assignments serve only as aesthetic relief from the burden of grammar and that they are unrelated to each other. The continuing themes of the reading selections can easily be traced on the wall chart (like the development of the grammar), whereupon it becomes manifest that the most prominent of these is the concern with language. As we have seen, this finds its culmination in the ninth-grade text, in which all twenty selections almost overpoweringly reflect some facet of language

study. Although some of the selections have to do with the history of the language, that phase of linguistics has been more fully studied in the eighth grade and to some degree in the seventh. Even as early as the third grade, the text's table of contents lists etymology: "where words come from," "why endings differ," "what negative words come from," and so on. It would seem that no course could provide in a more thorough-going manner for the commission's requirement of "systematic study of word derivations and change in word meanings."

That the series also provides sufficient vocabulary enrichment to meet such standards is similarly obvious. Since every reading selection is invariably followed by a section listed as vocabulary, meaning, the child finds himself learning not only polysyllabled English words but also, for example (in the sixth grade), the nomenclature of the dinosaurs in Van Loon's "The Beginning of Life on Earth," and what Burns means by "guid-willie waught." Moreover, in a varied exposure to words under such headings as phonology, morphology, and orthography Roberts extends the child's vocabulary range relentlessly by the use of unfamiliar examples (e.g., chauvinistic + ly = chauvinistically). In addition, study of Latin and Greek affixes and roots, taught under morphology in the last chapters of The Complete Course, makes possible the understanding of a considerable number of words to which these apply.⁵

⁵According to Roberts, after a child reaches the ninth grade virtually all of the new words he learns are Latin derivatives.

The dividing of words implied by the headings mentioned above provides exposure to spelling, as well. By the time the ninth-grade child has finished The Complete Course he has learned which words are spelled ant and which ent, which able and which ible, which ory and which ary, (and the reasons why), plus, in the event that his memory fails him, where the odds lie. In this departure from the customary lists of unrelated spelling words Roberts no doubt relies on the study made by Jean and Paul Hanna in 1964-65,⁶ in which more than 17,000 words were put through intricate IBM processing. The results showed the spelling of English to be amazingly patterned and predictable to a considerable degree.⁷

Where the older child learns historical reasons for changes in spelling and the patterning of morphemes, the younger one progresses to that level by sequential study of sound and letter associations. In reference to the development of this relationship Roberts explains:

The problem of teaching English spelling is essentially that of associating a rather complex set of written symbols with a (much simpler) set of sounds they symbolize. One shortcoming of traditional teaching has been that it concerned itself almost wholly with just one side of the equation. It studied the symbol without much regard for or understanding of the thing symbolized.⁸

⁶Phoneme-Grapheme Relationships Basic to Cues for Improvement of Spelling (Washington, D. C. 1966), pp. 33-38.

⁷Thus banishing the old joke that English spelling has a perfectly good system--for Old English.

⁸An Interview with Paul Roberts, pp. 3-4.

Thus, as the child who is learning to read begins with the letters of the alphabet and attaches to them the sounds they represent, the child who is learning to spell does better to begin with the sounds and learn the letters regularly used to signify them.⁹ To learn sounds, of course, it is necessary to have some sort of system of referring to the twenty-four consonants and fifteen vowels distinguished by Roberts.¹⁰ For sounds which have no regular names (unlike dee, eff, aitch, etc.) a satisfactory convention was established: /sh/ is "esh" by analogy with "ess"; /ch/ is "chee," and so on. The unnamed vowel sounds are provided with the consonantal /k/, becoming "ick," "ack," "eck," "ike," "ache," and "owk."

In regard to this method of teaching spelling O'Neil voices some objection:

It is a serious question whether a spelling system would in fact be serviceable if it consistently represented the superficial, phonetic level of phonology. (p. 14)

Roberts presents the phonetic level of spelling as a substrand of the grammar only in books for the third and fourth grades, it should be noted, and even there it is provided with semantic depth in each section of the book under headings like vocabulary-meaning, grammar and usage, and even etymology. Such a bridge between the twenty-six letters of the alphabet and the two thousand different letter combinations

⁹Introduction to Elementary texts, p. T6.

¹⁰These are based on the conventions used by leading dictionaries, but without diacritical marks.

possible to the forty phonemes of English¹¹ seems at worst a defensible experiment, at best a considerable truncation of the time-period¹² necessary in the past for the apprehension of reading and its sister subject spelling.

Although the sound-spelling relationship is no longer identified as a separate component from Book 5 on, the study of spelling continues, usually under the heading of phonology (or even syntax). The child may come to see, for example, how pronunciation (as an essential clue to spelling) may depend on whether the word is a noun or a verb, and how certain suffixes establish the stress of a word, thus making clear its spelling (e.g., Byron-Byronic). In association with reading and writing assignments in the more advanced books spelling becomes even more meaningful.

To sum up, then, spelling in The Roberts Series is demonstrably--and desirably--far removed from the word lists still widely inflicted on children in a large number of elementary schools. There can be no doubt that the texts promise to teach more than adequate competence, not only in spelling but in the other features of language study thus far examined, e. g., vocabulary enrichment and word derivation and change, to the child who is preparing for college board examinations. Let us move on, then, to the sequential aspects of the writing assignments in the series.

¹¹ Dwight Bolinger, Aspects of Language, New York, 1968, p. 179.

¹²A time-period up to two years more than children of other nations require, according to Bolinger (p. 179).

In the teaching of composition Roberts' goals are certainly more than minimal, at least as they are stated in a promotion piece put out by Harcourt, Brace & World:

The Roberts English Series aims to bring all children to a greater capacity in the writing of the English language than has ever been accomplished before.

For the achievement of this goal, Roberts falls back on the familiar stand-bys of teaching composition to elementary-school children: the paraphrase of poetry, the drills on paragraphing, the emphasis on topic sentences. To them, however, he brings some imagination. Thus the paraphrase of a given poem must follow the "paragraphing" obvious in the stanzas of the work (consequently, many of the poems selected have three stanzas). In some assignments the child is to expand into a paragraph some idea that is presented in a sequence of three topic sentences (which are not so labelled, however). In addition to such prefabricated compositions there are directions provided to encourage him in coherence, in letting his ideas flow in logical sequence (with hints about the use of transitional devices; Several options are presented in each assignment, varying in difficulty from those in which the necessary information is available by close reading of the text to those for which he must seek material outside the classroom or in an exercise of his imagination.

Here again Roberts' assessment of the abilities of a sixth-grade child seem surprisingly high. For an optional assignment on "The Jabberwocky," for example, the child is asked to substitute meaningful parts of speech in place of the nonsense words, desirably

creating end-rhymes. For "The Trojan Horse" and the Scott diary referred to earlier he can write a report on a chosen personality from the Iliad or the roster of polar explorers, as the case may be. Subsequent to a study of "The Charge of the Light Brigade" he must conceive of himself as a journalist at the scene, writing home a report of the debacle (based on information from an encyclopedia). The requirements for a paper on Longfellow's "Sands of the Desert in an Hourglass" begin with this paragraph:

Write a three-paragraph paper about King Ozymandias. Write it from the point of view of the sand of the desert, impersonating the sand, as Longfellow does. Pretend that you are the sand, and use the pronoun I. Tell what you have seen of Ozymandias. (p. T79)

Directions for the assignment on Lincoln's "Second Inaugural" are complicated in a different way: the sixth grader can choose to write on the when, why, and how of the Gettysburg Address or the what, when, and why of the Emancipation Proclamation.

Relatively more challenging loom the assignments optional to ninth-graders. In connection with the "Humpty Dumpty" ("Jabberwocky") paper the student may choose to create and define portmanteau words (given a list of words that can be combined) or he can search out and justify the meaning of the nonsense-word swoggle, identifying it only from its varied use in nine different sentences. Having read closely the essay by Charlton Laird, "The Spread of the Indo-European," the fourteen-year-old turns to these directions:¹³

¹³Complete Course (Book 9 of The Roberts Series), p. 261. Henceforth, all page references to this work will be included in the text.

Suppose that you are an anthropologist studying an American English language family. We'll call it Proto-Raskatchan. You know of six languages that belong to this family--Powlee, Washquatch, Supu, Drue, Analan, and Miktik. Suppose further that the tribes that speak these languages now live in various parts of the United States. You have found in each language the words that have the meanings given in the left-hand column. Study the vocabularies and try to determine the part of the United States in which the parent language, Proto-Raskatchan, was spoken. Write a paper supporting your conclusion.

	<u>Powlee</u>	<u>Washquatch</u>	<u>Supu</u>	<u>Drue</u>	<u>Analan</u>	<u>Miktik</u>
moose:	odo	othu	odu	utho	odo	odu
beaver:	gapi	kabi	gopu	kapi	kapi	gapi
alligator:	eepo	kori	eepu	dinra	motoo	bolo
salmon:	bori	pori	boru	pori	pori	boru
ocean:	upi	ubi	upu	upi	upi	upi
coffee:	usa	oro	mobu	kimro	aloto	oru
buffalo:	beeta	otho	robu	ino	ino	bodu
desert:	ripo	benu	ramu	anra	tono	benu
otter:	dapi	tabi	dapu	tapi	tapi	dapi
ice:	risa	riso	riza	riso	rizo	rizu

Other assignments chosen at random disclose a variation provocative and yet decidedly rigorous. Suggesting college-level requirements rather than those of the ninth grade, for example, are three sets necessitating comparison/contrasts: the first between the dialects of Huck Finn and Sam Weller, the second involving the satire of Swift and that of Orwell, and the third coupling Greenough and Kittredge's Words and Their Ways in English Speech and Mencken's The American Language. Appropriately, those assignments built around Hayakawa's "Reports, Inferences, and Judgments" challenge the teacher as well as the pupils; one includes a hint (p. T222) that college psychology teachers "sometimes enliven and edify their students by staging a scene of some sort which the students will afterward be asked to describe," e.g., a fake hold-up or an attack.

Such operative methods in teaching meet with derision from O'Neil. Following a reproduction in his article of a typical page of notes and queries (the customary suggestions to look up certain words) from Roberts' Book 6, O'Neil paraphrases as follows (p. 14):

Tell how it was before you got hooked on Roberts, when you really didn't care whether the strange names you came across were real or not; you chose to believe they were unreal or real as the whim took you. Tell how it was when you didn't give a damn that the word fathom meant "six feet--as a yard means three feet, and a foot means twelve inches"; when you weren't asked, given that "the measure fathom has been used mostly by people in ships, to say how deep the water is"; "if the person measuring reports" six fathoms, "how deep is the water?" (Red whispering to the teacher, "36 ft." The Roberts "arithmetic" series, Book 6, p. 214.¹⁴

O'Neil backhands the discussion of Shelley's "Ozymandias" and Dickinson's "Autumn" with the same sarcasm, concluding his remarks on the first poem with the line "The Roberts 'criticism' series, Book 6, p. 62," and on the second with the line "The Roberts 'seasonal selections' series, Book 3, p. 63, teacher's edition." What comments he makes on the far more controversial issues of transformational rules we will see in the chapter to follow.

First, let us look back briefly on the material just examined. We have held up the various categories of study presented in The Roberts Series against standards deemed suitable by the Commission of English of

¹⁴The words "red whispering" refer to the use of colored print in the answers supplied by the teacher's edition to questions asked in the child's text. In O'Neil's opinion, Roberts "by-passes" teachers in making his suggestions explicit and in supplying answers to even the simplest questions.

the College Entrance Examinations Board. In regard to Roberts' presentation of the three categories of literature, composition, and language (with the exception of grammar), the problems found by this analysis are only two: too much and too soon. In Books 7, 8, and 9, the barrage of facts on language no doubt has strong appeal for parents and textbook buyers, yet the more-than-casual reader cannot help consider the reality of the child behind all the wishful thinking. At any given level, much of Roberts' material must be more difficult than is usually presented; the question is--can the child be motivated to learn it?

CHAPTER III

ROBERTS' RULES FOR SYNTAX

Any subject can be taught effectively in some intellectually honest form to any child at any stage of development.¹

Although the last twelve years have seen what amounts to a closet revolution in linguistic theory, the conflict is now as dead as the arguments about the silver standard.² The turning point seems to have come in 1966, in part perhaps because of the 1965 appearance of Noam Chomsky's Aspects of the Theory of Syntax, a work that answered some important questions while it raised still more. Reviewing this book in the October 1966 issue of the Philosophical Quarterly, John Lyon voiced the opinion of many theoreticians then, stating that although no one would claim transformational theory had received its canonical or definitive formation, nevertheless "the fact that the scientific description of natural languages presupposes the construction of a transformational theory of grammar of some kind or other is no longer open to serious doubt."³

That same year seems to have marked a general acceptance of the theory among high-level educators as well. On December 28, reporting

¹J. S. Bruner, The Process of Education, Cambridge, 1961, p. 33.

²Mark Lester, "The Relation of Linguistics to Literature," College English, XXX (February 1969), 366.

³p. 393.

the recommendations resulting from the August-September Dartmouth Seminar at a meeting of the National Council of Teachers of English, Albert Marckwardt commented on the large numbers of formal linguists he had seen there: "They presented their case modestly, so quietly, in fact, that as someone observed, 'It was easy to overlook how revolutionary they are.'"⁴ The transformationalists showed up school grammar as fragmented and subjective, structural grammar as unquestionably narrow and insufficient. There remained only, in Marckwardt's words, "the unanswerable question of just when, what, and how much direct teaching of the structure of English there should be."⁵

At the seminar one version of these issues was thrashed out by a working party and a study group. Among the seven papers that they prepared was a final report presenting an illustration of "what kinds of attitudes toward language and knowledge about it might be included in an English language program in grades 7-12." In part, its conclusions state:

Though grammar plays the major role in the language curriculum, many other aspects of language are included: usage, the study of words, and something of the history of the language; however, these subjects will not constitute major units.

The study of grammar, which will focus on the construction of sentences, will emphasize the systematic nature of the language . . .⁶

⁴Albert Marckwardt, "Perspectives on the Teaching of English," PMLA, LXXXII (June 1967), p. 383.

⁵Ibid.

⁶Language and Language Learning, Albert Marckwardt, ed. (Champaign, Ill., 1968), p. 72.

The report provides some specific recommendations that will be useful in our present evaluation of Roberts' progress in presenting transformational theory. Specifically, it recommends the following for the second six years of education:

Seventh grade: learn to identify kernel sentence patterns and gain some skill in expanding each of them.

Eighth grade: pupils write their own sentences containing relative clauses and then practice applying the "deletion transformation" as a means of reducing predication.

* * * * *

Senior high school: the teacher can extend pupils' understanding of the possibilities of using sub-ordination by employing such transformational processes as relative clauses, participial phrases, prepositional phrases, appositives sentence modifiers, and absolute constructions.⁷

Such recommendations as these obviously sprang from strong convictions about the feasibility of improving student writing skills by the use of transformational rules. They were based in part on the enthusiastic hope with which the New English is often greeted by educators, but more so, no doubt, on two research studies which had pioneered in the effort to ascertain whether or not grammar study increases syntactic versatility and if a transformational grammar can succeed where its predecessors have failed.

The first of these, the results of which appeared early in 1966, was entitled The Effect of a Study of Transformational Grammar on the Writing of Ninth and Tenth Graders.⁸ Conducted by Donald Bateman and Frank Zidonis, it dealt with only twenty-one students and a control

⁷Ibid.

⁸Champaign, Ill., 1966.

group of similar size. In a test of the improvement possible over a two-year period in the child's ability to write well-formed sentences, Bateman and Zidonis predicated their study on "the heart of successful composition teaching: the need for the composition teacher to have something to teach."⁹ In this case, the teacher worked with a pedagogical grammar of forty-six rules derived principally from Chomsky's Syntactic Structures and R. B. Lee's work, The Grammar of English Nominalizations (1960). Although the methodology of their project was severely criticized, the favorable conclusions drawn by Bateman and Zidonis were widely publicized by the NCTE.

The study by John Mellon that followed this early project is considered to be of far greater importance. Empirically above reproach, it involved 250 seventh-graders divided into three groups. While the control group worked its way through one of Warriner's traditional grammar texts and the placebo group studied no grammar at all,¹⁰ the experimental group was taught certain transformational concepts and rules in preparation for the main treatment: novel sentence-building exercises requiring students to embed one or more dummy kernel sentences into a base sentence by previously learned rules. At post-test the experimental group was writing 32% more of the five critical transform

⁹Frank Zidonis, "Incorporating Transformational Grammar into the English Curriculum," English Journal, LVI (December 1967), 1316.

¹⁰James Moffitt. Teaching the Universe of Discourse, New York, 1968, p. 167. Moffett quotes Mellon as stating that "conventional grammar is in fact a kind of placebo treatment in itself, in that the effects which it produces do not differ significantly from those observed in a no-grammar environment."

types than the control group, with a rate of growth more than twice the rate indicated by previous norms. Thus the Mellon study is considered to have dependably established that (in Moffett's words) "some kind of formal language exercise can result in a greater syntactic fluency than normal growth would occasion."¹¹

For reasons not explained in his article in The Urban Review, however, Wayne O'Neil denies emphatically the validity of any such conclusion:

There isn't a shred of evidence that any of these things (the teaching of reading, writing, and literature) can be done via linguistics. In fact the linguists never seemed to feel that empirical support was even a valid thing to hanker after. Thus claims are made and textbooks built on them: all this without any attention to the logical consistency of the claims, much less to their validity. (p. 12)

Meanwhile Roberts' English Syntax, the first non-college textbook adaptation of transformational rules to appear (1964), was meeting with considerable success. Preceded by an introduction by Chomsky, its acknowledgments attributed new material on the determiner system, the transitive verb system, and the noun modifier system to explanations made by him to Roberts. Under this sponsorship, English Syntax became a popular text for college use (according to its publishers) in modern English structure courses. (The unfamiliarity to high school teachers of its material limited its use in secondary schools.) Garland Cannon, for example, taught it at the University of Texas for three semesters, finally relinquishing it, as he states in a

¹¹Ibid.

review for Word, because "the [determiner] system is unteachable."¹² Less demanding were high-school teachers, who, aware of the sweep of the wind, studied its rules in federally-financed summer institutes.

It was in this polarized climate, then, that Roberts' expanded presentation of transformational grammar made its appearance in 1967. Because its teaching of transformational rules began in the third grade text and culminated in the ninth grade's Complete Course, The Roberts Series encountered virtually no middle-ground opinion. Critics viewed the promise of its packed pages with either whole-hearted admiration or fervent disdain. O'Neil, of course, voices the opinions of the latter group:

The Roberts Series is not a fair representation of what linguistics is about nor of what linguists do. Nor is it even a compendium of what linguists think is true about English. (p. 15)

O'Neil obviously denies any concessions to a pedagogical presentation that in actuality makes no claims for presenting the truth and nothing else. Lashing out at texts as a whole that lay like claim to linguistic influence, he denies their innovations: "The Roberts series, however, marks a step backward in every respect. The others simply mark time." (p. 14) For this study, then, it becomes necessary to examine the relationship of Roberts' interpretation to actual theory.

Perhaps what must be O'Neil's main objection can be indicated by a three-way comparison of the generative aspect of Chomsky theory. These are Chomsky's words, taken from Cartesian Linguistics:

¹²Garland Cannon, Review of English Syntax, Word, p. 476.

By a generative grammar I mean a description of the tacit competence of the speaker-hearer that underlies his actual performance in production and perception (understanding) of speech. A generative grammar, ideally, specifies a pairing of phonetic and semantic representations over an infinite range; it thus constitutes a hypothesis as to how the speaker-hearer interprets utterances, abstracting away from many factors that interweave with tacit competence to determine actual performance.¹³

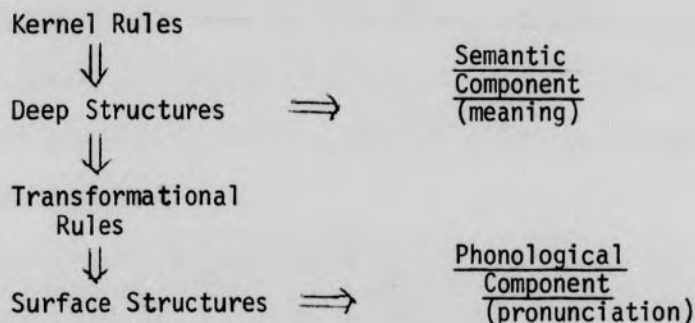
In the following statement written for the benefit of college linguistics students, Emmon Bach is not so much defining as differentiating:

. . . there is no fixed set of "levels" such as word level, phrase level, clause level. . . Similarly, the levels of phrase structure, transformations, and phonology are not based primarily on a difference in the nature of the linguistic aspects or substance to which they refer as are, for instance, the divisions in some discussions (such as H. L. Smith, Jr., in 1962) into levels of phonology, morphology (i.e., 'grammar' in the old sense), and semology.¹⁴

In contradistinction to these explanations, it will be seen from the following diagram prepared for teachers (p. T11) that Roberts does imply a division into actual levels at which the various aspects of grammatical interaction are performed. Teachers and children alike have no reason not to conclude that the diagram represents the psychological processes actually undergone. Roberts' introduction states only that "The relationship of the various components of the grammar can be diagrammed":

¹³New York, 1966, p. 75^f.

¹⁴An Introduction to Transformational Grammars. (New York, 1964), p. 59.

Syntactic Component

As a further indication of Roberts' departure from theory (and his objectionable "pedagogical style") O'Neil quotes (p. 15) from his presentation of the imperative in the sixth grade text:

The third kind of sentence is called a request. A statement says something is so or isn't so. A question asks whether something is so or isn't so. A request tells someone to do something or not to do something.

Requests are transformed from statements (not true, W.A.O.) that have the subject you:

<u>Statement</u>	<u>Request</u>
a. You study the lesson.	Study the lesson.
b. You are polite. etc.	Be polite.

(Book 6, p. 102).

O'Neil goes on to say (p.15) that in this kind of presentation any interest there might be "in discovering just those (misinformed) rules that Roberts has in mind is lost, not to speak of the interest that there could be in quarreling with his wrong rules" (italics mine)

Here again O'Neil is undoubtedly justified. In an article

written for the Harvard Educational Review a year or more before The Roberts Series was published, an article checked by both Chomsky and his associate Paul Postal, Peter S. Rosenbaum, formerly a student of Chomsky, comments on this very aspect of the relationship between two (agnate) sentences.

Ongoing work in transformational grammar shows that it is incorrect to think of two sentences as being related by a transformational rule or set of rules which somehow convert one sentence into another. Rather, when various considerations force the conclusion that two or more sentences are syntactically related, this relation is reflected in those aspects of underlying structure which both sentences share. Thus the burden of representing a common source for two or more sentences falls not on the transformational rules of the grammar which generate surface structures, but on the rules which generate underlying structures.¹⁵

In other words, man is not descended from the apes; it is a matter of their having a common ancestor.

Roberts is more open in his transgression of a well-known grammatical compromise: While ideally a grammar should generate any and all grammatical sentences of the language and none that are ungrammatical, it is better to settle for a necessarily restricted grammar that generates only grammatical sentences, rather than one that is broader but allows ungrammaticality. Roberts, of course, has clearly elected for the latter. Only by means of the complicated selectional restraints and context symbols such as those first developed in Chomsky's Aspects can a grammar block such gross errors as "we are knowing," while

¹⁵"On the Role of Linguistics in the Teaching of English," Harvard Educational Review, XXXV (Summer 1965), 341.

permitting the apparently similar "we are going."

O'Neil's charge of wrong rules is further borne out by Roberts' disregard of the standard requirement that kernel sentences be grammatical. So important is this rule that Dwight Bolinger, surveying the entire field of language in his recent work, Aspects of Language, mentions this specifically in the few paragraphs devoted to transformational grammar:

The deeper the grammatical rule, the more upsetting should be any violation of it--accidents hitting the surface are to be expected; for them to penetrate the interior is serious.¹⁶

With no context-sensitive rules Roberts is obviously driven to ignore this basic requirement,¹⁷ as he openly admits:

Notice that the transform is actually more common, more "right-sounding", than the kernel sentence. This is often true. Indeed, we shall find cases in which the kernel structure is downright ungrammatical and can be made grammatical only by the application of the transformational rules. (p. 141)

This is in direct contrast with his statement in English Syntax that "if any of the base sentences that make up a complicated sentence is ungrammatical, the whole sentence is ungrammatical." (p. 363)

With equal frankness he disclaims the adequacy of his rules for determiners. Despite criticism of the treatment used in English Syntax,¹⁸ the provisions made in Complete Course are unchanged, as

¹⁶New York, 1968, p. 211.

¹⁷"Context-sensitive rules are practically indispensable for the description of natural language in a simple way." (Bach, pp. 35-36)

¹⁸Garland Cannon, Review of Paul Roberts' English Syntax in Word, XXI (December 1965), 463-480.

follows:

Det \Rightarrow (pre-article) + Article + (Demon) + (number)

Apparently the only underlying change is the use of the secondary stress mark over the vowel in sôme where the implication of demonstration gives the meaning of a certain, as in "Sôme man hit Johnny," rather than the nondefinite "Some dogs were in the yard." The earlier unsatisfactory allocation of a certain and some, with their semantic suggestion of definite selection, to the category of "nondef" is not improved by differentiating them under the "near" and "far" headings, respectively. In pointing out some of the failings of the determiner rule to the teacher Roberts states that "We could of course elaborate the rule to incorporate these ('several of those first fifty boys,' etc.) and other structures, but to do so would probably be to tune the lute too fine." (pp. T77-78)

At other times he deals with troublesome areas less equivocally. Having left the breakdown of transitive and intransitive verbs for the last chapter, he opens the discussion with these words:

The constructions that we have until now labeled just V_T and V_T are among the most complicated and prettiest parts of the grammar. Therefore they have been saved for a special treat at the end. (p. 530)

He fails to point out that his V_i-2 + particle will not generate a simple sentence like "He glanced up at the clock," with its combination of particle and preposition. Nor does he mention the similar difficulties inherent in generating the indirect object, with its two NP's.

For the last several pages, then, we have accumulated a convincing justification for O'Neil's blistering allegations, including serious misinterpretations of theory and the use of "misinformed" or "wrong" rules. It is obvious that Roberts would not leave his work open to such criticism were his purpose only to present unassailable rules for an ideal grammar. Unquestionably this does not constitute his purpose. It will be remembered that his overall goal was explicitly expressed as follows:

This series aims to improve children's writing by teaching in a thorough and sequential way, the main features of the writing system--in particular the sound and spelling relationship--and the nature of syntax.

Apparently, then, the shortcomings of Roberts' grammar can be attributed to his intention of weighting other values, those that better serve this specific purpose. A careful study of the Complete Course and its teacher's^X manual makes evident just what these values are.

The first would seem to be a simplification of grammatical rules as such, no doubt for the purpose of cutting away undergrowth that hides important structure. O'Neil refuses to admit any such achievement, as we see:

This is the old rule-oriented study of grammar. The names and terms to be memorized are somewhat different, certainly greater in number, but not more tolerant of the complexity of natural language and no more engaging to the mind in their manner of presentation. (p. 15)

The issue here seems to turn on whether the children must memorize the forty-five rules. If they do not, as Roberts recommends, then his mechanism for handling subordinate clauses, verbs, and function words, his objective suggestions for classification and punctuation, seem to

simplify considerably and give organization to the traditional practice, as we shall see.

One of the most satisfactory rules Roberts uses is that involving the sentence modifier. This term applies not to the nominative absolute of school grammar but to nonrestrictive relative clauses and their residues after deletion. (The reverse is not true, however; not all sentence modifiers are, or are derived from, nonrestrictive relative clauses.) It should be remembered that clauses are structures, not functions.

Consider the sentence "Because he felt ill, John went to bed." The [subordinate] clause . . . cannot be plausibly said to apply its meaning to just a part of the matrix sentence that follows it. It does not modify just John or just went to bed, but rather the whole matrix.

(In) "Feeling ill, John went to bed," feeling ill has precisely the relationship to the matrix that because he felt ill does. If we apply the function term to the one, we must also to the other. (p. T180)

By the use of deletion transforms on both restrictive clauses and sentence modifiers, Roberts points out, "a very wide variety of structures and positions are accounted for by a very few rules, and what seemed disorderly and haphazard can be viewed as essentially regular and simple." (p. T181) This represents possible control of just those very stylistic devices poor writers among students seem slowest to make; it also accords with the requirements necessary to logical subordination listed in the Dartmouth Seminar report.

In this connection, Roberts' rules may profitably be compared with those of his predecessor, Emmon Bach. In An Introduction to

Transformational Grammar¹⁹ for example, the latter explicates the sentence

Hitting people on the head is bad taste.

by a nominalization that provides the object for a string (People-consider-bad taste-hitting people on the head), which, undergoing the passive transformation, becomes (Hitting people-on the head-is considered-bad taste-by people), followed by deletion. On the other hand, Roberts' T-poss transformation (making the first NP possessive and replacing tense with ing) would embed within the matrix "NP + is + bad taste" the insert "You + tense + hit people + on the head," after which deletion produces "(Your) hitting people on the head is bad taste," certainly a more reasonable process.

The reduction of verb tenses to two, past and present, cannot be credited to Roberts, but perhaps the banishment of the infinitive will be. The word infinitive is never used by Roberts in any of the various rules involving "to" phrases; he explicitly points this out in the teacher's manual (p. T247) without any further explanation. Where it would ordinarily be needed it is made by replacing tense with to or by deliberately affixing it to the preceding verb, as in the semi-modals dare to, ought to, need to, etc. This represents a remarkable change from the six infinitives (and six participles) illustrated by Margaret

¹⁹p. 82.

Bryant²⁰ only ten years ago. The troublesome rule of the split infinitive, based on nothing more than the fact that in Latin the infinitive literally cannot be split, may vanish forever from the minds of Roberts' readers.²¹

Going hand-in-hand with the deliberate simplification of such grammatical complications are various objective guidance rules (as opposed to those based on usage, which are, of course, subjective) presented helpfully throughout the text. Some examples follow:

To tell the difference between a subordinate clause and a relative clause: if the relative pronoun is removed from a relative clause, what is left is not a complete insert sentence. (p. 343)

The true transitive verb is that which can undergo the passive transformation. (p. T123)

A participle that can be used as a true adjective is one that can take very (whether, like surprised, it should or not). (p. 219)

The use of who or which in a relative clause clears up any ambiguity, as that does not. (a dress on a model that we all admired) (p. 294)

A restrictive clause can use that; a sentence modifier cannot. (the boy that was running) (p. 319)

Similarly, Roberts' use of the principle of the phonological pitch-pause simplifies many of the problems of punctuation. Thus,

²⁰A Functional English Grammar, New York, 1959, p. 257 (now out of print).

²¹In the interesting ing-to alternation which, as Roberts mentions, permeates the language, the ing gerund is also made by replacing the tense. (p. T248) A phrase like "feeding the animals" may be derived from three sources.

embedding a kernel sentence (with its definitive 2-3-1 intonation pattern) intended as a non-restrictive sentence modifier within its matrix involves a resulting change to a 2-3-2 pattern, as well as two junctures. The 2-3-2 intonation and the two junctures clearly signal the need for commas, which, incidentally, are retained in any residue of the clause after deletion transforms. This rule thus accounts for a large number of structures with which comma punctuation is used.²²

The placement of a comma with a sentence connector requiring it is also clearly evidenced by the juncture of speech. The latter may thus provide some help in overcoming the problem of the comma wrongly used after the conjunction instead of before it:

He had eaten a big dinner but, he was still hungry.

Underlying reasons for this error are not well understood by psychologists, Roberts states (p. T261). This interesting observation hints at the new preoccupation with grammar by psychologists, a factor this study will examine later.

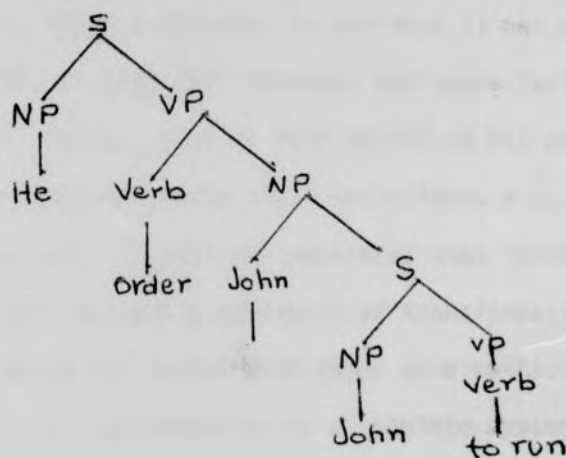
Having covered Roberts' preoccupation with simplicity, one of the values it is assumed he has attended to more than, for example, such complexities as the provision of selectional restraints, we may look at another of his goals:

One of the great problems in teaching children to write English is getting them to mark off their sentences with periods in the proper places. In a sense, this is the main purpose of the lessons

²²In addition to this information Roberts deals with the change in intonation brought about by question transformations, but virtually no other phonological rules.

on syntax in this book: to show what is and what is not a sentence. (p. T278)

It is this goal, perhaps, to which we can attribute Roberts' failure in Complete Course to make use of the singular phrase marker or tree diagram, introduced in Chomsky's Aspects of the Theory of Syntax. Since knowing where to put a period constitutes one of the most recurring of children's writing problems, it may be that the singular structure suggests too strongly a run-on sentence or comma fault:



Certainly this phrase marker depicts the idea of nominalization far more graphically than does the older generalized structure, which seems appropriate only to simple compounding.

²³Transformations are singular (pp. 31-46) when one underlying string is converted into one resultant string, or generalized (pp. 46-64) when more than one string is combined into a single string, e.g., by conjunction or embedding.

Similar concern in avoiding reinforcement of a problem in sentence construction may underlie Roberts' discarding the term compound sentence in favor of the two-way division into kernel and complex sentences, the latter any sentence resulting from at least one double-base transformation. Perhaps this is a ploy to shift emphasis to the subordination possible with embedded constructions; the paratactic sentence construction compounded in students' compositions need no encouragement.

Roberts' concern for what is and what is not a sentence, with its implication not only for fragments and comma faults but also for complicated stylistics, must in turn depend on his presentation of all the tools necessary to create these variations, e.g., the complete grammatical system. It will be remembered that "formal" linguistics implies a system; as such a hall-mark of transformational grammar it must have weighted his decision in favor of a sufficient number of rules to appear to non-linguists as a complete system, even though he sacrificed scientific reliability. The need to present a full system, as stated by H. A. Gleason, Jr. and often quoted, must have been familiar to him:

Language is a system (or a complex of systems). Its grammar must be systematic to be meaningful. Bits and pieces cannot be taught or omitted at will simply because they are judged individually useful or not. As items are dropped the system falls apart . . . The experience of the schools with "functional grammar" has confirmed that random teaching cannot work. The more grammar is cut, the less successful is the teaching of the remainder.²⁴

²⁴Linguistics and English Grammar, New York, 1965, p. 75.

Roberts explains carefully in the general introduction to the teacher's manual that the Complete Course aims at presenting as much grammar as is likely to be useful to the high school student in further writing and reading, including the reading of literature. "It is intended to be terminal in the sense that only a specialist would feel the need for more extensive formal work in grammar either in high school or college." (p. xiii) This no doubt answers O'Neil's complaint about too many rules;²⁵ it also vindicates to some extent Roberts' treading the path into the unknown that linguists have not as yet mapped.

The need to present a system as such no doubt supplies an answer also to some of O'Neil's other charges, the proliferation of rules mentioned earlier, which he assumes must be memorized; the violation of the teacher's "integrity" because of strong editorial suggestions that she stick closely to the order and wording of the rules.

The need to present a system provides not only rebuttal but at least one innovation on the positive side which Roberts does not mention. Implicit in such a system of language, even one demonstrably so inexact, lies the promise of exhibiting an underlying order such as grammar has never been able to show, entirely foreign to the average concept of the term. Rosenbaum touches on it briefly, noting the

²⁵In this series Roberts presents a total of forty-five multi-sectioned rules, considerably more than in English Syntax, which A. A. Hill lauded as being remarkably compressed and comprehensive. "Roberts presents the central part of the doctrine, the analyses of the basic structure types of English, in twelve short chapters, together with a few notes. Then he presents the same material over again in two pages of summary rules . . . Such remarkable compression and clarity seems simple, but only after it is done." Harvard Educational Review, XXXVI (Winter 1966), 82.

continuing failure to find successful classroom techniques for changing linguistic performance in speech and composition:

It is difficult to find a textbook on grammar which does not point out the alternation of the word "for" in the following sentences.

- (6) a. Mary would hate for the boys to arrive early.
b. Mary would hate the boys to arrive early.

Similarly, such textbooks usually describe the alternation of "'s" in the following sentences.

- (7) a. Does your mother dislike your brother's coming home late?
b. Does your mother dislike your brother coming home late?

Simply looking at the linear sequence of words in these pairs of sentences, one finds little reason to suspect that the deletion of "for" in (6b) has anything whatever to do with that of "'s" in (7b). The "for," for instance, precedes the subject of the complement sentence, "the boys"; the "'s" on the other hand, follows the subject of the complement sentence, "your brother."

Rosenbaum's explanation becomes more easily understood if we reverse the transformations undergone by the two sentences and restore them to their original strings:

- (6) insert: the boys + tense + arrive early
matrix: Mary + tense + hate + S
- (7) insert: your brother + tense + come late
matrix: your mother + tense + dislike + S

Rosenbaum continues:

Considerations brought to bear in the development of a general theory of complement structures, of which (6) and (7) are instances, indicate that the initial expression, based solely upon examination of the linear sequence of words, is incorrect. In the most general description of such constructions both the "for" and the "'s" are shown to share exactly the same position in the underlying structure of these sentences. Furthermore, both the "for" and the "'s" are optionally deleted by exactly the same transformational rule.

Implicit in this description is the claim that judgments about these pairs of sentences made by native speakers of English will conform to the linguistic description. In other words, the grammar predicts that the speaker of the dialect of English in which sentence (6a) is preferred over sentence (6b) will also prefer sentence (7a) over sentence (7b) . . .

On the other hand, the speaker whose grammar contains this single rule will delete both "for" and "'s."²⁶

For the reader well-acquainted with the Georgia dialect that deals in phrases like "I sure hate John not seeing you" this comes as something of a Joycean epiphany. In any case, the suggestion that superficial linguistic diversities are psychologically related adds immeasurably to the complexities of so-called "correctness" in writing, as linguistics centers involved in teaching the "preferred dialect" to ghetto children have begun to discover.

In reviewing this chapter, we see that there is no longer any real discussion in connection with the acceptance of transformational grammar so far as theory is concerned; the controversy has moved over to the realm of the educators, who now debate the issues involved in presenting the new grammar to school children. Because of well-publicized studies that dealt with its success in effecting improvement in children's writing, as well as the popularity of Roberts' English Syntax, The Roberts Series has been unusually well-received. Yet O'Neil bitterly alleges--and substantially proves--Roberts' misinterpretation of theory. Are the liberties Roberts takes with his presentation of

²⁶Rosenbaum, pp. 346-347.

formal linguistics justified in view of the results to be obtained? The answer to this question must be viewed in light of recent studies in psycholinguistics, a topic to be examined in the chapter to come.

CHAPTER IV

WHERE ROBERTS' RULES GO WRONG

This series being adopted so widely so soon is a function of a complicated set of factors. The linguistic mythology of it . . . is an important factor, but other factors are important, more important. I have already suggested most of them; it comes on new in every direction; the series is an integral package, there are more publisher's things to hook on to the basic series than there are attachments for a Land Rover: records, workbooks, interviews with the author, a king-sized wall chart revealing the intricacies of the series . . .; it provides new and sequential busy work for the elementary grades: it leaps into a vacuum with Substance that smells like New Math.

For every wrong reason the series is being adopted widely.
(O'Neil, p. 16)

At this stage in our analysis we have finished a survey of what The Roberts Series has to offer. For the readers of the Boston Globe and their brethren elsewhere then, there are bright, eye-catching accessories (no doubt motivationally researched) to go with the smart binding and good typography, the appealing illustrations. For textbook committees and administrators to fan through there are pages upon pages of magic-making rules to key in the New Grammar, interspersed with more information about linguistic history than most English teachers ever know.

Lest all this should indeed turn out to be too much for the teacher, there are teachers' editions full of additional details; the events leading up to the fact as well as those that happened afterward.

Everything the instructor might think to require is required here:¹ a statement of the author's philosophy; built-in sequential lesson plans; so much extraneous material that she has some leeway in choice,² and so on. With the publisher's contract signed, new purchasers of The Roberts Series no doubt relax content, sure that their students will be numbered when the roll is called up yonder by W. Nelson Francis:

I predict that within a decade or so the superior freshman reaching college from a good high school will know more and have thought more about language and will be more interested in it than his instructors.³

While The Roberts Series clearly exemplifies this hope, more specifically its sights are set on an objective with which even O'Neil can agree: teaching the child whatever it takes to find verbal self-expression, as an act both of creativity and of communication. Because this is one of the goals on which virtually all educators agree, the child spends from one-fifth to one-fourth of all his classroom hours in an English class, while his teacher works to decrease the one-to-three ratio of those who fail English achievement tests. If he reaches college, he may still have to take remedial English to continue, nor can his future employer count on effective writing when he graduates--even

¹Natalie K. Stroh, "Seven Ways to Make Your Textbooks Work for You," Grade Teacher, LXXXV (September 1967), 32-33.

²This refers only to material other than syntax. In that respect Roberts repeatedly urges the teacher to follow the progression set up in the book.

³"Pressure from Below," (Mimeographed paper), Linguistics and Freshman English, Oregon Curriculum Study Center, Eugene, Oregon, 1966, p. 6.

if it turns out that he teaches school.⁴

It comes as no surprise, then, that educators tend to follow where transformationalists beat the drum, particularly if they are acquainted with reports of the new grammar's past successes. Of the sizeable number publicized in the various educational periodicals, we shall look briefly at three that have experimented successfully with transformational rules as a basis for improving or analyzing writing style, those of John Mellon,⁵ Francis Christensen,⁶ and Richard Ohmann.⁷ With some understanding of their accomplishments, we may judge more profitably what Roberts might have done.

In the preceding chapter we have referred to Mellon's dependable study of 250 seventh graders, an assurance that, as James Moffett states, "embedding exercises based on transformational rules will improve syntactic versatility in writing."⁸ It should be understood, however, that the children made no rhetorical judgments such as a composition might require (e.g., choosing a focal point, making transitions between sentences, varying the lengths of succeeding sentences, observing the requirements of rhythm, etcetera). Utilizing the necessary

⁴Francis Christensen, "The Child's Right to a Teacher Who Knows," The English Language in the School Program, ed. Robert F. Hogan (Champaign, Ill., 1966), p. 269.

⁵Transformational Sentence-Combining, A Method of Enhancing the Development of Syntactic Fluency in English Composition, Harvard University, Project 5-8418, Cooperative Research Bureau, U. S. Office of Education.

⁶See Notes Toward a New Rhetoric (New York, 1967).

⁷"Generative Grammars and the Concept of Literary Style," Word, XX (December 1964), 423-439.

⁸Moffett, p. 167.

transformational concepts they had been taught earlier (on which no emphasis on a system as such had been placed) they elaborated syntactic constructions they normally did not use, thus creating a larger percentage (32%) of "mature" sentences than the control group.

What is important, as Mellon makes clear, is that the significance of the study pertains

. . . only secondarily to the particular format of the sentence-combining activities it investigates, and hardly at all to the model of grammar in the context of whose study they were presented . . . It appears that this increase of growth rate is of sufficient magnitude to consider the programs which produce it as valuable supplements to reading, writing, and discussing, which would, of course, remain the staple activity content of the several subjects in English.⁹ [*italics mine*]

The italicized material reminds us that even in a study so exacting Mellon recognized that the transformational rules utilized in the sentence-building exercises were of no more than tertiary importance. Simply to learn them affected the writing of the children not at all; the change was effected through the use of special exercises.

Just as Mellon's studies improved on those of Bateman and Zidonis, whose project we looked at briefly in Chapter One, so that of Francis Christensen¹⁰ benefits from the weaknesses discernible in Mellon's work. Christensen disparages the earlier practice of gauging

⁹Quoted by Moffett, p. 166.

¹⁰"The Problem of Defining a Mature Style," English Journal, LVII (April 1968), 572-579.

Christensen's study was based on Roberts' rules. It seems significant that James Moffett refers to this fact disparagingly as follows:

Christensen's way of analyzing sentences . . . is rather misleadingly called "A Generative Thetoric of the Sentence." It

improvement in terms of increased length and complexity of clausal structures. What were once clauses, he points out in his study of mature style, in professional writing will have undergone considerable deletion, thereby making possible such stylistic devices as repetition, improved rhythm, change in position, and so on. Thus the professional will write:

The very hallmark of jargon is the long noun phrase--the long noun phrase as subject and the long noun phrase as complement, the two coupled by a minimal verb.

On the other hand, the average high school student will, at best, produce this version:

The very hallmark of jargon is the long noun phrase as subject coupled by a minimal verb to the long noun phrase as complement.¹¹

Christensen argues accordingly that clause length in itself should not be encouraged in student writing, since neither the complexity of a sentence nor the number of words in its clauses indicates the quality of its effectiveness. In other words, clause-building exercises such as those used by Mellon could very well stimulate students to sentence elaboration simply for its own sake, without the necessary regard for

is generative only in the technical sense of a deductive system, being derived from transformational theory as popularized by Paul Roberts (whose rendition is unacceptable to most transformationalists themselves), not in a psychological sense relating to actual sentence creation. (Teaching the Universe of Discourse, p. 174)

¹¹Having written these two sentences on the chalkboard, I asked a college freshman class for a show of hands in judgment of the better-written sentence. Without hesitation the great majority voted for the second.

rhetorical judgment.

According to Moffett's theory of maturation, however, clause elaboration, whether exaggerated or not, has its place in the developmental process necessary to achieving a mature style of writing.

I think Christensen fails here to allow for the dynamics of language growth. He is assuming that instruction can short-cut development, so that, for example, a student can be deflected from relative clauses to appositives, or from adverbial clauses to absolutes. But children's sentences must grow rank before they can be trimmed. Although I cannot cite evidence to prove this point, I feel certain from studying children's writing that they have to spin out long clauses before they can learn to reduce them.

Of the two sentences below I would say that the maturing student has to write the first before he can write the second.

- (a) After he was elected, Goodsayer adopted the policies his opponent was advocating, which he had harshly criticized when he was running for office.
- (b) Once elected, Goodsayer adopted the policies advocated by his opponent--the very policies he had harshly criticized during the campaign.¹²

Moffett considers that much of the tightness and read-ability of mature style depends on clause reduction of this sort; therefore, since clause reduction presupposes a prior expansion of clauses, short-cutting is not possible.

In other words, I believe the term "clause reduction" refers not only to some sentence transformations but also to a psychological process of language maturation.¹³

¹²Moffett, pp. 172-3.

¹³Moffett, p. 173.

The implications of a coalescence of linguistics and psychology constitute an important aspect of this study, as we shall see later.

In his analysis of the stylistic devices of several well-known writers, Christensen concludes that the quality of their style is evidenced by four principles:

- a. the ADDITION to the main clause of clause modifiers
- b. the DIRECTION of modification (placement of modifiers before or after the clause)
- c. the level of GENERALITY of modifiers in relation to the main clause
- d. the sentence TEXTURE that results

His method of analysis becomes clear in the following sentence,¹⁴ the clauses of which are numbered for abstraction levels:

- (1) The assistant manager fussed over him,
- (2) wiping a cut on his leg with alcohol and iodine,
- (3) the little stings making him realize how fresh and whole and solid his body felt.

Such deliberate changes in levels of abstraction (a whole-to-part descent depending from the broad generality of the main clause to the most removed abstraction) are, in Christensen's opinion, indicative of the great majority of narrative and descriptive sentences in contemporary professional writing. Linking semantics to structure in this manner, then, he has devised ingenious exercises in combining clause residues to achieve a stated focus.

Still another ingenious manipulation of syntactical rules suggests considerable promise for the improvement of a student's writing. In a

¹⁴The sample sentence is excerpted from Christensen's tenth-grade experimental materials at the Nebraska Curriculum Center.

paper entitled "Generative Grammars and the Concept of Literary Style," which holds that transformational patterns constitute a significant part of what the sensitive reader perceives as style, Richard M. Ohmann of Harvard analyzes the writing of Faulkner, James, Hemingway, and Lawrence in terms of the characteristic transformations utilized in their work. From this analysis he develops alternate possibilities, producing a convincing demonstration of the relatively simple grammatical rules that account for such intrinsic traits. To understand the possibilities of this procedure, let us look at specific examples.

Working with a dozen lines from the inner monologue of Part IV of "The Bear," Ohmann begins by reversing the effects of only three generalized transformations, i.e., relative clause, conjunction, and comparison. Reversing even such a small amount of grammatical apparatus as this, however, produces a remarkable effect, as just a few words will show:

two threads frail as truth and impalpable as equators yet cable-
strong to bind for life them who made the cotton to the land
their sweat fell on

The trickle was a thread. The cotton was a thread. The threads
were frail. Truth is frail. The threads were impalpable.
Equators are impalpable. The threads were strong to bind them
for life to the land. They made the cotton. Their sweat fell
on the land. Cables are strong.¹⁵

Such a method as the repeated use of a limited number of transforms is impossible with the idiosyncratic style of Henry James, Ohmann found, since his special brand of complexity results from a

¹⁵Ohmann, pp. 428-429.

variety of different transformations. Most of the complexity, however, can be seen to result from self-embedding. Once the intricacy of this device is removed, the typical Jamesian flavor is gone, although the sentence is still complex.

In the third study,¹⁶ involving Hemingway's easily-identified style, the emphasis on style indirect libre is contrived by a sentence of transformations, unexpected in such an apparently simple sentence structure:

quotation or reported thought:

He thought She has made me lie	He thought, "She has made me lie"
-----------------------------------	--------------------------------------

Indirect discourse:

He thought, "She has made me lie"	He thought that she had made him lie
--------------------------------------	-----------------------------------------

deletion:

He thought that she had made him lie	She had made him lie
-----------------------------------------	----------------------

Ohmann's last example is drawn from D. H. Lawrence's Studies in American Literature, a work in which the distinctively brusque manner comes from the use of declarative sentences and sentence fragments. The original structure can be seen to undergo a surprising truncation, as a contrast between the sentences as Lawrence wrote them and their content after undergoing replacement will show:

We can't go back. And Melville couldn't. Much as he hated the civilized humanity he knew. He couldn't go back to the savages. He wanted to. He tried to. And he couldn't.

¹⁶Ohmann, pp. 435-436.

We can't go back. And Melville couldn't go back. Melville couldn't go back, as much as he hated the civilized humanity he knew. He couldn't go back to the savages. He wanted to go back to the savages. He tried to go back to the savages. And he couldn't go back to the savages.¹⁷

Certainly this stripping-down of style discloses the syntactical structure as no other process can do. That credit must be shared with the transformational rules, Ohmann openly declares:

All I have done here is outline, briefly and in part informally, a fruitful method of stylistic description. But no analysis of a style, in the fuller sense, can get off the ground until there are adequate methods for the humble task of description. Such methods, I think, are provided by transformational grammar It alone is powerful enough to set forth, formally and accurately, stylistic alternatives.¹⁸

It can be seen that such strongly positive results as are presented by each of the foregoing studies, imaginative and challenging as they are, undoubtedly must arouse hope for similar success in those who opt for the Roberts books. Two considerations, however, must be kept in mind. The first is that in the two studies feasible for students below college level, those of Mellon and Christensen, a minimal use is made of transformational rules in themselves. Success has percolated from the procedures of conjoining, embedding, and deletion, procedures that can very well be taught without reference to any system whatever. What Mellon's seventh graders learned were game-like rules that allowed them to shape a simple sentence into acceptable form to be added to another simple sentence ("That added to any sentence allows it to be used as the subject of another sentence.") For Mellon's

¹⁷Ohmann, p. 438.

¹⁸Ibid., p. 439.

purposes there was no need to teach those transformations that are essential to a system like Roberts', the rules for questions, the negative, the passive, and so on.

As for Christensen, who works with tenth graders capable of assimilating the entire system, again the transformational rules functioned as convenient descriptions for the processing of sentences. Of his four principles, only the first is concerned with transformations; his real concern is with rhetoric.

The second consideration that presents itself in assessing the Roberts books is that Roberts presents almost no prescriptions for the use of his rules. With such research reports as those just described available to him, why did he fail to provide similar exercises to bridge the pedagogical gap? A page-to-page search of the Complete Course and its teacher's manual discloses no instance of direct application of transformational rules to the understanding of literature or the expression of a rhetorical principle. As we have seen in Book 6, the teacher's edition (p. T184) explicates the parallelism found in Lincoln's Second Inaugural speech in terms of transformational rules, but other examples are rare, if to be found at all.

In some circumstances, following a discussion of the passive rule, for example, Roberts comments on the desirability of the active rather than the passive voice, observing that in certain situations the passive makes possible a desirable anonymity. Similarly, demonstrating the for-to deletion, he comments:

This deletion would not take place if there were some special

emphasis on the subject of the insert, some contrast with something else: "The object was for us to have a good time, not these other people." (p. 456)

In view of the possibilities, however, this sort of observation hardly seems sufficient.

It might be argued that Roberts relies on the teacher to originate practical examples, but close reading belies this inference. O'Neil's article refers at least four times to Roberts' putting the material beyond any dependence on the skill or judgment of the teacher, as this passage will indicate:

[A number of chairmen of school committees] were now casting about for advice on how to use them [the Roberts Series]; on how to retrain the teachers who would have to work out of these texts (in fact, this is no problem at all, for the books are made for automata, or in the current phrase, are "teacher-proof" as a commercial advantage) (p. 12)

In leafing through the teacher's manual it becomes obvious that Roberts has observed considerable care to leave as little as possible to the teacher. To quote O'Neil again, "Furthermore all the answers are fed to the teacher, lest she slip, for example, on such difficult matters as $6 \times 6 = 36$." (p. 16) In a statement highly ironic under the circumstances, Roberts himself makes this clear:

The teacher who does not happen to be also a grammarian should be cautious about forming generalizations. They may turn out to be invalid and may have to be unlearned in later years. (p. T2)

Nor is it at all certain that such a demonstration of the rules in stylistics could be undertaken effectively by a teacher untrained in transformational grammar, as Francis Christensen indicates in his

article, "The Child's Right to a Teacher Who Knows."¹⁹ To bear out this point, a questionnaire that I submitted to teachers in North Carolina supplies a somewhat damning piece of evidence. Some of the answers from one teacher of fifth-grade children convey quite clearly the attitude hinted at in all of the responses:

- Q. How do young children respond to the rather mature reading selections presented by Roberts?
- A. Most seem to enjoy them when they understand them.
- Q. A critic has argued that transformational grammar is too advanced a subject to be taught in elementary grades. Do you find any such difficulties? Do you cut down on the number of rules to be presented?
- A. Some few theories are difficult for me to understand so these I omit as I feel I could not do justice to them in trying to explain them to the children.
- Q. Do you find that transformational grammar has any marked effect on the sentence structure used by students in writing compositions?
- A. None that I have noticed but then we have not done any extensive work in composition writing this year.
- Q. Is there too much material in any given book? Does the fact that you are advised not to skip around in these texts present any sort of burden?
- A. To try to cover all the grammar, literature, and the work given in the workbook of Grade 5 is a rather mammoth task so I have omitted most of the literature this semester to concentrate on the grammar.

It should be mentioned, perhaps, that of the teachers actually teaching the texts, none to whom I talked seemed genuinely pleased with

¹⁹Christensen, p. 270.

them; the enthusiasm came from the higher level of principal or supervisor. Such verifiable emotions with which the classroom teacher viewed Roberts' texts appeared more like those of the writer of the following jingle, published in the English Journal²⁰ some months after The Roberts Series appeared in California (where the books found their heaviest sales):

On First Looking into a Linguistic Series
for Elementary Children

The tense morphemes, another label,
Appear now in our schoolroom Babel;
Modals and transforms demand attention,
And leave US tense with apprehension.

Joanne Dale, Los Angeles

Unquestionably it is difficult for a teacher to change, either in attitude or practice, from terminology and procedures she learned as a child and has been reinforcing for years. Without a strong indoctrination in transformational theory she may very well dismiss the new grammar as just another fad; almost certainly she will lack the real interest in its possibilities that enabled Mellon and the others to achieve significant results. Her attitude is likely to be that of the writer of a satire published since the appearance.

The Roberts Series, of a satire undoubtedly in one of the educational reviews, aimed at the mathematical notation of transformational grammar. Arriving at school on the first day of a new semester, the teacher finds that a new system of English has just been ordered; the text is her city's phonebook, and she is directed to

²⁰English Journal, LVI (December 1967), 1289.

have the children memorize the names one page at a time. There being no recourse, she and the other teachers undertake the task. They devise procedures, set goals, announce problem sessions. At the end of the term, the job done and children and teacher exhausted but successful, they await evaluation. The results are not what was hoped for, comes the decree from the higher echelon; the children should have been made to learn the telephone numbers. Next year . . .

Those classroom teachers whom I interviewed about the Roberts books seemed to manifest a feeling of oppression, a kind of reaction to the relentless pressure generated by the over-supply of everything,²¹ the long grinding of the material necessary before any digestion could take place. After a certain amount of this force-feeding, the teacher must conclude, a child may well lose whatever appetite he has had for language.

This reaction, I was interested to discover near the end of the study, was evidently shared by an English Journal reviewer of the Roberts series, David R. Searles, who expresses the same point of view.

. . . the seventh grader who wants to generate the sentence "Cows were in the corn" has to chase the words through 11 successive phrase-structure rules, and then go back to pick up five more before the terminal string is achieved. To creep in this petty pace from rule to rule can be more than a little trying, even for people who are interested

²¹For this reason I do not view favorably the various additions to the Complete Course--the charts on vowel sounds, the handbook of writing, and so on. That space, I think, should have gone into some kind of cross-referenced table of contents.

in grammar Soon one tires of Roberts' T-party.²² Obviously not a transformationalist, Mr. Searles acknowledges the series as being "generally admirable"; however, "the student who tackles it unsuccessfully will come out of the ordeal brainwashed, or with a severe case of combat fatigue." The successful student, on the other hand, "may even want to become a transformational grammarian."

This implication of the element of stress introduces a textbook series, particularly one that presents a number of innovations: the various psychological considerations. Let us look briefly at three questions that seem relevant in this regard: First, at what age can children deal with abstractions sufficiently to understand (not necessarily learn) what O'Neil terms "a very specialized university thing like linguistics"? Second, considering the continuing trend to mix middle-class and disadvantaged children, to what extent can the latter benefit from this material? Third, what the prospects for considerable development of the theory of cognition, so that such a presentation as Roberts has made of his material will be supplanted soon by new procedures?

It will be remembered that the rationalism necessary to transformational theory is directly at variance with the behavioralism of the structuralists. As educators at M.I.T. and Harvard proclaim triumphantly on various occasions, Chomsky "defeated" the champion of

²²"Teaching Materials," English Journal, LVI (September, 1967), 906.

the behaviorists, B. F. Skinner, when he reviewed the latter's work Verbal Behavior in the January-March 1957 issue of Language. Inherent in Chomsky's rationalistic approach is the assumption, of course, that there is some fixed schematic structure within which any human knowledge has to develop. It can be initiated by experience, but ultimately it will take the form which is determined by the nature of the mind. Commenting on this assumption in an interview published in The Nation, Chomsky explains wryly

In philosophy this is a very hard position to maintain because almost everyone assumes that these issues are dead, and if you only use words clearly you can see that there is no issue. I don't believe that at all.²³

Behind the psychological implications of modern rationalism are ranged the theories of Jean Piaget, a renowned French biologist-psychologist of the entre-guerres period and a sort of "man in the middle" between the arch-empiricists and the arch-nativists. Using the study of children to answer questions about the nature and origin of knowledge, as David Elkin reports, Piaget sees his contribution primarily in the area of logic and epistemology, only secondarily in the area of child psychology and education.²⁴ It is as a psychologist

²³Sklar, p. 217.

²⁴David Elkin, "Piaget and Montessori," Harvard Educational Review, XXXVII (Fall 1967), 535-545.

An associate of Dr. Benjamin Spock, Dale B. Harris, states in a foreword to a recent translation of Piaget's essays (Three Theories of Child Development, New York, 1965) that Piaget's work stands as an unsurpassed milestone in cognitive thought, and that "his experiments are among the most ingenious devised by child psychologists." His key notion of "reflecting abstraction" or "logico-mathematical expressions" is that "thought derives from the abstraction of one's own thoughts upon things."

of innate stages of maturation, however, that his opinions serve as guide to leading educators today. Thus the report from the 1966 Dartmouth Seminar (quoted earlier in this study) makes clear their confidence in Piagetian theory:

Any systematic study of language at the grammatical levels calls for a degree of abstractness in one's thinking that children are seldom capable of attaining much before the age of 15 or 16. (Piagetian researches into concept formation are highly relevant here.)²⁵

Moffett also speaks plainly on the subject of maturation, referring to Piaget as the leading authority:

. . . Control of behavior becomes possible only as awareness of [earlier] abstractions arises. In short, increased consciousness of abstracting has as much to do with developmental growth as has progression up the abstraction ladder. I believe that growth along one dimension fosters growth along the other. This would square with Piaget's insistence on decreasing egocentrism as a dimension of growth.²⁶

It would appear, therefore, that when O'Neil expresses his opinion of Roberts' use of transformational grammar in elementary grades, he has ruling authority on his side:

If the formal study of language is deemed important at all (and that is an open question), it shouldn't begin until the child can deal honestly and freely (i.e., without being led to it through phony inductive traps) in overt system building. What little we know of the growth and development of cognition (e.g., from Piaget, etc.,) suggests that the secondary level would be a good place to begin such formal studies. (p. 16)

²⁵Language and Language Learning, p. 69.

²⁶p. 24. In a more specific application of the maturation theory, Moffett says that the pedagogical issue is not whether children's syntax should grow in the direction of more and longer clauses--it must--but, rather, when and by what means students can feel the need for clause reduction and thus learn to exploit it for rhetorical advantage. (Teaching the Universe of Discourse, p. 173)

While Roberts' texts testify that he and his publishers believe otherwise, the weight of the testimony seems to suggest that formal grammar study should begin in the ninth grade, not be concluded there.

Seemingly sociological but in actuality psychological is another problem underlying the choice of textbooks, that of the disadvantaged child. While Roberts' tone and style of writing would seem quite liberal to some parents,²⁷ O'Neil characterizes it by the epithet "mannered" several times, and Roberts himself concedes that "we content ourselves with a somewhat literary sort [of English], which coincides pretty well with the production of the simplest rules of the grammar." Since just the sort of linguistic principles that we will mention briefly here have convinced authorities of the need to enforce integration, The Roberts Series must be judged in terms of its usefulness to all children, not just to those of the middle class.

The problem of the non-standard dialect may be viewed in three ways, it seems, granted that its speaker must benefit by learning middle-class speech. The first sees it as a restricted version of the preferred dialect, with smaller vocabulary, less organization, fewer possibilities for conveying explicit meaning. Change can be effected by teaching and practice.²⁸ The second viewpoint is based on cognition;

²⁷"The students wonder what the devil they have to do it for." (p. 147) "Part of the author's technique is to have Gulliver . . . approve of looney statements." (p. 97) It's a niggling point, but one on which a lot of people niggle." (p. 27)

²⁸This is taken from a statement of the British sociologist Basil Bernstein, quoted by Harold G. Shane in Linguistics and the Classroom Teacher, Washington, D. C., p. 74.

as Robert Kaplan points out, in the culture of poverty, where possession is limited to only one item (if any) of a particular linguistic type, children may be unable to recognize such concepts as "next to" or "larger," or "on the right," much as the Japanese child fails to distinguish the English /r/.²⁹ The third viewpoint is also concerned with cognition, but it implies more than perception and intelligence; we have seen an example of its operation in Rosenbaum's discussion of the joint deletion of the apparently dissimilar "for" and "'s", where the dialect that removes one seems always to drop the other.³⁰ If these are psychologically related, he writes, "then the task of effecting changes in the linguistic system of a speaker becomes immeasurably more complex." For example, it may be that other rules in the speaker's grammar requisite to the production and comprehension of grammatical sentences will reinforce the rule which deletes the "for" and "'s."

Martin Joos has estimates that normal fluent speech obeys about five or six grammatical rules per second. It would seem futile to inflict The Roberts Series--or any other text directed to the middle-class youngster--on a child who generates strings like the following:

²⁹"On a Note of Protest: Bidialectism vs. Bidialectism," College English, XXX (February 1969), 396.

³⁰This is discussed at the conclusion of Chapter Three.

NP + Aux + V + NP + passive
 NP + past + V + NP + passive
 NP + ed + V + NP + passive
 Someone + ed + eat + the chicken + passive
 Someone + ate + the chicken + passive
 the chicken + ate + passive + someone
 the chicken + ate + by + been + someone
 the chicken + been + ate + by + someone
 the chicken + been + ate

Furthermore, it would seem that good teaching practice should work to prevent a school system from forcing a Mexican-American or Indian or Puerto Rican--or even Negro, now that blacks insist their dialect follows African patterns--to study so intensively the background of English.

As for the third question, even a casual acquaintance with digests of scientific reports should alert us to the stepped-up pounding on the barrier that blocks a fuller understanding of the mind. Chomsky's real success, of course, lies in the area of cognition, not in that of grammar alone. As such, it has constituted a scientific revolution of the sort described in Thomas E. Kuhn's work The Structure of Scientific Revolution, as explicated by Robert Sklar:

All the researchers in a field operate on the basis of a shared paradigm, something more than a theory and less than a world view. The paradigm provides a set of rules, defining the boundaries of a field and determining the questions a scientist can properly ask

The time comes when new techniques, or simply an accumulation of data, begin to create difficulties for the reigning paradigm Researchers are confronted with anomalies in their work which would not be there if their field were functioning properly and the science enters a period of crisis If a successful

³¹Martin D. Loflin, "A Teaching Problem in Non-Standard Negro English," English Journal, LVI (December 1967), 1314.

revolution comes it will be led by a young scientist or an outsider new to the field, who asks new questions and produces a new theory around which a new paradigm can form. The new and the old paradigms compete against each other for adherents, but the new paradigm is fated to win, because it provides possibilities for normal scientific research that the anomaly-ridden old paradigm no longer can. How long the struggle may take is another matter.³²

The questions posed by scientists responding to the new paradigm include those of Jerome S. Bruner, psychologist at Harvard's Center for Cognitive Studies, who attributes to the smallest neonate a complicated programming system or, as Time describes it, "the full splendor of intelligence [that] is a part of the human birthright."³³ In what suggests a modern version of Platonic thought, the description goes on to say

Everything the infant needs--to master a tongue, to coax new music from strings, to find undiscovered stars--is already embedded in his nervous system

Thus Bruner considers the development of the human hand as a parallel to Chomsky's theory of speech development:

The infant hand speaks a kind of faltering language at birth, and incrementally exhibits its innate competence--just as the neuromuscular system involved in speech, by conquering its inexperience, ultimately produces syntax and fluency . . . All that seems necessary is a few months of maturity. If this were the result of a learning process, man's grasp would be forever limited by what he has learned to reach.³⁴

³²p. 213.

³³"Behavior," Time, March 28, 1969, p. 56.

³⁴Ibid.

Conducting a promising study of quite a different kind, George B. Milner, a linguist at the University of London's School of Oriental and African Studies, concludes that the underlying similarities of proverbs (literally, "before the words") found in isolated pockets of culture world-wide "provide a clue to the common denominator of all human thought." Time's reporter comments that "anthropologists and linguists have long suspected that the human mind obeys a hidden code-- just as the computer follows instructions programmed into it before it begins to 'think.'" Thus Milner finds significant the similarities between some Samoan and Basque proverbs, not only in meaning (which might be attributed to the similarities of human experience), but in structure and rhythm as well.³⁵

This hint of a universal wisdom suggests an appealing metaphor once employed in a different connection by Suzanne Langer: that modern man appears to exist on a tiny grammar-bound island of human thought, in the midst of a sea of feeling. To extend the comparison, that island, scientists now suspect, more nearly resembles a Pacific atoll; it is an upthrust from an underlying floor, and by this floor it is linked invisibly with other "islands" we have yet to discover.

What Roberts stakes in presenting to children "the system of transformational grammar," then, becomes considerably more of a claim than might at first appear. We know that theories rise to the surface only to become the raw material for their successors; hence the reluctance of most educators to teach theory as such to young children.

³⁵"Language," Time, March 14, 1969, p. 38.

Linguistics appears very much a science, while composition remains a skill; the twain should meet more responsibly in the mind of the teacher than in that of the child. Let the teacher come to understand the satisfactions of the theory, yet present it to her class only by application; on that application rests its sole justification for inclusion in the pre-high school curriculum. It can hardly be argued that linguistics yields content more essential than, for example, anthropology or psychology.

To examine with a coldly critical eye the fund of information supplied about language in Books 8 and 9 of The Roberts Series is not to say that students should not become acquainted with it at some time during their education, particularly if they are college bound. Such heavy-handed indoctrination in language history, Newspeak, geographical linguistics, Fowler's Modern English Usage, and so on should certainly be withheld until after the completion of the grammar course. Let the more rigorous study be interspersed with greater aesthetic relief than this information provides. If adults who make a career of the English language one way or another can weary of the subject, a child must grow to hate it.

Such weaknesses of the Roberts books have already been suggested by O'Neil, of course. Regrettably, his double-edged jabs at Roberts predispose the reader to reject his statements. With some study, however, he can be seen to speak for the Boston Brahmins--the Harvard educational people and the scientists at M.I.T. Their dismissal of Roberts as a mere popularizer designates him as the underdog, with whom

we instinctively sympathize. Strangely enough, even in this appellation they may be deemed correct. It will be remembered that in the first chapter of this analysis Archibald Hill's review of English Syntax was quoted to point out Roberts' curious periodic shifts to successive front-runners in theory. That such demonstration of unstable conviction would end with English Syntax might have been expected, Chomsky theory remaining pre-eminent; there seemed no place to go. The Chomsky-launched rules of the earlier work, as Roberts makes clear, were simply expanded for the textbook series. However, the declared goal of the latter, it will be remembered, states that "This series aims to improve children's writing by teaching . . . the main features of the writing system . . . and the nature of syntax." Here is explicit justification for teaching children the long, complicated system of rules, extended over seven years. Yet let us look back at the expressed objectives, not of The Roberts Series, but of English Syntax. The third is specifically said³⁶ to be of least importance:

This study [of transformational rules] should be of some service to the student. It won't automatically make him write better.³⁷

We see again, then, the chameleon's change of colors. It is regrettable, but The Roberts Series, Paul Roberts' final work, adds no lustre to the real achievements of his life, such as English Sentences and English Syntax continue to be.

³⁶p. 386.

³⁷Notes, pp. 403-404.

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