Insufficient attention has been directed toward understanding the effects which have flowed from past orthographic interference, specifically, the deletion of the second consonant from most of the core root words derived from Old and Middle English. Originally, words such as *flag, sled, hen*, and *let*, were spelled with a second consonant in place, as *flagg, sledd, henn*, and *lett*. The immediate and long term result of such interference upon generations of spellers is discussed in this paper in an effort to both offer new directions for future spelling instruction, and to clarify past and current misperceptions about the underlying orderly character of English spelling.

There are numerous orthographic anomalies tending to create confusion in the development of writing and spelling skills - multiple irregular verbs, nouns whose plurals are formed atypically, gross inconsistencies between the way words are pronounced and the way they are spelled, etc. However, a prolonged experience with thousands of individuals who have failed in their efforts to develop spelling proficiency has isolated one specific aberration that lies at the heart of the bulk of most spelling deficiencies. It is a little seedling that is innocently planted and takes root during the very first weeks and months of print exposure as children are asked to memorize numbers of innocuous looking little words which are thought to be easy to learn. Although everyone recognizes the potential for the production of anxiety and confusion as abstract little demons like *who, the, was, once and their* are shown to toddlers barely out of their diapers, very little concern is voiced about a second group of early words which most children are expected to learn without undue difficulty. They are common concrete words like *hat, pet, sit, hot, and nib*. 
On any relative scale, it is easy to agree in principle that the latter group is far less apt to cause difficulty initially than the former. However, it has become apparent after three decades of research into this area that even these supposed exemplars of regularity are not the best representatives to use during the early stages of word introduction for two significant reasons. First, they constitute only a small minority of the specific category of orthographic structure of which they are members, and second, they contain a structural irregularity which will eventually have the potential to wreak havoc on even those children who appear to learn them without difficulty.

The reason underlying the initial belief that words like *hat, pet, sit*, etc., are structurally regular is related to the fact that the vowel residing in the medial position before the final consonant, consistently carries the sound value referred to as the short vowel sound. In addition, it is true that once such words have been perceived accurately and have become immediately recognizable, they can be observed to be part of larger subcategories of words having similar structural characteristics, as in *hat*: bat, cat, fat; *pet*: bet, let, met; *sit*: bit, hit, fit, etc. Clearly, words which permit the learner to utilize his capacity for generalization are to be preferred over the abstract grammatic signalers constituting the first mentioned group. The word *the* not only contains a very late developing speech sound in the consonant digraph *th*, but it also makes use of an associated vowel pronunciation for the final *e* that is unique in the entire English lexicon. Similarly, not only does the word *who* have only two other graphic relatives carrying the same vowel sound when it appears in the final position in the words *to* and *two*, it also utilizes a pronunciation for its preceding consonant combination (wh) which is, again, unique in English. Even more significantly, virtually the entire group of words comprising this general category have no concrete meaning whatsoever and function solely as abstract signalers of person, number, tense, gender, position in space, etc.

If one group of little words is better than the other, what then is the objection to their continued use? Clearly the answer isn’t simple and has at least two relevant dimensions. In the first place, the type of word patterns presented thus far as being representative of the over-all category, although numerous) do not constitute even half of the total group of which they are a part since they are really only remnants of an earlier system of patterns which have been distorted by the ravages of time, usage, and, almost certainly, by human intervention. And secondly, since these word patterns are learned at such an influential stage of development for the
maturing child, they eventually play a leading role in the gradual evolution of a much larger problem arising when the time comes for these words to be enhanced and enlarged by the addition of inflections and suffixes.

To clearly understand the parameters of the category of structure being discussed, it is essential to establish a definition for purposes of clear identification. In English, simple word or root units containing a single vowel-element followed, by one or more consonants, normally carry the short vowel pronunciation when they are decoded, both at the spoken or written levels of expression. The most common deviation occurs when a single vowel is immediately followed by the consonant \( r \), in which case the vowel pronunciation is influenced in the formation of a second, extremely regular subcategory of pronunciation as in \( car \), \( her \), \( sir \), \( for \), and \( fur \).

As is obvious, the examples of the category under discussion have thus far been limited to word forms in which the vowel has been followed by a single consonant. The general conception of most literate adults initially is that this is the predominant method available for representing the membership of the overall category. It should also be obvious by now that the objective here is to change that orthographic misperception, and by so doing, indicate a more useful course of action in developing instructional procedures for teaching both the young to read and write initially, and in establishing a basis for vastly improved remedial techniques for those who have failed to learn how to read or write.

After more than thirty years of research, it has been discovered that overall category of words under discussion contains 1,1666 members. (1,2) It is important to indicate here that this larger group includes not only those of the type already mentioned, but also two other more consistent types of representation. First are those words like \( pass \), \( sell \), \( trick \), \( gloss \) and \( buzz \) whose present day spelling is far more representative of their antecedent origins, those most often having an Old English or Middle English heritage. This group has managed to consistently retain their second, originally present, consonant. The second type, by far the most significant quantitatively, includes those words which contain two or more distinctly different consonant elements, such as, \( last \), \( tempt \), \( wrist \), \( short \) and \( church \).

Although generally considered to be among the most commonly occurring word patterns in the language, those ending in a single consonant actually represent only 28 percent of the entire category. There are but 469 root words in English carrying this pattern. Conversely, and far more in-
fluential in both numerical and structural terms, 1,197, or 72 percent of the total category, consists of words which contain a single vowel followed by more than a single consonant.

What these figures really represent is but one more example of the cavalier attitude that has persisted for generations concerning the methodology to be used in introducing infants into the mysteries of the print system. A deplorable lack of understanding has existed concerning the complexity of the activity involved in learning how any human develops the ability to associate spoken language with printed language, while simultaneously attempting to perceive the precise structural characteristics of the sequence of individual letters comprising meaningful words. These figures indicate that the general process used most frequently with children to assist them in initially developing decoding-encoding facility, one masquerading under the guise of regularity, unlocks a bare quarter of the total population covered by that process, and those that it does unlock contain a significant irregularity. Mere infants are expected to learn about a complex manipulation of an abstract symbolic translational medium through the use of procedures that, at best, provide access to a minuscule portion of the language. The truth is that as graphic and oral language evolve through subtle interaction) increasingly complex word forms become the norm, and simple words like hot, dim, rug, and far, become more and more atypical in terms of structure, and isolated in semantic terms.

As one considers this problem, it is easy to see why the writer of this essay yearns for “the good old days” when the word man really did appear as mann. If one skims through the pages of Old and Middle English texts, one will find countless examples of words in which the now missing second consonant was retained. During the long period when English spelling patterns were evolving, not only was man spelled as mann, but men also appeared as menn. And so was it with henn, denn, gett, nett, dimm, hemm, fledd, catt, etc., and in slightly varied form, so was it with flagge, brimme, sette, steppe, sledde, stresse, wrenne, penne, lette, etc. In this latter group, the final letter element gradually disappeared when it became superfluous, since it no longer possessed a pronounced sound value. In order for so many of these words to have become distorted from their original, more structurally logical forms, there must have been considerable interference coming from forces operating without full realization of the mischief being wrought upon all future generations of spellers of English, as second consonants were falling by the orthographic wayside.
Despite this intrusion into the rational, but largely unconscious inner workings of our representative system, even a cursory glance at almost any page of printed English will demonstrate the strength of the opposition mustered against such unwarranted intrusion. Every newspaper, every textbook, every work of fiction or non-fiction, every telephone book extant, provides having proof of the resistance being offered against such debilitating interference, for in them can be found staunch defenders maintaining contact with the past through the proper nouns used to identify persons, places and things. In these sources can be found original spellings for The Cubb Group, Flagg Brothers Shoes, John Begg Whiskey, Bunn coffeemakers, Mott Apple Sauce, Topps Gum. Mickey Finn, Roger Mudd, Phileas Fogg, Diggory Venn, Diana Rigg, John Hopp, Fort Bragg, Mapp and Lucia, and the Brothers Grimm.

In the case of the synthetic construction of words through a conjoining of sequences of discrete letter elements of the alphabet, the problem lies in the area already touched upon, that of developing an unfailing awareness of the precise parameters of the “doubling” procedure. The results are an entire body of familiar spelling errors common to the poor speller as he encodes written for written, rubber for rubber, tapping for tapping, planed for planned, hoping for hopping, buggs for bugs, etc. The list of words and writing situations in which the normal and sequential flow of ideas is disrupted by the need to stop and momentarily reflect upon the correct spelling form, is endless. Developing fluency in the placement of the produce of one’s thought on paper is absolutely dependent upon the same kind of facility present as we learn to speak. Anyone who must constantly stop to remember the “how” of word pronunciation at the oral level is easily identifiable as one suffering from some form of speech deficit, be it in the area of articulation or be it a more basic problem of cognition. In like manner, once the ability to set words on paper with ease and joy is disturbed during normal development, a serious writing problem becomes manifest, one having the potential to exercise lifelong effects.

The other side of the coin relates to more subtle and less obvious analytic problems of the type which tend to not only interfere with the development of good spelling, but more pervasively, to disrupt word processing procedures used in the decoding of complex polysyllables. Take the disarmingly simple root word pet, for example. Its meaning is known to every toddler (if it’s toddler, why is it butler and curler?) entering first grade, for what child hasn’t either had, or coveted, a cuddly cat-dog-hamster-gerbil of his own? Exposure to it as a combination of letters
“standing for” the relevant concept comes early and is generally learned without difficulty. However, when the time comes to learn how to enhance this base root, the child must become aware, at some level of cognitive functioning, of the so-called “rules of structure” governing correct spelling. He must learn that when the plural noun form, or the third person singular form of the verb denoting the masculine, feminine or neuter genders is to be written, an s is added directly to the base root form. But when the pet under discussion happens to possess a bone) name or saddle, the previously indicated s must; be preceded by an apostrophe to correctly designate the pet’s bone, name or saddle, unless) of course, there are several pets exercising ownership, in which case the apostrophe is to follow this chameleon-like s, as in, the pets’ names.

The structural task becomes far more complex when the inflection to be appended to the base root involves a past tense form, the present participial form, a noun form, or any of the three adjectival forms. These are linguistic events calling forth the “doubling” response, one resulting in the spellings petted, petting, petter, petty, pettier and pettiest.

Obviously learning about the processes involved in making these subtle enhancements is not as simple as they have been made out to be by most adults, both in and out of education.

And yet, for the inadequate and insecure speller who hasn’t already given up) the worst is yet to come. The truly devastating effects of the problem only become apparent when one examines the difficulties confronted analytically when the enlargements involve a great number of suffixes subtly affecting the semantic value of the new words formed. To begin with, what possible semantic relevance does the sequence of letters comprising the syllable pet have, as it is isolated in such complex polysyllables as petition, appetite, competitively and impetuosity, especially in view of the fact that developing youngsters have been consistently rewarded for solving other unknown words by “finding the little word in the big word,” as in mailman, cupcake, bravely, etc.? And more to the point, why isn’t this syllable subjected to the “doubling” response in any of these cases? Since the syllabicate pronunciation for the letters p-e-t in each of these words is pet, the innocent translator who isn’t aware of the true root form of these words is reduced to the ludicrous, but extremely logical, conclusion that they must all have something to do with cuddly animals.

Of course, those who have evolved a more rational set of processing systems understand, that the root holding all of these complex words together under a single unified meaning banner is pete, not pet, a root de-
rived from the Latin infinitive *petere*, meaning variously to seek, to strive, to go toward) to demand, etc. The normal operations of this root are clearly observable in the word *compete*. In words carrying the signal *e* in the final position, inflections are added according to a very regular set of processing procedures to form *competes* (*es*), *competed* (*ed*), and *competing* (*ing*), as the signal *e* is suppressed before the addition of inflections and suffixes initiated by a vowel. The result of this very regular structural process permits a broad range of suffixes to be added, as in *competitor* (*ite*, *or*), *competition* (*ite*, *ion*), *competitive* (*ite*, *ive*), *competitively* (*ite*, *ive*, *ly*), etc.

In English, at the most complex levels of structure, the shift from the general pronunciation found at the simple root level, to a variant form after various suffixes are appended, is common to numerous roots ending in the signal *e*, changes which affect pronunciation only and not essential structure or semantic value. The shift can be clearly discerned in the following root forms: *spece* (species to specie); *labe* (labor to elaborate); *vive* (revive to revivify); *mode* (modality to modification); and *pune* (impunity to punishment).

Analyzing complex combinations of roots and affixes is a most sophisticated activity and learning to develop facility with all of its nuances is a lifelong task for even the most literate individuals. It evolves slowly, layer of complexity by layer, through the subtle interaction of the full range of oral and graphic language activities available to the developing human, especially as they are being absorbed and integrated in discrete stages during the course of one’s education. Without prior development of a whole hierarchy of inextricably intermingling associations, as connections are being made between subtle transformations of orally produced symbols with their graphic counterparts, the poor speller is doomed to failure as he constantly attempts to apply incorrect strategies in his unending search for the Holy Grail of “correct spelling.” If deprecation has only one *c*, why does impeccable have two? If tribute and sibling have only a single *b*, why do ribbon, scribble and cribbage have two? And so on....

The fact that most literate people do in time develop the necessary awareness required to master these apparent, but not real) contradictions, indicates the existence of an underlying and organized system permitting such complex behavior, one which allows them to spew out instantaneously, extremely long sequences of letter elements like *interrogatories* and *deinstitutionalization*. Watching national spelling bees
in which eight and nine year olds rattle off the most atypical spelling demons in the language with ease, provides ample proof of the existence of these systems, those which in the case of these small children are not only unconsciously learned, but are also largely divorced from semantic considerations. One of the most influential of these developing systems results from an early analytic awareness that the presence of two consonants after the vowel in the enlarged forms of words like tapping, stepping, tipping, topping and cupping, elicits the specific and consistent pronunciation associated with the regressed forms of these words at the simplest base root level, as in tap (p), step (p), tip (p), top (p) and cup (p), a form in which the second consonant is present in its “understood” form.

The presence of this second “understood” consonant, exists just as surely as the pronoun “you” exists and is understood in the imperative commands “Fire!” and “Don’t shoot!” In like manner, the presence of the single consonant in hating, meting, hiding, coding, and fusing is immediately recognized as stemming from the earlier root forms hate, mete, hide, code and fuse, another example of an existing “understood” element, in this case the vowel signal e. For the competent speller these “understood” elements have been programmed into the neural operations underlying the instantaneous retrieval and expression evident in every spoken and written word that has ever been produced by the human species. It is, in reality, that truly unique capacity which sets us apart from all other species that have ever existed.

No matter how sophisticated the combination of roots and affixes forming a word is, those who have developed an organized hierarchy of processing skills from the outset of print exposure, one that has been nurtured lovingly over the period of their education, instantly seek out and discover the root lying at its core. After more than three decades of study, it has been discovered that there are in reality only three essential processing procedures able to be used in the construction of base root forms, strategies which permit the normal writer of English to read or write any word possible of representation. (3,4) If an idea can be conceived, and pronounced by a speaker of the language, it can be encoded in a form that will be immediately recognizable to all other literate members of the group, and that is the wonder of our language.

Difficulty with the area of structural process that has been discussed here has been found to be the essential cause of the vast majority of spelling inadequacy diagnosed and treated over a thirty year period. Introducing uncertainty about their own language media into the minds of five and six year olds) children who have experienced an unending series of suc-
cessful dealings with their language at the spoken level) has the potential
to unleash enough anxiety producing confusion about print to account for
virtually all of the various error patterns observable and discussed in the
extensive literature devoted to a discussion of printed language insuffi-
ciency.

It is hoped that the lament uttered in the title of this work will take on
new relevance for all those involved with instructing both young and old,
and perhaps, there someday will be a return to the “good old days” when a
man was a mann, and men were menu, and cats were catts....

References


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Mr. Laurita sent me this article in April 2007 to publish on my web site. I have finally found the time to republish it in a retyped edition. The original was in columns.

You can find numerous other valuable essays by Mr. Laurita on the Education Page of my web site: www.donpotter.net I hope eventually make all of Ray’s published material available for those who really care about our English language and how best to teach it so that all students can achieve total linguistic function.

Late in 2001, I got a copy of Ray’s book, *The New Spelling: Orthographic Structuralism* from the Interlibrary Loan. The book was a revelation to me. Finally, I understood the beautiful, logical organization behind the structure of English spelling (orthography) and had a developmental sequence to follow that would lead all of my students to rapid and secure success in reading and spelling.