SOME EXPERIMENTS IN THE UNITED STATES CONDUCTED DURING
THE NINETEENTH CENTURY UTILIZING PHONETIC ALPHABETS AS
TRANSITIONAL MEDIA FOR INITIAL READING INSTRUCTION WERE
SURVEYED TO PROVIDE A HISTORY OF THIS ASPECT OF EDUCATION.
THE ACTUAL CIRCUMSTANCES SURROUNDING EACH OF THE MAJOR USES
OF SUCH TRANSITIONAL MEDIA ARE CONSIDERED IN DETAIL. THE
MATERIAL PRESENTED IS BASED ON AN EXTENSIVE SEARCH OF PRIMARY
SOURCES. SOME OF THE EXPERIMENTS WERE PREVIOUSLY UNREPORTED
IN THE BACKGROUND LITERATURE OF PHONETIC TEACHING METHODS. A
CYCLE OF INNOVATION, USE, AND DISCONTINUANCE IS POSTULATED AS
A MEANS OF STRUCTURING THE HISTORICAL FACTS. SIMILARITIES
BETWEEN THE PRACTICES REPORTED AND PRESENT EDUCATIONAL
ACTIVITY ARE NOTED. REFERENCES ARE GIVEN. (AUTHOR/MC)
NINETEENTH-CENTURY EXPERIMENTS WITH TRANSITIONAL READING MEDIA

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NINeteenth-Century Experiments With
Transitional Reading Media

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SUMMARY

Much current educational research is directed at the use of transitional media for beginning instruction in reading. Little is known, however, about the past experience with these phonetic alphabets designed to facilitate the process of learning to read.

The main purpose of this study is to present the historical situation surrounding the various attempts to use transitional reading media in this country during the nineteenth century. The system-wide introduction of particular phonetic alphabets are considered in Waltham (Massachusetts), Cincinnati, Syracuse, St. Louis, Boston, and Portland (Maine). For each of these experiments, the major characters and influences affecting the use of a transitional reading medium are presented in some depth. Certain of these attempts at establishing a phonetic teaching method in a school system have been previously unreported. Similarly, the course of events concerning the other experiments have not been considered before in detail.

Extensive use of primary sources was made in gathering the historical data. A cycle of innovation is postulated in an attempt to organize the facts and relate the various experiments. This cycle involves an enthusiastic introduction of the transitional medium, a varying period of continued use, and the eventual discontinuance of the method.
PART 1

INTRODUCTION
The reading and writing system of the English language is inconsistent. The traditional alphabet has twenty-six letters by which the sounds of the language are transcribed. Yet there are about forty different and distinct sounds in the spoken language. Obviously some of the written symbols represent more than one sound. English, then, lacks a one-to-one phoneme-grapheme correspondence.

Because of these inconsistencies in the writing system, the task of learning to read English can become very difficult. Over the years various methods have been proposed to simplify the teaching of reading by using systems with a high degree of phoneme-grapheme correspondence. In most instances, these teaching methods were designed only for the beginning stages of reading instruction, after which a transition was made to the traditional orthography. The problem of sound-symbol relationships would probably be resolved by general spelling reform, but since this reform is not in the immediate future an individual who learns to read in a phonemically-regular reading system must become familiar with common English. Any initial reading media with a one-symbol one sound relationship is, therefore, transitional.

One such system receiving a great deal of attention at the present time in this country and in Great Britain is Sir James Pitman's Initial Teaching Alphabet (i.t.a.). By using an augmented alphabet of forty-five letters, i.t.a. achieves a high sound-symbol correspondence design to facilitate beginning reading. Another
initial teaching medium under investigation at the present time is Fry's Diacritical Marking System (DMS) which makes use of diacritic signs to distinguish the different phonemes of a single grapheme.

Since a large amount of current education research is focused on the general topic of reading instruction and initial teaching media, it is appropriate to inquire into the historical background of this subject. A total evaluation of transitional reading systems should trace their development in addition to discussing the current findings. This report will present just such an historical background by considering the use of these systems in the United States up to 1900.

Many individuals began experimenting with transitional reading media beginning in the 1840's. We will treat only those experiments, however, which were carried out on a large scale, as in an entire school system, and for which there are available records. There were many instances in which a single person conducted small classes using an initial reading media, but these are not considered. Instead, the research deals with the large-scale uses of the teaching systems, and indications are that all the major experiments before 1900 are reported herein.

Because of the limitations of time, we could only treat the facts immediately related to the topic. Underlying influences, such as political or religious issues, or the trends of developing
educational philosophy, are mentioned only when they were important factors in an experimental situation. It was impossible to become deeply involved in these indirect influences. The importance of such considerations is realized, but the primary goal of this report was to establish the historical facts concerning the major experiments with transitional reading systems.

The experiments are given in essentially chronological order and are referred to by the location in which they were conducted. In the six experiments reported, two different transitional systems were used, Phonotypy and Pronouncing Orthography. Phonotypy is an augmented alphabet of forty to forty-three characters, in which each letter represents one sound. It was developed by Isaac Pitman and A. J. Ellis in the 1840's, and is directly related to the present-day I.T.A. system developed by Isaac Pitman's grandson, James. As seen in the sample of Phonotypy in the Appendix, there are twenty-three letters from the traditional alphabet, while g, q, and x are not used. Twenty new characters, mainly vowel sounds, are added to the common letters. Most of the new characters are elaborations of Romanic letters by means of additional strokes or ligatures.

Edwin Leigh's Pronouncing Orthography, the other widely used transitional medium, has far more symbols than sounds. Though not all are shown in the sample page in the Appendix, there were seventy distinct graphemes. As a result of this, the form of conventional
spelling is maintained. For instance, because there are nine
different a's in Leigh's system, it is possible to represent the
various sounds associated with the letter a without changing the
spelling of a word containing the letter. Owing to the complexity
and number of the characters, Pronouncing Orthography presents
difficulties in writing, and thus it is only a reading medium.

These two initial reading media were the most widely known
systems in the United States during the last century. There were
others in existence, but the above mentioned were the media chosen
for the major experimental trials discussed here. Other transitional
alphabets did not have as much support, which is evident in that
they were not used for large-scale experiments with initial reading
media.

The experiments to be reviewed are the use of Phonotypy in
Waltham, Massachusetts, 1852-1860; Phonotypy in Cincinnati, Ohio,
1851-1858; Phonotypy in Syracuse, New York, 1853-1863; Pronouncing
Orthography in St. Louis, Missouri, 1866-1892; Pronouncing Orthography
in Boston, Massachusetts, 1866-1879; and Pronouncing Orthography in
Portland, Maine, 1875-1883. The dates given here are qualified where
necessary by the text concerning the particular locations.

Most of the historical information was obtained from primary
sources, and a reference could have been given for every statement.
To avoid pedantry, however, notes are restricted to direct quotations and the most important facts. Except for quotations, references are usually given at the end of a complete paragraph in order to avoid breaking the text.
PART 2

WALTHAM, MASSACHUSETTS
The first large-scale use in the United States of an initial reading medium took place in Waltham, Massachusetts. In the fall of 1852, Phonotyyp, devised by Issac Pitman, was introduced into the beginning reading classes of the Waltham school system.

Harrison tells us that Pitman brought out his first version of Phonotyyp in 1844.1 Between the time it was made public in 1844 and its introduction into the schools of Waltham in 1852, Phonotyyp acquired a very respected group of supporters in the United States. The attention given to Pitman's alphabet set the stage for its innovation in Waltham.

Phonotyyp was brought to this country by Stephan Pearl Andrews, a noted abolitionist. While he was in London in 1843 he became familiar with Phonotyyp and Phonography (Pitman's shorthand method) and returned to the United States with various books and pamphlets, and enthusiasm for the new systems.

With headquarters in a Boston office, Andrews lectured often in support of the Pitman reforms. In 1846, Andrews and Boyle published the first books in this country using the Phonotyyp alphabet. Issac Pitman watched Phonotyyp take root in New England and provided financial and moral support to Andrews and Boyle.2,3

Through the efforts of Andrews and his materials, influential figures were made aware of Phonotyyp. In August 1846, Andrews
addressed the American Institute of Instruction, a group of important educators including Horace Mann and J. D. Philbrick. The lecture told of Phonotypy's benefits and of the excellent results to be obtained from its use.

Various small scale experiments were conducted in and around Boston to test this new reading method. Harrison refers to the Boston Phonetic School which became a showplace for Phonotypy as a means to teach reading. Dr. James W. Stone, another leading proponent, did much to draw attention to Phonotypy with spelling contests and reading demonstrations to show the superior results of using the Phonotypy method. Just such a demonstration probably resulted in the following letter quoted by Dewey:

Dear Sir:  
July 3, 1851

Having witnessed the exercises of a class of nine children under your care in reading phonography, and phonotypy, it gives me great pleasure to assure you of the delight which their performance gave me... The children you exhibited had certainly made most wonderful proficiency, and were, in several of the essentials of good enunciation and reading, years in advance of most children who had been taught in the old way.

Yours truly,

Horace Mann

Mann was a leading figure during that period of American education, and such an endorsement would carry much weight.
The attention Phonotypy attracted was by no means limited to the efforts of certain individuals. In 1852 the Massachusetts Teachers Association recommended "that teachers should study the merits of the phonetic system by themselves by actual trial in their schools." Similarly, committees of the Massachusetts Legislature reported in favor of Phonotypy in 1851 and 1852. Fries lists various prestigious organizations which recommended the use of Phonotypy and he indicates that by 1853, 124 schools in Massachusetts had followed this advice.

The innovation of Phonotypy into the Waltham school system was, then, not an isolated incident. It can be viewed against a background of numerous smaller experiments with this new method of reading instruction.

Waltham, which lies eight miles west of Boston, had a population of about 5000 during the early 1850's. Of this number, approximately 800 attended school. This would be a very low proportion today, but considering that there were 1200 adult white males, and assuming a similar number of women and a certain Negro population, plus the fact that many children did not remain in school, 800 students seems to be a reasonable number.

The interested people in Waltham would certainly be aware of the reading experiments in nearby Boston. The distance to the city was not very great, even for 1850; and a trip into Boston was not unusual. Also, Boston newspapers were readily available.
and out-of-town newspapers arrived quickly through a fairly efficient postal service. Waltham was by no means a rural town; it was well within the influence of the intellectual activity in Boston.

The head of the Waltham school committee at this time was a Unitarian minister, Rev. Thomas Hill. Hill's activities were by no means limited to the ministry. He graduated from Harvard College in 1843, where he had distinguished himself in mathematics and developed an interest in a host of other subjects. He turned down an offer for a position at the National Observatory in Washington and the prospect of a brilliant scholarly career in order to enter Harvard Divinity School. When he graduated in 1849, he became a pastor in Waltham and one of the town's most influential citizens; yet, he did not lose contact with the academic world.13

Hill gave frequent scientific and educational lectures in addition to his Sunday sermons. He belonged to a circle of friends at Harvard which met regularly for discussions on a wide range of topics; and he published many articles and pamphlets in education, mathematics, philosophy, etc.14

Indicating his ability and reputation as an educator, Hill became president of Antioch College in 1859, immediately following Horace Mann in that office. In 1863, Hill returned to the East to become the twentieth president of Harvard. Before he retired in 1868, he laid the groundwork for many of the changes made in the structure of higher education by his own successor, Charles W. Eliot.15

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The Waltham townspeople considered Hill to be the authority on many subjects. One local newspaper termed him "the most universally learned in science of all the American clergymen." This would be no small compliment considering the high esteem accorded to ministers then. Not the least of Hill's areas of concern was education and it is not surprising that he appeared as a member of the School Committee as early as 1849. He seemed to become the moving force of the committee, and served as its chairman most of the time he was a member. He took his position seriously and addressed himself to many problems concerning education; he acted almost as the superintendent, visiting each of the schools, examining the students and guiding the teachers. One of his biographers notes that "in these observations on teaching methods there was a scientific spirit uncommon in the educational practice of his day." As we shall see later, Hill had a definite sense of experimentation and applied it to education.

Thomas Hill was not an anxious reformer; he approached change from a critical yet interested viewpoint. As might be expected from his background already outlined, he was willing to look at new methods with an open mind. He said of himself:

I am a conservative by birth, by education and by conviction. Hold fast to that which is good, is my motto, whether in politics, or religion, or education; and I am never ready for any new thing until I am sure it is not going to destroy what is valuable in the old. 18
It is not difficult to assume that Hill knew of Pitman’s Phonotypy long before it was introduced into Waltham and was aware of the claims being made for its educational benefits. Once it was introduced, Hill was its leading proponent and he did much to maintain its original momentum.

In September of 1852, Thomas J. Ranney gave several lectures in Waltham on the subject of Phonotypy. The School Committee was apparently quite receptive to the idea of this reform and it was introduced into all the lowest grades. The school committee report says, "We allowed the introduction of this system into our schools as an experiment, having beforehand had good reason to suppose that it would be successful."¹⁹

Most of the students bought the First Phonetic Reader from Ranney. The School Committee purchased the remaining copies and also appropriated money for the Second Reader and Transition Reader in order to give the Pitman system a complete and fair test. There seems to be a definite understanding at this point that the use of Phonotypy was strictly on a trial basis.²⁰

Thomas Ranney appears to have been a traveling agent for Phonotypy. He joined the Phonetic Corresponding Society in February 1849. This group had its headquarters in Cincinnati and its avowed purpose was to keep a watch on the extent and progress of the phonetic movement.²¹ From his home at Picton on Prince
He also notes that Phonotypy provides a means of teaching adults to read and write English. The spelling of children taught with the Pitman system appeared to Hill to be better than those taught with the common alphabet. This was explained in that the child's attention was drawn to the oddity of the traditional spelling. Hill also mentions the healthy moral effect on the students of seeing the words spelled as they sound, and of developing an analytical mind.

Elsewhere, we find a rather remarkable example of early testing procedures as devised by Hill.

Fears were expressed lest this method should injure the pupils' spellings. In order to test the question, I took pains to procure, several times, lists of words which had actually been used in Boston, Roxbury, and other places, with the percentages of failures on each list. Springing the lists without warning, upon classes of the same grade in Waltham, we always found our percentages of errors very much smaller than in other towns, sometimes I think only one-third as large...27

This type of demonstration would certainly support the use of Pitman's alphabet; and even though it was not a good objective measure, it was a move in that direction.

Others corroborated the results of using this transitional reading system. The local newspaper printed a letter from a member of the school committee in a nearby town who visited the Waltham schools in late 1856. The letter praised the reading performance of
those taught by the phonetic method. About the same time, the Governor of Massachusetts visited Waltham and acclaimed the condition of the schools and the excellent reading. The New York Tribune printed a lengthy article in December, 1857 discussing the use of Phonotypy in Waltham, and commending the improved reading and spelling of the students.

All the reaction of Phonotypy was not favorable, however. Although the objections are more difficult to locate, there was opposition to the introduction of Phonotypy from the start. Hill, in 1863, said the opposition was due to misunderstanding of the method by some of the townspeople; later he indicates that some parents were dissatisfied with the system because of the apparent lack of progress by their children in the traditional orthography. The Tribune article reported that "many parents have opposed it bitterly" and gave reasons ranging to the following extremes:

"Some of the Catholics have denounced it as a piece of Protestant Jesuitism to smuggle heresy into their children's mind, veiled by these unknown letters," or, "Some of the conservative Protestants have denounced it as a radical measure smelling of ultraism."

One of the practical problems with Phonotypy, according to Hill, is that the students were taught the names of the letters of the alphabet at home by anxious parents, and were thus confused before being ready to make the transition to the traditional
orthography. This is related to the complaint of some parents about not being able to teach their children new words in the common alphabet. Both of these problems are due to a confrontation between the conflicting methods of spelling.

Opposition such as this was overcome mainly through the efforts of Thomas Hill. He himself was convinced that Phonotypy was a better method to teach reading. He understood well the problems with the traditional orthography and the need for a one-to-one relation between symbol and sound. He was not very concerned about spelling reform, but saw Phonotypy as a transitional medium for the teaching of reading. He probably would not have taught his own daughter by this system if he had any doubts about its effects.

The extent of Hill's commitment is shown in his activities. Beginning in the winter of 1852, Hill lectured frequently on the phonetic method. He tried to give common sense explanations to how Phonotypy worked, and outlined the results of his own experiments and of others'. He assured people that the transition was gradual and harmless, and tried to separate Phonotypy from fears of general spelling reform. Many times he made statements similar to the following: "We advocate Pitman's Phonetics simply as an aid in education, and as an introduction to ordinary orthography," or, "I repeat, then, my assertion, founded upon five years' constant usage
of the phonetic mode of teaching, both in my private experiments, and in the Public Schools of Waltham, that it is vastly superior to the ordinary or A-B-C mode of teaching children to read."36

Hill's influence and commitment to Phonotypy seemed to combine to insure its continued use. There was no one in Waltham with the stature to effectively oppose him on an issue such as this. Land quotes an article that appeared about the time of Hill's death in 1891 saying that "he threw himself into that work with great zeal; his ideas seemed revolutionary, but he brought the town finally into his way of thinking."37

It is difficult to determine whether Hill exerted the same effort in support of Phonography, the Pitman shorthand method. Often Phonotypy and Phonography would come together in a single package of the "Pitman reforms." Phonography was not introduced into Waltham schools until 1854, two years after Phonotypy. There is no mention of whether Hill was highly in favor of such action. It is known that he had learned Phonography by 1852 and used it from time to time in his personal writing. Perhaps Phonography found its way into the high school curriculum in Waltham by a "halo effect" surrounding Pitman's reforms. In any event, the students and the school committee both approved of its use and in 1856 it was even being taught in the last year of grammar school.38
The resistance to Phonotypy seemed to become stronger in the late 1850's. Hill still mentioned the parents' objections which had not subsided. In 1858, we find a very telling comment in a Cincinnati newspaper which reported that Andrews and Boyle moved their publishing business to New York City because there was little sympathy in Boston for the phonetic movement.39

The appearance in early 1859 of the "Phonotypic Papers", an article each week for five consecutive weeks in the Waltham newspaper, indicates that not all was going well. It would not seem necessary to explain to the townspeople the justification for using Phonotypy in such an elaborate and precise manner after the town had employed the system for seven and one-half years.40

One of these articles says, "The Rev. R. C. Trench has given a very savage thrust at phonotypy, and the newspapers of this country have repeated his blow by copying his remarks [claiming Phonotypy destroys etymology]."41 Trench was the Archbishop of Dublin and a noted authority on etymology and the English language. The effect of his statement advising against Phonotypy would only be compounded in Waltham with its high percent of Irish immigrants and descendants.

By this time, Hill was having trouble with his teachers. In 1857, an article on Phonotypy stated that "a teacher in love with the scheme can undoubtedly perform wonders with it; but the ordinary teachers
employed in the public schools will not do so much." This statement acknowledges the effect of teacher-differences and implies the result of novelty effects. That is, the teacher who is enthusiastic about Phonotypy will do well with it. After seven years the novelty of Phonotypy in Waltham had probably worn off. Hill said in 1861 that "the greatest impediments in the way to reform in school instruction are in parents and teachers... Teachers, too, have their own methods of instruction and it takes time and effort to change them."43

Hill always had to devote considerable time in instructing the teachers in the use of Phonotypy, and now in 1859, as before, there was a continual turnover in the teaching staff. Without novelty effects to assist him, with constant complaints from parents, and with the insistence by teachers on their own methods, Hill had some difficulty in maintaining Phonotypy.

In 1859, Horace Mann, who had gone to Yellow Springs, Ohio, as president of newly-founded Antioch College, died. The trustees looked to the Boston area for a replacement and chose Thomas Hill. Hill accepted the position and took office in September, 1859. This move ended his active involvement with Phonotypy in the Waltham school system. After so many years, Hill's name is conspicuously absent from the School Committee Report in 1860.
This same report includes a rather cryptic statement.

The Board have found their labors during the year peculiarly arduous and trying. Changes have been made which involved much labor, and which have subjected them to much criticism, as these changes were necessarily made contrary to the wishes of some, and the good judgement of others.44

There is no mention of what changes this statement refers to, but such a statement was hardly to be found in the reports of previous years when Hill was chairman. Without Hill's prestige and influence to stand behind their actions, the school committee apparently encountered a good deal of criticism.

One of the changes the school committee made was to discontinue the use of Phonotypy. It is difficult to locate in the official records of the committee any direct reference to such action; e.g., the reports available between 1858 and 1864 make no specific mention of the method of reading instruction used, nor do they include text book lists. Harrison states unqualifyingly that Phonotypy was used in Waltham until 1860.45 Crockett says that Phonotypy was used "to 1860 or thereabouts."46 We have Hill's own statement in an article he wrote much later that after he left Waltham there were no strong supporters of Phonotypy in the town "and in a few years the system fell into disuse."47 Although the exact date of the discontinuance of Phonotypy can not be pinpointed now, there is little doubt that it was dropped early in the 1860's after Hill left Waltham.
In his later lectures and articles, Hill attempted to account for the abandonment of Phonotypy. His reasons centered on general resistance to change or reform and to the loss of a strong proponent. He said he was aware of "the strength of prejudice with which we cling to old ways and resist new methods even when they are better than the old."\(^{48}\) Despite the results of experiments with phonetically-regular methods of reading instruction, Hill knew that towns "have been obliged to abandon them, simply from the difficulty of overcoming the vis inertia of new teachers and new committeemen, who had prejudices in favor of the old ways."\(^{49}\) He reported that when he left Waltham "and new members came upon the committee, and new teachers into the school, there was no one who had the leisure or the zeal to instruct the new-comers and in a few years the system fell into disuse through the vis inertia of the novices."\(^{50}\)

Several other contemporary observations can be added to these reasons given by Hill. The Tribune, as early as 1857, noted that the student "learns both phonotypy and common type in less time than he could learn common type alone, although not in so much less time as was at first hoped." The reason for this slow-down is given as: 1) the strong opposition discussed above, and 2) "the lack of teachers who seized and appreciated the peculiar spirit of the method" and thus used it poorly. The article termed the Waltham experiment a failure in the sense of not meeting up to the expected results.\(^{51}\)
Conclusion

As with any reform or innovation, there seem to be two sets of factors which affect the success and life span of the reform. One type of factor is related to the efficacy of the reform in bringing about a particular change or in reaching a particular goal. The alternate set of influences consists of factors unrelated to the effectiveness of the reform system, i.e., external influences.

Factors or terms directly related to the success of a transitional reading medium would include such considerations as reading performance, the time required to develop certain specified reading skills, the degree of comprehension, and the effect on other studies, such as spelling and writing. Factors not directly related to the efficacy of a system would be financial considerations, community prejudice, personal vested interests (for and against), general resistance to change, etc. There is, of course, an interaction between these two types of influences. The direct results of a system can either change or overshadow indirect influences of the opposite direction; and conversely, if factors unrelated to the efficacy of the reform are compelling enough, the benefits of the method can become secondary to external considerations.
With this model to structure the review, we can consider the reasons for the discontinuance of Phonotypy in Waltham. Harrison offers the explanation that experiments of this type lost their momentum when they lost their chief proponent. Hill certainly seemed to be the strength behind the Phonotypy experiment in Waltham and his own statements are in agreement with Harrison. Crockett says he can give no reasons why Phonotypy was discontinued.

The resistance to Phonotypy on the part of both parents and teachers is also an important factor, manifesting itself in other ways. The objections of the parents were certainly heard by the School Committee and would influence their decision, which was finally to drop Phonotypy. Also the parents' direct concern with their children's learning progress produced operating problems in the use of Phonotypy which Hill mentioned above. The teachers' resistance would also have an effect on the results. Their enthusiasm, or lack of it, for whatever reason, would influence the observed effectiveness of the method. We can suppose that the absence of the anticipated time savings would serve to strengthen any objections the parents might have concerning reading progress, and reinforce the opinion of teachers who were not entirely in favor of Phonotypy. The wearing off of novelty effects on the part of both students and teachers may have been responsible for the reduced level of time-savings.
Hill's leaving Waltham and the inertia and misunderstanding which produced the objections to Phonotypy can be viewed as unrelated to its actual effectiveness as a teaching medium. On the other hand, the lack of expected results seems to say more about its educational value. If the spelling was so dramatically improved, and if the students read and pronounced better, and if their minds were generally improved, and if all the other beneficial claims given above are to be taken at face value, it becomes difficult to account for the objections to Phonotypy in Waltham and the eventual abandonment. Perhaps the printed statements of the system's results were based on only the best students or best classes, because if Phonotypy did all that was claimed, one would not expect that it should be dropped from the schools. We can only conclude that the demonstrated effectiveness of Phonotypy was not sufficient in Waltham to justify its continued use.
FOOTNOTES

Part 2


4. For information on Philbrick's role in transitional reading systems, see William B. Gillooly, "The Boston Reading Experiment (1866-1879)", presented at The Fourth International i.t.a. Conference, McGill University, Montreal, Canada, August, 1967.


10. Type of The Times, vol. 11, p. 31 (Cincinnati: Longley Bros., 1858); cf. Harrison, p. 36.


13. For details of Hill's life, see The Hill Papers, passim.


15. Land, p. 207, et passim.


17. Land, p. 79.


20. Ibid., pp. 22 ff.


22. Ibid., vol. 1, passim and later volumes.


26. Hill, "The Four Ways..."

27. Hill, "Spelling Reform..." Transliterated to traditional spelling.


29. Type of The Times, vol. 11, p. 5.

30. Idem.


32. Type of The Times, vol. 9, p. 165. Note error in pagination by duplication of numbers 165-176.

33. Type of The Times, vol. 11, p. 5.

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34. Hill, "The Four Ways..."
36. Hill, "The Four Ways..."
37. Land, pp. 77-78.
40. The Waltham Sentinel, January 7, 1859 to February 4, 1859.
41. Ibid., February 4, 1859.
42. Type of The Times, vol. 11, p. 5.
45. Harrison, p. 43.
47. Hill, "Spelling Reform..."
48. Hill, "The Four Ways..."
50. Hill, "Spelling Reform..." Quote transliterated to traditional spelling.
51. Type of The Times, vol. 11, p. 5.
52. Harrison, p. 47.
53. Crockett, pp. 46 ff.
PART 3
CINCINNATI, OHIO
The School Board of Cincinnati, Ohio, experimented with the use of an initial reading medium first in 1851-52, then again in 1858-59. In both cases, the transitional system was Phonotypy. To follow strict chronological order, Cincinnati should have been discussed before Waltham. As was pointed out above, however, Waltham was the first community to use such a teaching method on a system-wide basis. Given only the year difference between the beginning of the experiments in Waltham and Cincinnati, it seemed more appropriate to begin the report with a city that had conducted a full-scale trial. In Cincinnati, the use of Phonotypy never went beyond a few classrooms.

The question then becomes why discuss Cincinnati at all, since there were so many other small scale experiments. The answer has several parts. Cincinnati did not introduce a transitional reading system into its schools, even though it experimented with the very same system used in Waltham. Therefore, it will provide a contrast to Waltham and to the cities reported later in showing the relative importance of various factors. Furthermore, Cincinnati during this time period was the headquarters of the phonetic movement in the United States and numbered among its residents Benn Pitman. The fact that the city's own school system did not use a phonetic alphabet should be investigated. Cincinnati is also unique since the School Board, not once, but twice considered the innovation of Phonotypy to the point of conducting experiments.
In comparison with other cities during the early 1850's, Cincinnati had a fairly progressive educational system. Between 1840 and 1848, a uniform and regular course of study was set up for each grade level throughout all the city's schools. By this time too, a well-organized administrative hierarchy had been developed, and in 1850 the position of superintendent was created. To meet the problems of the large influx of German immigrants to Cincinnati in the late 1840's, separate classes with German-English instruction were provided. By 1850, almost 20% of the students were enrolled in such classes.

This general forward-looking trend is further reflected in the School Committee's approach to new text books. In 1849, the high-school principal in the city who performed most of the duties of a superintendent said:

As the merits of text-books are best tested by their use in the Schoolroom, it is proposed to place, occasionally, in the hands of the pupils belonging to the classes of the same grade, and pursuing the same subjects of study, text-books by different authors, and to determine their merits by the interest, scientific attainments, and practical knowledge obtained by the classes respectively.

Coupled with this sense of experimentation was a reluctance to change a set of text books. The result was a cautious yet interested concern for new teaching methods.
In 1849 the books used for reading instruction were Sanders' Primer in the beginning classes, followed by the McGuffey's Readers up to the high school level. The use of the McGuffey's Readers may have been influenced by the fact that the author, William H. McGuffey, lived in the vicinity for many years previously and even taught in a Cincinnati high school from 1843 to 1845. In 1850, Swan's Primary Reader was introduced in place of Sanders'. Swan's book was arranged to present words in order of increasing phonetic irregularity, i.e., the first lessons consisted solely of words that are spelled as they sound, and the latter lessons introduced words which are less phonetically-regular.

In 1850, Nathan Guilford filed his first report as Superintendent of Schools in Cincinnati. Guilford was by no means new to the situation. He had helped start the school system in the city in 1829, and had remained very active in its affairs. He was called one of the fathers of the Cincinnati public schools. His was a popularly elected position, and throughout his term there was friction between him and the School Board concerning the extent of his authority. Finally in 1853 the legislature allowed the board to appoint its superintendent, and predictably Guilford did not get the position.

In his first report, Guilford noted that the primers were easily damaged or destroyed, and he recommended that they be
eliminated in favor of more alphabet cards. This suggestion was followed for the very young classes, but Swan's Primer was still used. Guilford was reminded that his post was strictly advisory. In 1852, the school committee had dropped the use of Swan's book and substituted McGuffey's Pictoral Primer and Eclectic Spelling Book for the beginning reading classes. Guilford was disturbed by this action and objected that the McGuffey book had not been tried in the schools. He stated further that most of the teachers preferred Swan's approach rather than the word method in the McGuffey text.

The School Board adopted a resolution in May of 1851 to conduct a test on the merits of Phonotypy. Obviously, there were some active supporters of the Pitman system in Cincinnati, but there is no mention of who petitioned the board to run such an experiment. It is very probable that the head of such a group was Elias Longley. As early as 1848, Longley was publishing a weekly phonetic newspaper with a Cincinnati dateline. In the paper, he often urged the use of Phonotypy as a means of teaching children to read, and considered it strictly a transitional system. Longley became one of the leading proponents of Pitman's method in the country, and his publishing firm issued a large portion of the phonetic books printed in the 1850's. As we shall see later, Longley had detailed knowledge of this first experiment in Cincinnati.
At the beginning of the next school year, August 1851, a class was set up using the phonetic reading system. The results of the experiment are available but were reported from two different viewpoints. The ad hoc Committee on Phonetic Teaching reported against Phonotypy, and whereas this was the official version of the results, the School Committee eliminated the topic of transitional alphabets for further consideration. In line with this decision, Superintendent Guilford also filed a report against the use of Phonotypy. On the other hand, the phonetic advocates claimed that the chairman of the ad hoc committee was opposed to the Pitman alphabet from the beginning and did not allow a fair trial. The latter report was made in 1858 as part of an effort to have the School Committee reconsider the use of a transitional reading medium. The highlights of both reports will be given.

Dr. Jerome Mudd headed the subcommittee of the School Board appointed to investigate phonetics. His support is a very long discussion of Phonotypy, both as a spelling reform and as a teaching instrument. The bulk of the report is centered on the theoretical arguments for and against such a system; little space is devoted to the actual results of the experiment. The substance of Mudd's theoretical objections to Phonotypy include most of the common arguments against such a method seen in the literature of that period. (Just as many favorable statements from other contemporary sources could be found as a rebuttal to Dr. Mudd.) Suffice it to say that, on the basis of theory, the report was overwhelmingly
opposed to the introduction of Phonotypy. Whether or not Mudd was prejudiced against the transitional medium from the outset, as the phonetic supporters claimed, is impossible to say. It is also impossible to say whether Dr. Mudd let any of his own prejudices influence the conduct of a fair experiment.  

The official report outlines the general experimental design and gives the results of observations and examinations made by the ad hoc committee. In general, there seemed to be a lack of controls and a heavy emphasis on subjective evaluation of progress. From the results of the various sub-groups, it was judged that the best Phonotypy students were doing no better than students taught in the traditional methods. Comparing the observed progress to the claims of the Pitman system, the report calls the experiment a failure and recommends it be discontinued. Perhaps the entire report of Mudd's committee can be summed up in the statement that "to teach our children first to spell wrong, that they may thereby more easily and more speedily learn to spell right, is unfounded in reason, and not at all sustained by the experiment..."  

Superintendent Guilford seconded Mudd's recommendation in his own report on phonetics. He dealt primarily with the question of spelling reform, which he considered impractical and unlikely. In his brief consideration of Phonotypy as a transitional reading medium, he said, "To me it seems very clear, that the teaching of two contradictory modes of spelling cannot fail to puzzle and
confuse young minds, and do a positive injury by retarding their progress in learning to spell and write our language..." As this statement tends to indicate, Guilford drew few of his arguments from the experimental results in Cincinnati.

Considering that the ad hoc committee and the superintendent agreed in their opposition to the introduction of Phonotypy, it is not surprising that the School Board approved Mudd’s recommendation to discontinue the experiment. With the two sources of supposedly expert testimony both reporting against phonetics, the board could do little else.

In early 1858, one of the phonetic newspapers in Cincinnati printed its own report of the 1851-52 experiment. The article criticized Mudd for the way he directed the experiment and for the nature of his report. Objections to the report were aimed at the emphasis on theory and the little attention paid to the actual results of the trial. Mudd is accused of confusing the issue by discussing spelling reform when the supporters of Phonotypy consider the system as only a means for teaching reading.

With regard to the actual experiment, the article alleges that Dr. Mudd badgered the students and disrupted the classes. He supposedly conducted examinations at the wrong time in the transitional learning process and gave the Phonotypy students reading passages much beyond their level of progress. The article refers to public examinations
of the test subjects in which the phonetically-taught students were judged ahead of those in the traditional classes, contrary to Mudd's report. On Mudd's recommendation, the board supposedly stopped the experiment before the full benefits were evident.  

The last claim seems substantiated by a petition filed with the School Board at that time asking for a continuation of the experiment. Among those signing the petition, several are recognized as important figures in the school system, and most held high level teaching positions. One of the members of Dr. Mudd's committee reported early in the experiment that the phonetic students read at least as well as those in regular classes and that the trial should continue. This same member, on the other hand, at the end of the school year, signed the subcommittee report against Phonotypy and agreed to the results given by Mudd.

If the official report is taken at face value, the results certainly seemed to justify the dropping of Phonotypy. If the newspaper article is taken at face value, the experiment was biased against the phonetic mode. It should be noted here that the article was printed six years after the incident, with the obvious intent of re-opening consideration of Phonotypy by calling into question the previous results. The two reports are simply not coincident on enough points of dispute to further evaluate the claims.

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Besides Longley, another of the major supporters of Phonotypy in Cincinnati was Benn Pitman. Pitman left England to come to the United States in 1852. Up until that time, he had been working in Great Britain to help spread the reforms of his brother Isaac, i.e., Phonotypy and Phonography. He apparently came here to adapt the systems to this country and to oversee their use. He went first to Philadelphia for about a year, then moved in 1853 to Cincinnati where he lived for the rest of his life.²¹

One of the first things Benn did in Cincinnati was to establish a phonetic publishing firm. In partnership with R. P. Prosser, he began to print initial reading texts in the phonotypic alphabet and to publish a phonetic newspaper. These activities were obviously in direct competition with the Longley Bros. The reason the two firms did not join forces was because of disagreement over various details of the phonetic alphabet. After meetings and conferences involving many other supporters of the phonetic movement, Pitman and Longley resolved their differences, and in July, 1854, announced they would work together.²²

The alphabet they had agreed on was essentially the 1847 version of Isaac Pitman's Phonotypy. Longley had been using this alphabet right along, but Isaac Pitman was continually making changes in his Phonotypy, which Benn had probably accepted. After establishing himself in this country, Benn then ignored his brother's changes in order to join Longley. What they agreed on became known as the Cincinnati Phonotypy or the American Phonetic Alphabet.²³
By late 1854, Prosser broke off with Benn Pitman, and began publishing his own phonetic newspaper early in 1855. The reason for this split is not apparent; Prosser might not have liked the details of the settlement or possibly he disagreed over the alphabet. In any event, the new difference of opinion among the leading proponents of a phonetic alphabet opened the movement to criticism, as we shall see later.

There is little doubt that Cincinnati had become the center of the phonetic movement. Pitman and Longley were among the most vocal of its supporters. Most of the printing of phonetic books was done in Cincinnati; and at various times, several phonetic newspapers originated there. Although they had overlapping membership, the American Phonetic Society and the Phonetic Corresponding Association had headquarters in the city. As mentioned above, the system was called Cincinnati Phonotypy. Numerous reports were received there detailing the progress of phonetic experiments throughout the country. Letters and newspaper clippings from around the country were printed in the phonetic journals telling of work in dozens of cities and towns. In most cases, a supporter of Phonotypy had conducted his own classes on a limited bases, but larger experiments, such as Waltham or Syracuse, were discussed in the journals.

Through the 1850's, the Cincinnati school system continued to use McGuffey's readers, from the Primer upwards. This fact stands in
contrast to the great deal of phonetic activity in the city. Yet, even though traditional orthography texts were retained, the efforts to introduce Phonotypy continued. Various private classes in Cincinnati were taught by the initial reading system. In 1854, illiterate adults were learning to read in evening schools with Phonotypy, and the Cincinnati orphan asylum also used Phonotypy as a means of instruction. The latter often received inquiries from the public schools.25

Although there was some degree of interest and activity, the School Board did not give the subject official consideration. The hesitancy at this time to change texts is shown in the statement of the board president:

The experience of this Board convinces us, that whilst every real improvement should be watched and eagerly availed of, the proffers of new text books and modes of instruction so urgently and unceasingly made by interested persons...should be regarded with great caution and reserve.26

The superintendent from 1854 to 1858 was A. J. Rickoff, who seemed to be a very competent man. He kept himself, and the School Board, informed about educational methods and trends around the country, and often took trips to obtain first-hand observations. During his administration, the superintendent became more influential in board decisions. In 1857, Rickoff issued a long report on methods of instruction and courses of studies in which he quoted many authorities and gave results of the experiences of other school systems. In the
section concerning the teaching of reading, Rickoff significantly does not even mention the phonetic method; rather, he discusses only the A-B-C- method, phonics, and the word method. 27

Combining the superintendent's ignoring of Phonotypy with the board's reluctance to change text books, there is little wonder that the phonetic advocates made small progress in the Cincinnati schools.

Some of the objections to Phonotypy came to light during this time through various speeches and articles which attempted to answer these objections. The statement that there was often difficulty in making the transition from the phonetic alphabet to the transitional system was countered by referring to the various experiments that had demonstrated otherwise. Parents often objected to Phonotypy because they couldn't understand it and/or thought their children were not making good progress in learning to read the common type. Here the supporters asked the parents to be patient, and went to lengths to try to explain the rationale behind the method. 28

It was often asked why a school should adopt a phonetic teaching system when the supporters themselves could not agree on which system was best. This objection arose primarily from the continual changes made by Isaac Pitman, but it also applied to the disagreement among the American proponents. In the pages of the various phonetic newspapers, articles and letters are found indicating a certain amount of in-fighting between the members of the movement. As examples, Isaac and Benn Pitman eventually wrote articles very critical of each other. 29
A. J. Ellis, Isaac's early co-worker, also got into the arguments, and by the end of the 1850's, Pitman split with Longley. All this could have hardly escaped the notice of the public and would have been more obvious in Cincinnati.

In spite of the objections, the supporters of Phonotypy were successful in having the School Board reconsider the system. In 1858, Benn Pitman and C. E. Royce of the Ohio Phonetic Association visited each of the members of the School Board to discuss a new phonetic experiment. Then Pitman submitted a formal petition to the board. The petition was referred to the Course of Study Committee, which was headed by I. J. Allen, "long a friend of our [phonetic] cause." The favorable report of this committee led to approval by the entire board, and a trial with phonetics was arranged in two of the elementary schools of the city.

Some external factors may have influenced the decision to permit Phonotypy a new trial. The bulk of the reports from other cities were in favor of its adoption and the pressure of these experiments may have been sufficient to affect the Cincinnati School Board. At this time, the Waltham experiment was still going on; and closer to Cincinnati, the Indianapolis Superintendent of Schools reported the great success of a class using Phonotypy in that city. Also at this time, the press was still giving Phonotypy generally favorable reviews. Lastly, after living in the city for a period of time, Pitman, Longley, and the others obviously had an opportunity to interest influential people in the transitional alphabet.
Later in August, 1858, the same I. J. Allen mentioned above became superintendent of the school system. Now Longley was confident of a fair trial. The phonetic classes began on August 24th and the proponents reported that the arrangements made with the board had been carried out, and that they were pleased with the start of the trial. Strangely enough, there is no further mention of this experiment. Other sources indicate that Phonotypy was not introduced system-wide and that the McGuffey's books were still used in all the grades. It is not known why or exactly when the experiment was discontinued. Given the nature of the phonetics journals, a successful trial would have been reported; or an unsuccessful trial would have been discussed in an attempt to explain the reasons for the results. All that can be said with certainty is that the experiment began in August but did not convince the School Board to introduce Phonotypy.

Benn Pitman remained active in Cincinnati until after the turn of the century. As time went on, he turned more of his attention to Phonography. The original enthusiasm for Phonotypy in Cincinnati seemed to die out, the books eventually went out of print, and the journals stopped publication. Dewey has recently pointed out that Isaac Pitman eventually moved away from an augmented alphabet such as Phonotypy, and near the end of his life published a text with "no new letters, and almost no diacritics." This interesting turn of events is paralleled in Benn Pitman's life. One of the last books he published was a first-reader printed in the traditional
alphabet with the dictionary-type diacritical marks. He said that sixty-three years of experience had shown him that an augmented alphabet was too drastic a change to be accepted.39

Conclusion

The history of the use of an initial reading medium seems less clear in Cincinnati than in other cities. The details of the first experiment are given from two different sources and are at variance concerning the results of the trial with Phonotypy. Six years later another trial was begun, but the progress of this test is not reported in the official records of the School Board nor in the various periodicals devoted to the phonetic movement. The eventual outcome of this latter experiment is that Phonotypy was not introduced into the school system.

The results of the first experiment in Cincinnati, according to the official report, showed that Phonotypy was not as effective as it was claimed to be for the teaching of reading. The duration and limited extent of the trial tend to indicate that external influences, such as teacher and community opposition, did not play a large role in deciding the first outcome. The claim that the experiment was unfairly conducted and that the major figures were initially biased against Phonotypy must definitely be considered. If this claim is true, no conclusion can be drawn concerning the effectiveness of the teaching method. If, on the other hand, the
results given in the official report are fair and accurate, the demonstrated efficacy of Phonotypy would support the decision not to innovate.

The background activity of the supporters of the phonetic system in Cincinnati would have mixed effects on the school authorities. The newspapers reported almost weekly of numerous experiments showing favorable results, and devoted many articles to explaining Phonotypy and rebutting the objections. The personal influence of the advocates on friends should be considered also. Contrariwise, the public arguments among the supporters hurt the cause, since these disagreements were often mentioned along with the theoretical and practical reasons for not introducing the system.

Results of the second experiment cannot be directly discussed. Three possible explanations can be offered, however, as to why Phonotypy was not introduced into the schools. The trial may have been arbitrarily discontinued before valid results were obtained, or conducted in a biased manner to give negative results. Secondly, factors unrelated to the system's efficacy, such as financial pressure or hesitancy to change books, may have exerted a greater effect on the eventual decision of the school board than weak positive results in favor of Phonotypy. Lastly, a fair test may have given clear indication that the phonetic alphabet was no better in teaching reading than the traditional methods. Further investigation may indicate which of these possible conclusions apply in this case.
1. Nineteenth Annual Report of the Trustees and Visitors of Common Schools to the City Council of Cincinnati for the School Year Ending June 30, 1948 (Cincinnati: Daily Times, 1846), p. 61. Hereafter such references will be cited by number and year, e.g., Nineteenth Annual Report...1846.

2. Twenty-first Annual Report...1850, pp. 8, 48.

3. Twentieth Annual Report...1849, p. 25.

4. Ibid., p. 48.


6. Twenty-first Annual Report...1850, p. 68.

7. Type of the Times, vol. 9, p. 166 (Cincinnati: Longley Bros., 1856).


9. Ibid., pp. 60-62.

10. Twenty-second Annual Report...1851, passim.


12. Type of the Times, vol. 11, pp. 136-139.

13. The Phonetic Magazine, passim (Cincinnati: Longley Bros.).

14. This conclusion discounts the vague reference in T. A. Longstroth, "Foster, Ohio - The Home of the Longley Brothers," MS, 1967, (at Cincinnati Public Library, Rare Book Room) that Elias Longley came to Cincinnati in 1851.
15. Twenty-third Annual Report...1852, pp. 67 ff.
16. Ibid., pp. 78-79
17. Ibid., p. 76.
18. Ibid., p. 81.
19. Type of the Times, vol. 11, pp. 136-139.


22. Type of the Times, vol. 7, pp. 21, 180.


25. Ibid., pp. 4, 364.

26. Twenty-fourth Annual Report...1853, p. 11.


28. Type of the Times, vol. 10, passim. See also vol. 7, passim.

29. Ibid., vol. 11, passim.

30. Ibid., vol. 12, p. 29.


32. Ibid., vol. 10, p. 173.

33. Ibid., vol. 8, p. 357.

34. Ibid., vol. 11, p. 241.

35. Ibid., p. 244.


39. [Benn Pitman], Child's First Reader, [Cincinnati, 1904] p. 9 of Appendix, et passim.
Another community which initiated a wide-spread innovation with a transitional reading medium was Syracuse, New York. In 1852, the School Board of the city conducted a small-scale trial with the Cincinnati Phonotypy and in the following year introduced it into all the schools. Phonotypy continued in use of a system-wide basis until 1866. There seems to be no evidence that Phonotypy was employed on such a large scale again in the United States during the time period covered by this report.

In 1850, the School Board adopted the first complete list of text books to be used in the schools. As in other cities, this was an attempt to bring some uniformity to the course of study. For beginning reading the list prescribed Webb's alphabet cards and Sander's Readers.¹ The texts were changed by 1855 and Webb's Readers had replaced Sander's.² According to Fries, Webb's series consisted of the word method approach to reading instruction.³ These books continued in use until the innovation with Phonotypy several years later.

The action of the full board in approving text books does not accurately reflect its primary concerns at this time. Most of the matters before the board dealt with the finances and property of the public school system rather than with classroom matters and details of educational practice. This latter type of work was done by subcommittees which would, in turn, present their recommendations for rubber-stamp approval. In 1858, for example, there was not a single negative vote on the reports or resolutions offered by the various subcommittees.⁴
The School Board was made up of commissioners elected from each of the wards in the city. This group, one of the most important and influential in Syracuse at the time, would then choose its own officers. The Superintendent of Schools was also ex officio clerk of the board. As clerk, he acted as secretary and agent of the board; as superintendent, he performed the usual duties associated with that position.

At the organization of the new School Committee in March, 1855 George L. Farnham was elected superintendent, a position he held until 1863. He had been in the school system for some time previously as a principal. He and his wife, a local teacher, had been thought so highly of that when a nearby town offered them a greater salary, Syracuse responded in kind with a raise. Thus, when he started as superintendent, he was quite familiar with the educational situation. Farnham was a warm supporter of Phonotypy. As we shall see, it was partly through his efforts and influence that the phonetic medium was used in Syracuse. There are many parallels to the case of Thomas Hill in Waltham.

In April of 1857, a new committee was created by the board for the purpose of "examining and reporting upon the text books to be used in the Public Schools of the city." One of the members of the subcommittee was Joseph A. Allen, an active and progressive individual in the area of education. He, too, was interested in seeing the experimental use of Phonotypy in the city. Farnham writes that
"without the intelligent and active cooperation of Mr. Allen, who has recently returned from the East, where he has taken great pains to inform himself on the subject, we should not now be able to test its merits." Allen had perhaps gone to Waltham to see Phonotypy in actual use.

At a board meeting in September, Allen moved that the superintendent "procure elementary works on the subject of Phonetics at an expense of $15, for the purpose of testing the merits of that system, as compared with the method now used to teach children to read." The board adopted the resolution, and by October 1st three "very intelligent teachers" were conducting beginning reading classes with phonetic texts, under the careful supervision of Superintendent Farnham.

These classes evidently gave good results. In December, Farnham wrote to the Longley Bros. ordering the Phonetic First Reader which was used after the Primer and Cards. He commented, "The experiment of teaching with a perfect alphabet is succeeding very satisfactorily. The prospects now are that it will be generally introduced into our schools." The superintendent was obviously pleased with the progress made using Phonotypy and was gaining support for a system-wide innovation. The following March, 1858, Commissioner Allen submitted a report from the subcommittee on text books recommending a revised course of study which included the phonetic mode of reading instruction. The report was accepted and Phonotypy was adopted for the school year beginning in the fall of 1858.
In the years immediately following the general introduction of the initial reading system, the reported results were almost uniformly favorable to its continued use. The official reports of the superintendent detail the benefits of Phonotypy, such as improved pronunciation, better spelling, the development of a more critical and analytical mind in the students, improved reading ability and a general beneficial effect in other subjects.\textsuperscript{13}

In regard to pronunciation, Syracuse had a sizable German population at the time, with lesser numbers of Irish and English. Farnham says that after a short time with phonetic instruction, the accents were corrected and the students "completely lost all their peculiarities of pronunciation."\textsuperscript{14}

The phonetic supporters themselves had been anxious about spelling performance after the transition to traditional orthography because of the confusion that might be created by using two different alphabets. In discussing this matter, Farnham refers to one class which had made the transition and reports that they were better spellers than those taught in the usual manner. The explanation was that the phonetic students noticed and remembered the irregularities of common spelling. There is no mention of how this evaluation was made.\textsuperscript{15} If, indeed, spelling tests were used, it would be important to determine the number of phonetically-regular words vs. the number of phonetically-irregular words to
see if this conclusion is warranted. It would be expected that students taught with a system such as Phonotypy would do better on a test with a greater number of phonetically-regular words.

Other results claimed from the use of Phonotypy seem to be more subjective. The "spirit of careful attention" is awakened; the constant analysis required by the method "will greatly influence and elevate the whole character"; the careful instruction in phonetics is "felt upon the whole school"; the phonetic students "seemed to more readily comprehend the principles of the other branches presented to them"; etc. This type of statement is difficult to discuss.

Along with the favorable results, Farnham also reported the problems and opposition to the general introduction of Phonotypy. Many of the teachers had "grave doubts" about the change and did not understand the system. To counteract this, Farnham put the best teachers in the primary grades, paid them the highest wages, watched their progress, and explained the workings of the phonetic approach. The parents, too, objected to the strange alphabet which their children had to un-learn in going to traditional orthography. This problem was overcome, according to Farnham, by providing the text books free to the students (at this time, they had to buy their own books in the public schools), and by preventing the books from being taken home until the student could read well.
In the first year of the innovation, Farnham relates that the teachers instructing the phonetic classes were apprehensive about the transition to the common type. Farnham wrote to Thomas Hill in Waltham regarding the best method to make the transition. Hill suggested simply going from the Phonetic First Reader to a traditional second reader. This was done with "scarcely a perceptible jar" and the "pupils were found to read with nearly the same readiness in the new books as in the old." 18

In general it seems that whatever opposition there was in the city to Phonotypy was not very strong or well organized. In 1859, Farnham said that the "parents are apparently satisfied with the progress their children have made," and later, estimated that in a vote "five to one would say give us Phonetics." 20 In newspaper articles, Farnham was commended for his work and there seemed to be little disagreement with his educational practices. 21 At the least, this indicates that Phonotypy was not a large point of contention in school affairs.

It is interesting to note that the official reports do not claim a savings of time for Phonotypy in reading progress. A close look at the course of study tables, however, shows that the reading program was accelerated. For instance, in 1855, before the introduction of the transitional alphabet, the student was expected to finish reading Webb's Second Reader by the end of the third grade. In 1858, the first year in which phonetic texts appeared in
the course of study, Webb's Second Reader was entirely completed two-thirds through the second grade. The four trimesters gained here between the second trimester of the second grade and the end of the third grade were used to finish an additional reader. By 1861, after Phonotypy had been in use for some time, a slight slow-down is observed. The phonetic reading in the first grade was spread out and Webb's Second Reader was not completed until the end of the second grade. This loss of a trimester is probably due to the experience of several years use. Comparison of the reading program through all the grades during these years can not be made because of text book changes.22

The progress of other experiments with Phonotypy seemed to have little effect on its use in Syracuse. Farnham knew Hill and the Waltham experiment, but the phonetic alphabet started in Syracuse later than in Waltham and then continued in Syracuse five or six years after it was dropped in Waltham. The results of the Cincinnati trials would certainly not have a positive influence on the continuation of the system in Syracuse. The actions taken on the initial reading system in Syracuse seemed to be largely independent of other cities.

Late in the year of 1861, one of the principal supporters of the experiment moved away from Syracuse. J. A. Allen, who helped Farnham initiate and conduct the trial, went to Massachusetts to become the head of the State Reform School. Allen's interest in
the phonetic movement is reflected by the fact that he continued to lecture on the topic through the 1870's. It seems likely that while he was still in Syracuse, Allen actively assisted Farnham in supervising the continued use of Phonotypy.

At least as early as 1861, there were attempts to remove Superintendent Farnham from office. It appears that these efforts were based on political considerations rather than on educational matters. E.g., after the organizational meeting of the board in March, 1861, the mayor of Syracuse expressed his disapproval at the introduction of politics into the affairs of the schools. Then again in March, 1862, Farnham had difficulty being re-elected as the voting went to six ballots.

The political situation during this time is set against the background of the Civil War. Farnham was a Unionist and took an active part in political affairs. He also supported the policy of integrated schools, Syracuse being one of the few cities which had such a policy at that time. These views together resulted in his failure to obtain re-election in 1863. The Democrats practically swept the city-wide elections in March of that year. A contemporary report says the sweep was not due to actual support to Democratic ideas, but rather to fear of being drafted, fear of the increasing number of Negroes coming into the city, and general dissatisfaction with the war. Four of the eight positions of School Commissioner were elected in 1863 and the Democrats took all four.
Two days later, the Democratic newspaper proclaimed the schools were going to be segregated. Obviously, Farnham's job was not secure. Later that month the new school board met and the Democrats held the majority. They "insisted that their party should enjoy the fruits of victory," and that the schools should be "under the charge of a Superintendent who was of their political faith." Thus Farnham was not re-elected. The outgoing board passed strong resolutions commending him for his service and regretting the circumstances of his retirement.

Though the Democrats were in control of the board, they could not agree among themselves concerning the post of superintendent. After more than 200 ballots in several days of voting, the two Democratic candidates opposing Farnham withdrew in favor of a compromise candidate, who was immediately elected. The new superintendent was Charles E. Stevens, a young lawyer who had recently moved to Syracuse. He had had no experience teaching, but was "a Democrat of the most steadfast faith." This was apparently all that the board required.

Several members of the board proposed that the offices of clerk and superintendent be separated. This was seen as "an attempt to cover up, or provide against the possible incompetency of the present clerk." In view of this type of criticism and his lack of experience in educational matters, Stevens acted to maintain the status quo. He sought out the advice of the teachers in regard to classroom affairs and took a conservative approach in his decisions.
He had a difficult time simply maintaining the schools. Politics became the primary consideration in making appointments within the school system and often a principal or teacher was appointed by the board without suitable qualifications and against the wishes of parents. In this regard, Stevens tried to resist any mass changes in the school personnel. During his three years in office, then, no drastic actions were taken. This applied equally to the course of study, and Phonotypy continued in use.

By 1865, with the end of the Civil War, political considerations were essentially eliminated from the activities of the school board. Appointments were no longer made on the basis of party affiliation. At the organization of the new school board in March, 1866, Edward Smith was a candidate for superintendent against Stevens. The voting started as a deadlock, but Stevens withdrew his name and urged the election of Smith. Smith was promptly named to the office, which he held until 1889.

Edward Smith had been involved in the Syracuse school system for quite some time. As early as 1850, he was listed as principal of one of the schools. Later in the 1850's he resigned to devote most of his time to farming, but even then he taught during the winter session. He returned as a regular principal about 1860 and held that post until he became superintendent. Smith is credited with "having advanced views concerning all matters pertaining to the
common schools." He kept abreast of the educational trends, and knew of the activities of school systems in other cities. In the ensuing years, he had a strong influence on the school board.

One of the first actions taken under Smith's administration was the discontinuance of Phonotypy. He reports, "At a meeting of the Board, held at the commencement of the year [1866-67 school year], the course of study was revised. The principal change made in the course was in the primary grade, by substituting the Phonic and Word methods of instruction." The exact details of how this change came about is not clear since many of the official records for the Civil War period are unavailable. Smith does indicate the reasons for the action:

"Besides its benefits, Phonotypy...had also its disadvantages, one of which was the strong prejudice in the community against so wide a departure from established usages; but the principal one was the use of so many characters which were learned, and then dropped upon entering other books used in our schools,..."

In dropping Longley's Charts and phonetic texts, the School Board adopted Sheldon's Alphabet Charts and Cards, and the Union Readers.

After the change to the phonic and word method approach in the above books, Smith reports that the reading progress was as good as that obtained with the phonetic method; and several years later, he continues to praise the use of phonics for reading instruction.
He did not notice much change in shifting from phonetics to phonics, and considered the major difference to be the use of the common alphabet in the latter. The phonic method became rooted in Syracuse, and, in conjunction with other methods, was used at least through the 1890's.

Conclusion

There seem to be several probable causes why Phonotypy was abandoned in Syracuse. Both Farnham and Smith refer to the community reaction against the augmented alphabet, but their statements conflict concerning the extent of this objection. As shown above, Farnham reports that he overcame this difficulty by the way in which he introduced the books, and that most of the parents were satisfied with the results of the transitional medium. On the other hand, Smith states at the time the phonetic method was dropped that there was strong prejudice against the system, prejudice based on the strange alphabet and on having to learn two modes of spelling. It is possible that Farnham, a leading figure in the city, could have overestimated the support for Phonotypy or the extent of the objections was simply unknown to him. Possibly, he may have accurately reported parental reaction in the early stages of the innovation, but the objections could have increased to the level indicated later by Smith as the novelty effects diminished with time. This explanation is difficult to test because of the gap in records immediately preceding the discontinuance.

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Besides community objection, we find another possible reason for dropping Phonotypy which is more directly related to reading skills. After Farnham left Syracuse, he remained active in the educational field and held a variety of positions. In the 1870's he began to formulate the sentence method of learning to read. In this method the sentence is the basic unit, rather than a single word or syllable or letter of the alphabet. In a discussion of various techniques of reading instruction, he mentioned his association with Phonotypy:

In 1858, the phonetic system was introduced into the schools of Syracuse, New York, and for a time it was thought that the true method of teaching children to read had been discovered. After a trial of five years, however, it was seen that while pupils learned to read by this method in much less time than usual, and attained a high state of excellence in articulation, their reading was nearly as mechanical as before, and few of them became good spellers.  

This ex post facto evaluation indicates problems in spelling and comprehension.

Farnham stated early in the experiment that the phonetically-taught students were better spellers than the students taught in traditional orthography; but later, as quoted above, he contradicted his previous statement and referred to difficulties in this area. His mention of "mechanical" reading with Phonotypy is in direct contrast to the emphasis in his sentence method on understanding of content. It should be recalled that when phonetics was dropped in Syracuse, the word method was introduced along with phonics. In addition, Object Teaching
was also introduced. (The rationale of this latter technique was "to teach things and ideas in connection with words, which are but arbitrary signs."43) Thus, there was to be a distinct shift of emphasis to concepts and to an understanding of the meaning of words, as opposed to phonetic analysis and drill. The implication seems to be that Phonotypy did not produce the desired results in this aspect of learning to read.

There are several other factors which may have influenced the outcome of the phonetic experiment. After Farnham left the position of superintendent, Phonotypy did continue to be used. We have seen, however, that the political situation created a status quo policy in regard to educational matters such that the method of reading instruction was not changed. Perhaps Farnham's leaving actually signaled the approaching end of the experiment. Possibly, Phonotypy continued in use for a few years because of momentum it had attained and the conservative policies of the superintendent, but then when Smith took office, Phonotypy was promptly dropped. After Farnham, there seemed to be no influential supporters of the phonetic method in Syracuse to provide the moving force for continuation of the experiment. Except for the time delay due to the political considerations, the situation in Syracuse resembles that in Waltham.

The irregularity of attendance throughout the late 1850's and 1860's could have had an unfavorable effect on the experiment. In 1853, more than one-half of the registered students attended classes
for less than four months total during the ten-month school year. By 1870, the figures are somewhat improved, but still more than half of the pupils were in school less than eight months.

Again, the figures during the Civil War are not available, but some disruption in attendance is expected. This lack of regular class attendance would certainly interfere with the effectiveness of any teaching method. Yet, since it was a common situation at the time, and existed before and after the phonetic trial, it is doubtful that attendance problems had a relatively large adverse effect on Phono-type. Evaluations were made on a comparative basis; and in the practical application, the apparent effectiveness of the phonetic method plus the opposition to it did not provide for its continued use.
FOOTNOTES

Part 4


2. Seventh Annual Report of the Board of Education to the City of Syracuse for the Year Ending March 25, 1855 (Syracuse, 1855), p. 28. Hereafter such references will be cited by number and year, e.g., Seventh Annual Report...1855.


5. Smith, pp. 68, 90.


8. Type of the Times, vol. 10, p. 221.


10. Type of the Times, vol. 10, p. 221.

11. Ibid., vol. 11, p. 17.


13. Thirteenth Annual Report...1861, pp. 22-23. See also Type of the Times, vol. 12, p. 71.

14. Tenth Annual Report...1858, pp. 14-15. See also Thirteenth Annual Report...1861, p. 34.

15. Type of the Times, vol. 12, p. 71.

17. Type of the Times, vol. 12, p. 71. See also Eleventh Annual Report...1859, pp. 18-19.


20. Type of the Times, vol. 12, p. 149.

21. The Daily Journal, March 26, 1862 and March 26, 1863 (Syracuse, N. Y.).

22. Seventh Annual Report...1855, p. 29. Cf. Regulations of the Board of Education of the City of Syracuse as Revised March 4, 1858 (Syracuse, 1858), pp. 30-31. Also cf. Thirteenth Annual Report...1861, pp. 57-58.


25. Ibid., March 26, 1862. See also "Proceedings...", March 25, 1862.

26. Smith, p. 120. See also The Daily Journal, August 1, 1860.


28. Ibid., March 12, 1863.

29. The Sunday Herald, August 7, 1898 (Syracuse).

30. Smith, p. 118. See also The Daily Journal, March 24, 1863.

31. Smith, p. 297. See also The Sunday Herald, August 7, 1898. Also see The Daily Journal, March 27, 1863.


33. Smith, p. 298. See also The Sunday Herald, August 7, 1898.

34. The Syracuse Daily Standard, March 29, 1865. See also Smith, pp. 129, 299.

35. Smith, pp. 63, 96.

37. Nineteenth Annual Report...1867, p. 22.
38. Ibid., p. 23.
39. Ibid., p. 104.
40. Ibid., p. 23. See also Twenty-second Annual Report...1870, p. 34.
41. Smith, p. 100.
42. Quoted in Fries, pp. 240-241.
44. Tenth Annual Report...1858, p. 42.
45. Twenty-second Annual Report...1870, p. 23.
PART 5

ST. LOUIS, MISSOURI
The next major experiment with a traditional reading system which we will consider is the use of Leigh's Pronouncing Orthography in St. Louis. Leigh's method, which had recently been developed, was tried in one of the city's schools in 1866, and in the following year was introduced into all the beginning reading classes. The method was employed in the school system until approximately 1892. This 25-year period of use is the longest life span of any of the experiments with initial teaching media discussed in these pages.

Phonetic reading instruction did not suddenly appear in St. Louis in 1866, but had a definite history going back into the 1850's. Among its earliest-known supporters were Dr. Edwin Leigh, a resident of St. Louis, and William T. Harris, the important American educator. Leigh had been interested in the entire question of phonetics and spelling reform since about 1840, and devoted much of his attention to the subject. The culmination of this work was the development of his own transitional reading system, the so-called Pronouncing Orthography.¹

William T. Harris, who eventually became Superintendent of Public Schools in St. Louis and, later, U. S. Commissioner of Education, was perhaps the leading figure in the use of Leigh's method in that city. Harris went to St. Louis in 1857 after he dropped out of his junior year at Yale, and began supporting himself by teaching Pitman's shorthand, Phonography, in evening classes. Soon he was hired as an assistant teacher in the city's schools, a
position which was the lowest rung on the ladder; at the same time, he continued teaching shorthand.2

There is no doubt that Harris was well aware of Pitman's Phonotypy when he arrived in St. Louis. Speaking much later, Harris said he first became interested in Phonotypy in 1851, mainly through the writing of A. J. Ellis.3 Harris would have been only sixteen years old at the time, so one may wonder at the extent of his interest; but he kept informed on the subject and was a warm supporter of Pitman's reforms in his early days in St. Louis.

Phonetics was one of the major topics of discussion at the Annual Meeting of the Missouri State Teachers' Association in 1858. Edwin Leigh, who had a considerable amount of prestige and influence in the region, opened the phonetics session with a report on the use of Phonotypy as a transitional means of teaching reading. He outlined the favorable results of previous experiments with the method, showed examples of the texts, and explained the theory behind the system. Harris next spoke on the application of Phonotypy to general spelling reform and explained why such a reform was desirable. It seems evident that Leigh and Harris were the two major characters with regard to the subject of phonetics in St. Louis.4

Many of the teachers returned from the meeting in favor of the use of Phonotypy, and the School Board arranged to conduct a trial in several primary schools. One of the friends of the movement even agreed
to provide the necessary books. Early in 1859, three schools began using Pitman's augmented alphabet and the supporters reported fine progress.  

One of the factors which may have influenced the school committee to experiment with Phonotypy was the lengthy discussion on the phonetic system which appeared in the 1858 Annual Report of the Superintendent. The superintendent said he included the statement by an unnamed author, probably Harris, as a matter of information because of the attention being gained by the system. The report gives the theoretical background concerning the irregularity of traditional orthography, refers to numerous experiments in Great Britain and the United States, lists the practical advantages of Phonotypy, and suggests that "some experiments should be instituted, on a small scale at first, which shall practically decide upon the feasibility of the introduction, in whole or in part, of the system into our Public Schools."  

The 1859 Annual Report, issued after the beginning of the Phonotypy experiment, makes no mention of the results. It does include a discussion on Phonography which refers indirectly to the phonetic method of teaching reading, but implies that Phonotypy was no longer used in any of the Primary schools. Other than this, and the report of good progress by the phonetic supporters mentioned above, we find no information concerning the outcome of the experiment or what happened to Phonotypy in St. Louis. Later material makes it clear, however, that Pitman's transitional system was not introduced into the schools at this time.
Although this failure to obtain the general innovation of Phono-
typy, for whatever reasons, must have been discouraging to the advocates, they still remained active. By 1866, they had gained enough support to arrange for a trial of Leigh's Pronouncing Orthography beginning in the fall of that year. The experiment, involving Sargent's Primer transliterated into Leigh's alphabet, was conducted at the Clay School. 

The principal of the Clay School at this time was none other than William Harris. Over the years he had moved up through the ranks in the school system, and was now directly in charge of the phonetic trial. It seems quite likely that Harris was instrumental in arranging for such an experiment to be conducted in his own school, although his exact role is difficult to assess. In March of that school year, 1866-67, Superintendent Divoll, who was in ill health, appointed Harris to the post of assistant superintendent and was thus choosing Harris to be his successor. As assistant superintendent, Harris filed the official report of the results of the experiment with Pronouncing Orthography. This report then appeared in the published Annual Report of the Superintendent.

Harris wrote that Leigh's system gave "most satisfactory results" at the Clay School. Foreign accents were eliminated and pronunciation was greatly improved. The class was spelling well after the transition to the ordinary alphabet and the process of learning to read took less time than was required with the normal version of the text.
Later Harris reported that the progress had been slow at first, but after a quarter of the year, the results were more encouraging. He said the transition had been made easily and that a comparison with a class in the traditional alphabet showed the advantages of Phonotypy in pronunciation.12

In August, 1867, the School Board introduced Leigh's phonetics into all the beginning reading classes. They had seen an actual demonstration of the method and were quite pleased. Although the above official report appeared after the board's action, Harris quite likely informed the committee members personally of the results in much the same terms as found in the printed text. A contemporary of Harris commented that Leigh's method was used system-wide because of Harris' urging.13

Thus, the school committee substituted Leigh's Phonetic Primer and Charts for the common-alphabet edition of Sargent's Primer and Charts. Up to this time, reading instruction had been done by the word method and the A-B-C method, but now a phonetic approach was used in the first grade and phonetic drill was combined with the word-method in later grades. A year after Leigh's alphabet was introduced, the entire series of Sargent's Readers was dropped in favor of the McGuffey's Readers, including Leigh's edition of McGuffey's Primer.

During the 1867-68 school year, Harris was elected superintendent by the School Board after his predecessor resigned from the position.15 As superintendent, Harris did much for the St. Louis schools.
and developed a national reputation for them and for himself. He is recognized, along with Horace Mann and John Dewey, as one "whose thought has most affected the creation and development of the present philosophy of the American public school."\textsuperscript{16} Harris did not limit himself to educational matters. He wrote prolifically, and his works include philosophical commentaries, biographies, reviews in law and science, etc. Yet one of his major concerns was always education, and after he retired as superintendent in St. Louis in 1879-80, he eventually became U. S. Commissioner of Education.

During Harris' administration, the enrollment in the public schools of St. Louis almost tripled due to the westward migration across the country. To add to the problem of sheer numbers, much of the increased population was foreign. In 1870, approximately 45\% of the registered students were of German parents, and other nationalities were also represented.\textsuperscript{17} In meeting these and other practical problems, Harris formed his ideas on education, including free tuition and text-books, co-ed classes, provisions for kindergartens and colleges, and similar modern ideas.\textsuperscript{18} He also watched closely over the progress of Pronouncing Orthography and discussed the topic frequently in his superintendent's reports.

Harris listed the savings in time as one of the major benefits of Leigh's system. He often said it required about one-half the time of the traditional methods, time which he would arrange to devote to reading acknowledged pieces of literature. As before, he stated

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spelling was improved because the student would notice the peculiarities of the common alphabet and its multiple sound-symbol relationships. Better pronunciation resulted, which was especially important in St. Louis where the population was so heterogeneous. He went on to say that reading became a pleasure and was more interesting to the pupil and that the analytical training of phonetics generally improved the mind and made "better arithmetic and grammar scholars... more wide-awake and attentive." The phonetic students also received proper moral training by avoiding the harmful effects of the inconsistency in common spelling. The pages of the Annual Reports have many similar statements as Harris continued to make favorable remarks on Leigh's system.

In discussing the use of Pronouncing Orthography, Harris also referred to the problems he encountered. He reported that at the beginning many of the teachers "were very hostile to the innovation." He said, though, that most of this opposition disappeared within a few months, after they had an opportunity to work with the system and observe its results. The teachers had not been given much instruction in the use of Leigh's method during the first year of the innovation, and this probably caused some uneasiness. At the end of the first year, Harris set up guidelines for teaching with Pronouncing Orthography based on his observations during classroom visits.
One of the modifications made was that the students were required to learn the names of the letters of the alphabet from the start of the course. Normally, only the sounds of the letters were taught, and spelling by the names of the letters was not done until after the transition to the common alphabet. By learning words alphabetically and phonetically at the same time, Harris reasoned that the transition became a continuous process. One of the causes for this change was parental reaction to Leigh's system. Because the student did not immediately learn to recite the alphabet or to spell by letter, "parents were apt to get impatient at the apparent slow progress of their children." Some of the teachers had tried using this modified approach of Leigh's method, and Harris ordered its general use after he saw the good results.

Many of the comments given above could be classified as subjective evaluations. A more objective appraisal of actual reading progress can be found in course-of-study outlines which specified the required reading assignments. Such outlines are available for the St. Louis schools during the period here in question. These are significant because the course of study "receives slight modification from year to year, to adapt it to the actual average results attained." A comparison of the outlines before and soon after the general introduction of Pronouncing Orthography shows a definite acceleration in the reading program with the use of the phonetic system. The assignments, however, do not support Harris' claim that the time saved is one-half the amount of time required for learning to read in the traditional texts.
For the first several years of the experiment, there was a speed-up in the early grades of the reading program each year. By the upper grades, however, the changes had washed out so that the fifth graders in 1868 were reading the same assignments as the fifth graders in 1870. Specific comparisons with the course of study before 1868 are tenuous because of the change of reading texts from Sargent's to McGuffey's.

By 1873, St. Louis had added the eighth grade to its grammar schools. At the same time, there was also a general slow-down in the reading pace. Perhaps the reading was simply spread out over eight years rather than seven. For the rest of the period of use of Leigh's system, the overall reading course remained about the same; that is, by the end of the sixth grade in 1887 the students had read exactly as much as the sixth graders in 1873. There were many changes over these years in the lower grades. Most of the rearrangements were to slow the reading pace in the first two or three grades, then require more reading in the fifth and sixth grades.

Opposition and misunderstanding of Pronouncing Orthography continued in St. Louis, but it was not very vigorous. An editorial on Harris' 1873 report reflects this:

We apprehend that the success in teaching by this method [Leigh's] may be attributed to some incidental cause; while [sic] the almost inevitable danger of confounding the name with the sound of an alphabetic element may be an evil serious enough to countervail the advantages of the method.24

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At one point Harris asked rhetorically if a careful phonetic drill combined with the word method would give the same benefits as did Leigh's method. He answered that it would, but that the single approach required much less time to achieve the same results as the two methods combined.  

This statement would not allay the type of objection in the newspaper article above complaining about the augmented alphabet in Leigh's method.

During the 1879-80 school year, Harris resigned as the superintendent of public schools in St. Louis and moved to Concord, Massachusetts to devote most of his time to philosophy. He did not become fully involved in educational matters again until 1889 when he took office as U. S. Commissioner of Education. Soon after he left St. Louis, his successor made a general report on the condition of the schools. The new superintendent, E. H. Long, praised Harris for his work, and among other things, said that the reading was excellent and that the spelling was quite good.

Pronouncing Orthography continued in use for many years after Harris left the city, and it was finally discontinued only after several years of discussion and argument. Unfortunately, Harris' successors did not spend much time in their official reports discussing reading progress or the results with Leigh's system. The course of study with regard to reading instruction remained unchanged between 1881 and 1887, and the 1881 version was much as
Harris had left it. Although we do not have detailed evaluations of reading performance from the superintendent, the uniform assignments for the texts indicate there were no dramatic changes.

In April of 1886, a resolution to discontinue the use of Leigh's Phonetic Primer was brought before the school board. There is no mention of the reasons for this motion or of discussion on the matter. The motion was referred to the Committee on Course of Study where it remained in limbo for two years.27

In the background, we note changes in the schools which may explain the move away from Pronouncing Orthography. Beginning in 1885, supplemental reading was required in all the elementary grades, one through eight. This was in addition to the normal text assignments. At first, the extra reading material was provided by an educational newspaper aimed at different grade levels. The superintendent reported that the supplementary reading had "become a fixed factor in our means for teaching the pupils to read."28 In the following years, this practice gained wide acceptance among the teachers, and there were calls for additional reading matter.

In 1888, the superintendent explained the method of initial reading instruction as follows:

The word is the unit with which we begin. The first step in this work is to see that the child possesses an adequate notion of the object,
quality, or action to be represented. The words are then used orally in various combinations in oral language lessons, in advance of the use of the printed or written word. The analysis of the word into its sound elements follows the introduction of the written or printed word, and these elements are, in turn, synthetically combined to form new words.29

This description hardly seems fit to the phonetic approach involved in Pronouncing Orthography; rather, it seems to be a description of the word method. The emphasis in the entire discussion is on comprehension and language facility, and there is little mention of phonetic analysis. **Leigh's Primer** was still officially in use at this time, indicating somewhat of a discrepancy between policy and practice.

In April 1888, the Course of Study Committee recommended by a 3-to-2 vote that Leigh's editions of **McGuffey's Primer** be dropped in favor of the traditional orthography version of the same book. The split among the members of the subcommittee about whether to discontinue Leigh's system was reflected in the entire board. When the recommendation was made, the board members could not agree and action was held over for a month. Then, at the first meeting in May, the board voted to table the motion of the Course of Study Committee. The opponents of Leigh's system were not through yet. Two weeks later, it was moved that individual schools be permitted to decide for themselves whether to drop **Leigh's Primer** on a trial basis. A complicated parliamentary battle followed, which included

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name-calling and _ad hominem_ attacks, but the motion was finally adopted and the schools were allowed to experiment with the traditional version of McGuffey's Primer. The dissension in the board over this matter indicates that Leigh's system still had many supporters.30

The entire matter came before the board again in June 1889 when a motion was adopted to continue the experimental period for another year. Evidently, the opponents of Pronouncing Orthography did not have enough support among the members of the board to completely abandon Leigh's book, but they were able to muster enough votes to conduct the "experiment." It was reported that thirty-two out of sixty-three schools had used the regular _McGuffey's Primer_ for 1888-89. By allowing the choice of texts, it seems Leigh's transitional system was slowly phased out of use as individual primary school principals decided to adopt the regular _Primer_.31

No further action was taken on reading instruction until 1892. In 1890, when the board should have reconsidered the experiment, the members were involved in a bitter power struggle which disrupted all business. Throughout much of the year, the president of the School Board was unable to obtain a quorum to deal with official matters. Because of this, the schools ran on a _status quo_ basis. The split of the board continued into 1891, although it was less intense and the members did meet to discuss the most pressing affairs. One of the internal regulations of the board stated that text book changes could only be made in March, April,
or May to take effect in the fall at the beginning of the next school year. Since the board did not act on the reading program in the spring, 1891, the methods of instruction simply continued as they were through the following year.  

By 1892, the School Board showed a greater degree of harmony and began devoting more attention to strictly educational matters. In May, they discussed the reading texts and the question of possible price-fixing by the supplier of the McGuffey's series, including both editions of the Primer. In the following month, a motion was made to adopt the Porter and Coates New Normal Readers. Action was held over, but under a suspension of regulations the motion was passed and the new reading books were introduced for the 1892-93 school year.  

Thus, after a slow phasing out process which started in 1888, Pronouncing Orthography was officially dropped from the course of study.

The primary texts for reading instruction which had replaced Leigh's books used the common alphabet and a limited system of diacritical marks, much as in a dictionary. During the first quarter of the first grade only the sounds of the letters were taught, but by the second quarter spelling was done by both the sound and the name of the letters. There was a great deal of emphasis on understanding the contents of the lessons, and supplementary reading was required. This system seems much like Leigh's
method as it was adapted in St. Louis; the primary distinction is that Leigh's 70-character alphabet was abandoned in favor of the regular alphabet.

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Conclusion

The experiment with a transitional reading medium in St. Louis was quite different from the other innovations considered. The length of the trial is perhaps the most unusual aspect, but the other details also bear reviewing.

There is little doubt that Pronouncing Orthography was introduced into the schools through the efforts of William T. Harris and Dr. Edwin Leigh. The successful overcoming of the initial problems of the innovation could be ascribed to Harris' position as superintendent and his continued support of the phonetic method of teaching reading. Harris' stature and influence in the community added weight to his official reports of the success and benefits of Leigh's system. But when Harris left St. Louis, Pronouncing Orthography remained. There was no official move to abandon the method for six years, and it was another six years before the final action was taken. Granted, there was certainly some objection to the augmented alphabet before 1886, and part of the reason for the delay in the eventual discontinuance was a fractional split on the school board, but this twelve years of use after Harris left shows that Leigh's system did not depend solely on a strong proponent.
On the other hand, the demonstrated benefits of Pronouncing Orthography were not enough to resist the discontinuance. An entire generation learned to read in St. Louis by Leigh's method, and its period of use allowed at least two complete turnovers of students through the schools. This extended use, which would have permitted a complete and fair trial, eventually resulted in dropping the augmented alphabet.

The fact that Leigh's method was altered should be considered. In most initial reading systems, the common orthography is only introduced as the transitional step after the student has mastered the initial medium. Harris, however, found it necessary to teach the traditional alphabet along with the phonetic, and even though parental pressure may have required this change, he reported excellent results. With this adaptation, Pronouncing Orthography was not being used as a strictly transitional system. The theoretical implications of such a change require more study concerning the details of classroom practice at that time.

It is interesting to note that Harris, who continued to be a firm supporter of Leigh's method, co-authored a series of readers in 1878 which were "an attempt to combine the word method and the phonetic method." These readers made limited use of diacritical marks in conjunction with the common alphabet. They were published while Harris was still superintendent in St. Louis and still praising Pronouncing Orthography.
Supplementary reading was added to the course of study at about the same time the dropping of Leigh's method was first discussed. In the following years more attention was paid to comprehension, and reading instruction in the first grade came to resemble the word method. As in other cities, perhaps an understanding of the reading matter took a higher priority over phonetic analysis and pronunciation, so that the schools adopted methods of reading instruction with the emphasis in this order.

The abandonment of Pronouncing Orthography in St. Louis was very quiet; no dramatic objections had precipitated its sudden dropping. The majority of primary school principals over a period of years decided on their own not to use the method, and later the School Board officially dropped it by switching to a new set of readers. After many years of use, the benefits of Leigh's system could not support its continuation.


4. Type of the Times, vol. 11, p. 232.

5. Ibid., vol. 12, pp. 6, 135; and vol. 11, p. 214.

6. Fourth Annual Report of the President, Superintendent and Secretary to the Board of St. Louis Public Schools for the Year Ending July 1, 1858, pp. xiv - xvi. Such references hereafter cited by number and year, e.g., Fourth Annual Report... 1858.

7. Fifth Annual Report...1859, p. 59.

8. Fifteenth Annual Report...1869, p. 95.


10. Thirteenth Annual Report...1867, p. 56. See also McCluskey, p. 145.

11. Thirteenth Annual Report...1867, p. 56.

12. Fifteenth Annual Report...1869, pp. 95-96.


17. Sixteenth Annual Report...1870, p. 29. See also Wm. T. Harris: Honors Paid to Him on His Retirement from the Superintendent of St. Louis Public Schools (n.p., n.d.), p. 4. Latter volume available at the St. Louis Public Library.

18. McCluskey, passim. See also Harris' scrapbooks, passim.


20. Ibid., p. 98.

21. Ibid., p. 96.

22. Ibid., pp. 96-97.

23. Twenty-first Annual Report...1875, p. cxxvii.

24. Undated, unnumbered article in "William T. Harris - Personal Scrapbook No. 2, 1868-1875." When Harris collected his scrapbooks, he did not have the historian in mind.


27. St. Louis Public Schools: Printed Record of the Board of President and Directors, Vol. V, August 14, 1883 to July 13, 1886 (St. Louis: Nixon-Jones Printing Co., 1886), April 13, 1886. Page references given by date. Hereafter cited as Printed Record...Vol. V.


30. Printed Record...Vol. VI, April 10, 1888 to May 22, 1888.

31. Ibid., June 11, 1889.
32. Printed Record...Vol. VII, passim

33. Ibid., May, 1892 to June, 1892. See also Thirty-ninth Annual Report...1893, p. 14.

34. Forty-first Annual Report...1895, pp. iii-xl.

35. Fifteenth Annual Report...1869, p. 97.


PART 6

BOSTON, MASSACHUSETTS
Leigh's Pronouncing Orthography was also used on a system-wide basis in the public schools of Boston. For a detailed treatment of this experiment, see Gillooly. In order to present a complete picture of the use of transitional reading systems during this time, we will review the findings of Gillooly's study.

In 1866, Leigh's method was introduced into one of the thirty-eight school districts in the city, and by 1874 it was being used in thirty-two of these districts. Up to this time, Pronouncing Orthography was not specifically required in the primary schools and the head of each district apparently determined whether the transitional medium would be used in his district. Then in 1876, the School Committee passed a resolution ordering the use of Leigh's edition of the Franklin Readers for beginning reading instruction in all the schools.

After two years, however, the School Committee "reversed itself by reinstating the common-type editions of the Franklin Readers as permissible first readers." No reason for this action is reported in the official records. Gillooly discusses possible explanations from Harrison, and on the basis of his own research develops several hypotheses. He concludes:

From the evidence collected in Boston, then, it appears as though Pronouncing Orthography was rejected not because of an insufficient supply of books or the absence of its chief advocate, as has been claimed, but because of a general lack of efficacy.
Even when novelty effects were uncontrolled and, hence, added to the effects due to the new writing system alone, Pronouncing Orthography was unable to produce results in t. o. [traditional orthography] which surpassed those attained when traditional orthography was used all along.

Thus, Leigh's method was used system-wide in Boston for only two years. Most of the school districts had used it for a longer period but the previous use was on a trial basis. The Boston experiment certainly did not match the St. Louis use of Pronouncing Orthography in either duration or extent. Nevertheless, the overall course of events bears a strong similarity to the experience with transitional reading media in other cities.
FOOTNOTES

PART 6


2. Ibid., p. 4


4. Gillooly, p. 11.
PART 7

PORTLAND, MAINE
The last major experiment with an initial reading medium which we will consider is the use of Leigh's Pronouncing Orthography in Portland, Maine beginning in 1875. This trial had the latest starting date of any of those considered within the scope of the project. The topic has not been included in previous historical studies on this subject.

The reading instruction in the elementary grades in Portland in 1872 was based on the use of the word method. The course of study indicated that "words are taught, as the symbols of objects, and not the names of letters of which the words are composed." The School Committee reported seven out of eleven schools used the word method regularly, and three others used it somewhat. It seems that the word method had recently come into vogue in Portland, having displaced the A-B-C approach of reading instruction. The Annual Report of the School Committee quoted one of the local principals who "gives it as his opinion that there is a gain in time of at least 40 percent in teaching children to read by this plan [i.e., the word method]." The school committee also stated that ten of the schools were using "Phonic Spelling." This subject is not exactly defined, but the lessons consisted of spelling the words both by letter and by sound.

In 1873, the School Committee adopted a new set of readers, the Independent Readers, which was introduced into all the primary
schools. This was apparently a move away from a strict word method approach, since the new readers had a partial system of diacritic marks. The impression is that the readers used marks much like a dictionary. It is definite that the new books did not make such complete use of diacritical signs as did Leigh's Pronouncing Orthography.

Also in 1873, Thomas Hill, who figured so prominently in the Waltham experiment, came to Portland to accept a ministerial position. He had retired from the presidency of Harvard in 1868 due to ill-health and family problems. Hill's first wife died in 1864 and at the same time the difficulties of his administration at Harvard began to mount. He remarried in 1866, but within a year his second wife became chronically ill. Thomas Hill was exhausted now from the cares of running Antioch and Harvard and from the burden of his first wife's sudden death and his second wife's terminal illness. On the advice of his doctor and close friends, he resigned from Harvard in September, 1868, and moved back to Waltham, where his wife died six months later.

For the next four years, Hill renewed his past interests. He served two years on the Waltham School Committee, and one year as Waltham's delegate to the Massachusetts Legislature. He wrote numerous articles and joined his friends at Harvard for weekly discussions. Hill preached frequently, but was never able to return to his previous pace of work. He did extensive traveling in this
country, and sailed for almost a year on a geographic expedition around South America. He returned from the voyage in late 1872 and then in February, 1873 became pastor of the First Parish Church in Portland. Hill's biographer characterizes this whole period as a readjustment after the strain at Antioch and Harvard, "a period of improving health and renewed intellectual activity." 

While he was at Harvard, Hill became acquainted with Leigh's Pronouncing Orthography. In August, 1867, Edwin Leigh gave a demonstration of his transitional medium in Boston and exhibited books printed in the "pronouncing type." The subjects used by Leigh certainly testified to the usefulness of the system to teach reading. Hill knew of this demonstration and it seems likely that he would keep himself informed on the progress of the Boston experiment with Leigh's system. Given Hill's intellectual background and his concern for and understanding of reading instruction, he probably knew the results of the use of this new transitional reading system in both Boston and St. Louis. So, Pronouncing Orthography was certainly known to him when he arrived in Portland in 1873.

In the spring of 1874, the School Committee invited Hill to attend a meeting of primary and grammar school teachers and take part in the workshop-type conference. This action indicates a recognition by the school authorities of Hill's background and experience in education, and reciprocally, Hill's interest in the
city's schools. Hill's previous activities and his credentials accorded him a sizable degree of influence and popularity in Portland, which had not often had such a well-known and important resident. "As a pastor whom his people found to be so learned in an amazing variety of subjects, Dr. Hill was sought as one who could answer every question."10

In 1874, Thomas Hill was elected to the School Committee of Portland, and was sworn in with the other new members in March, 1875. He was active from the start, and at his first meeting, moved that a subcommittee draw up a set of rules and regulations for the functioning of the board. His motion was approved and he was appointed as one of the members of the subcommittee.11

Approximately two weeks later the subcommittee reported back with its recommendations. One of the proposals was that "a committee of three be appointed by the Chair to take into immediate consideration the course of studies, the text books, apparatus, and the methods of teaching in all grades of our public schools."12 This proposal was approved and Hill was appointed as one of the three members of this standing subcommittee.

At a meeting of the school board in August, this Committee on Instruction made various recommendations for the text books to be used in the Portland school system. One of the suggestions was the introduction of "Leigh's Charts and Primer." The full board accepted the report of the Committee on Instruction and Leigh's Pronouncing Orthography was used starting in the next month, i.e., September, the beginning of the school year.13
It would seem that Hill had convinced the school-committee members of the benefits of an initial reading system. Land sees a direct casual relation and ascribes to Hill a good deal of authority. "On being elected to the School Committee in 1874, Dr. Hill introduced into the early grades his own geometry and also Dr. Leigh's phonetic readers." More likely perhaps, Hill worked behind scenes, discussing with the committee members the various arguments in favor of such a system until they agreed to the innovation.

At this time, Hill could point to the results of similar experiments in other cities as good reason for using a transitional alphabet. Shortly afterwards, he wrote that twenty-five years' experience had convinced him of the benefits of a phonetically-regular method of reading instruction. Specifically concerning Leigh's system, Hill could mention the favorable results being obtained with Pronouncing Orthography in Boston and St. Louis, two cities which were acknowledged leaders in education at this time. Hill may have received some support in this part of his presentation from the Superintendent of Schools, who had been a teacher at Boston English High School, and thus would probably be aware of the phonetic work in the Boston schools.

The claim that a phonetic reading medium could improve pronunciation would have application in Portland. In 1876, about 35% of the school population was classified as being Irish in nationality. Whether this figure means Irish-born or first and second generation
American-born is not clear, yet it brings to mind Hill's comment on the Waltham experiment, where there had also been a high percentage of Irish in the population: "The phonetic print corrected the brogue of the Irish children and the Yankee dialect of the American in a surprising manner." 17

Another of the claimed advantages of a transitional reading medium at this time was an improvement in the students' spelling. This is evident in some of Hill's previously quoted comments. 18 It seems that the Portland schools were having difficulties in spelling performance at this time. The 1875 Report of the School Committee indicates they were quite unhappy with the results of spelling tests, and they urged the teachers to pay special attention to this subject. 19

The above discussion indicates areas in which the members of the School Committee might have been particularly open to claims for an initial reading system. With the weight of Hill's influence and prestige added to the arguments, the decision to use a transitional alphabet is not surprising.

Apparently Hill had not intended specifically to use Leigh's method. He reported that, "We found the Cincinnati books out of print, and were forced to use Leigh's type." 20 Hill's primary concern was probably the introduction of any acceptable transitional reading alphabet. His first choice would be Phonotypy, as he had used in
Waltham, but Pronouncing Orthography would suffice. He said of it, "A second mode of avoiding multiple grapheme-phoneme relationships is to use some simple diacritic signs...Dr. Edwin Leigh's type is a most ingenious device of this kind."  

The School Committee reported:

With their immediate predecessors they would say that they "felt little inclined to make serious innovations in established methods;" but...they wish also to introduce certain methods which have been established by ample experiments elsewhere, or which may be called established by the general consent of all the best writers on education of the past and present centuries.

They went on to say, "As a help in learning to read your committee have added to the apparatus of the primary schools, primers, and charts printed in Dr. Leigh's pronouncing alphabet." The primer they refer to, introduced in September, 1875, was the Franklin Reader transliterated in Pronouncing Orthography.

Hill authored the section in the annual report on the phonetic innovation during its first year of use. He was careful to explain the reasons for using such a system to the people of Portland. He stated there was no doubt about its advantages, and that good progress was being made. It was also noted in the same report that greater attention was being given to both reading and writing in the primary and grammar schools.

An explicit statement of the result of using Leigh's alphabet is not found in the reports of the next several years. The overall
impression from the discussion of the course of studies is that the committee was satisfied with the method and that the results were generally favorable. It was stated in 1877 that "in some special cases, notably we may say in the use of Leigh's type, in the lowest grades in the Primary schools, a very gratifying progress has been made."26

From a later text-book list, it is evident that the School Committee purchased a set of Leigh's Second Readers in 1877. There is no reason given for this action, nor is it even mentioned, except in the purchase record. Whether they thought Leigh's method was incomplete without the Second Reader, or whether they hoped to improve upon the results obtained with just the Primer is not stated. In any event, the purchase indicates a continuing commitment to the method. 27

Mention was not made in the reports of objections to Pronouncing Orthography. Hill explained this, saying, "It [Leigh's system] is not equal, as a means of facilitating the child's labor, to the Cincinnati Phonotype, but it has the advantage of not exciting so much prejudice, at first sight, among the parents."28 Land, however, in speaking of Hill's role in introducing Pronouncing Orthography, says that "opposition soon came from those who did understand the logic of his innovations."29

By 1880, the teaching of reading generally shifted away from a strict phonetic approach. Much more emphasis was placed on comprehension and understanding of the content, with less emphasis being
placed on phonetic analysis of the words. In 1879, we find this trend thus indicated:

Of the two methods in most approved use, the "word method," and the "Phonetic," we employed the latter using primary readers printed in Dr. Leigh's type. It is recommended to our teachers of beginners, even though we use the Phonetic method, to give pupils at the first a clear apprehension of the ideas represented by the words to be learned." 30

In the following year, the word method was specifically recommended to be used in conjunction with the phonetic drill. The "experienced teachers" of the city were said to be in agreement with this combined approach of Leigh's type and word method. The general instructions to teachers include exercises to test and insure good comprehension. 31

At the same time, additional reading work was introduced into the schools. The School Committee decided that the readers alone did not provide sufficient reading material, so they added supplementary books. They explained their decision by saying, "Much reading makes good readers." 32 They reported that this action resulted in an improvement of reading. These steps taken by the committee, both in suggesting the use of the word method and in providing supplemental reading, were part of a greater emphasis on reading content.

In 1880, the board was still quite concerned about spelling. "One thing, we regret to say, was too prominent to be allowed to pass without notice, that is, the great amount of incorrect spelling." 33 This statement was directed at all the schools, followed by a plea that the teachers pay more attention to this subject.
Thomas Hill apparently was not re-elected to the School Committee and finished his term in March, 1879. It seems the people of the city now looked somewhat askance at him. They considered his remarks in the 1876 School Report as "visionary." In the 1877 Report, Hill authored a philosophical discussion of the place of music in the schools, which drew criticism and facetious remarks. In addition, Hill had attacked the then very popular theories of Darwinism. It seems he finally came to be considered old-fashioned and slightly out of touch.

Hill's absence from the School Committee did little to help Pronouncing Orthography, since he was its strong supporter in Portland. About the same time, another event occurred which would not help Leigh's system. The city of Boston dropped the use of Pronouncing Orthography in 1879 after only two years of system-wide use. Since Boston was still an acknowledged leader in public education, the abandonment of Pronouncing Orthography there could have only a negative influence on its use in Portland.

As referred to above, Leigh's alphabet was still being used in Portland in 1880. The course of study for that year required that Leigh's Chart and Primer be used during the first term of the beginning year, and that the Second Reader be used during the latter half of the first year. These same items were still specified for the school year ending in 1882. In April of 1882, however, the School Committee voted "that the matter of school readers, also of supplementary reading for the schools, be referred to the Committee on Course of Studies and Text Books to consider and report to the Board."
Although the report of the subcommittee is not in the records, it apparently lead to the abandonment of Pronouncing Orthography in 1882. The course of study for 1883 indicates that a new reader was being used in the first grade. The School Committee said in 1883, "The furnishing free to the schools this year of two series of excellent school readers, at a merely nominal price to the city, has produced most excellent results." The new books were Sheldon Readers and McGuffey's Eclectic Readers.

Portland had thus discontinued the use of Leigh's Pronouncing Orthography without giving reasons for doing so, at least publicly. The probable causes for such action came out in retrospect. The School Committee stated later that the reading was just as satisfactory in the traditional orthography as it had been in the phonetic alphabet. One of the members wrote:

The quite uniform testimony of the teachers of the sixth class [first grade] is that their children have done as much and as good work in reading as ever before, even when they used the phonetic type. I was not expecting this; but on testing their classes I am convinced that the teachers are correct.

We must stop here to point out, as we have done in the other cities, that there is no indication of any type of objective evaluation to substantiate this statement or others of this type made with regard to the Portland experiment. Both the favorable and unfavorable comments on the progress of Leigh's system seem to be mostly subjective impressions. There was, however, an emerging sense of experimentation which should be considered before all the above comments are discounted. As early as
1877, the Annual Report shows an understanding of the problems of evaluating pupils from one class to another. In 1882, most of the classes of the same grade had identical instruction in an effort to achieve some uniformity in the school system, but it was commented in 1884 that differences between the individual teachers can greatly affect the student's achievement even though the subject matter was uniform. Thus, there was some progress to sophistication of the experimental method in education; and this should be kept in mind in judging the comments on reading progress.

After Leigh's system was dropped, the word method was used for the teaching of reading. This was combined with the sentence method by 1885 which shows the continuing emphasis on comprehension in the reading instruction.

Conclusion

In reviewing the reasons for the abandonment of Pronouncing Orthography in Portland, the oddity of Leigh's alphabet is the explanation most often encountered. In a discussion on the new first-grade readers, it was said that they had the "ordinary type, not disfigured by any diacritical marks whatever...Nothing therefore has been learned that is afterwards to be unlearned, or even forgotten, — nothing of questionable utility."

It is not known how strenously the parents may have objected to Leigh's alphabet, but the teachers did not entirely approve. By
1879, four years after Pronouncing Orthography was introduced, they were combining it with the word method. After the dropping of Leigh's method the teachers said that now a second grade student should read better because he did not have "the inconvenience of learning a new type in learning the common type."\textsuperscript{44} We have seen elsewhere that unless the teachers were convinced of the merits of a transitional reading system, the results would probably not be favorable. The statement that there was in 1877 a "very marked improvement observed in teaching reading, since the introduction of Leigh's type"\textsuperscript{45} could be accounted for by the novelty effects of so much attention being focused on reading and the new alphabet.

As indicated above, Boston's dropping of Leigh's system may have had an adverse effect in Portland. The time lag of three years between the abandonment in Boston and in Portland, however, would lead one to question the relative importance of this factor as a reason for discontinuance in Portland.

Financial considerations may have had some influence in the decision. It was quoted before that the new readers which were introduced into the schools and which replaced Pronouncing Orthography in the first grade were obtained at a minimal price. Perhaps the School Committee saw an opportunity to acquire new text books throughout the schools at a substantial savings, and in order to maintain the continuity of the series, also purchased the first-grade edition.
The distinct emphasis on comprehension in reading in the early 1880's might have forced out the phonetic approach. The authorities may have felt that Leigh's method devoted too much time to the elements of the words and details of sounds, and not enough time to the content. The use of the word method along with the phonetic method seems to imply this.

The chronic complaints about the poor spelling of Portland students were to the detriment of Pronouncing Orthography. One of the system's claims was improved spelling, and the authorities evidently did not observe this particular result. In trying to find a cause of the low performance in spelling, they may have simply placed the blame on the reading method currently in use. In any event, the spelling became no better with Leigh's system, according to their observations.

The effect of losing the principal proponent does not seem important in Portland. It is evident that Thomas Hill was the moving force in the introduction of Pronouncing Orthography. For various reasons, the extent of his influence had greatly declined by 1879, when he was no longer on the School Committee; yet the system continued in use. Hill remained in Portland until well after Leigh's method was finally discontinued, so his presence seemed to have little effect.
Pronouncing Orthography was used in Portland for seven years, and the pattern of its use and abandonment is familiar. It seems that Leigh's transitional reading system did not demonstrate results sufficient to continue its use. Financial pressure or teacher resistance may have been more compelling than the benefits of the method. On the other hand, factors directly related to its efficacy, such as comprehension and spelling, seem involved in the abandonment.
FOOTNOTES

PART 7

1. Annual Report of the School Committee of the City of Portland for the Year Ending March, 1872 (Portland, 1872), p. 6. Hereafter such references will be cited by year, e.g., Annual Report...1872.

2. Idem.

3. Ibid., pp. 35, 60-61.

4. Annual Report...1873, p. 47.

5. Annual Report...1876, p. 9.


9. "Records: Portland School Committee, 1874," May 9, 1874. These are the proceedings of the school committee meetings; page references will be given by date. Hereafter cited by year, e.g., "Records: 1874."

10. Land, p. 250.


12. Ibid., March 19, 1875.

13. Ibid., August 30, 1875.


15. Annual Report...1876, pp. 4, 8-9.

16. Ibid., p. 61.


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18. See Waltham section of this report, Section Two.


20. *Hill, "Spelling Reform..."


22. *Annual Report...1876*, p. 5.

23. Ibid., p. 8.


27. *Annual Report...1880*, pp. 58, 85 ff.


30. *Annual Report...1879*, p. 45.

31. *Annual Report...1880*, pp. 51 et passim.

32. *Annual Report...1881*, p. 5.


37. *Annual Report...1880*, pp. 85 ff. See also *Annual Report...1882*, pp. 59 ff.


40. *Annual Report...1884*, p. 75.

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41. Ibid., pp. 36-37.
42. Annual Report...1885, p. 44.
43. Annual Report...1884, p. 36.
44. Ibid., p. 37.
45. Annual Report...1877, p. 31.
PART 8

CONCLUSION
In the preceding pages, we have discussed the events concerning the use of transitional reading media in six different communities during the latter half of the nineteenth century. An effort has been made to present the circumstances leading up to the innovation of one of the initial teaching systems in each of the cities. The reported results were given in following the progress of each experimental use of such a system. Factors not specifically related to reading performance were discussed where they had a direct effect on the experiment. Finally, the steps leading to the eventual official abandonment of the transitional media were outlined, and the relative influence of the factors involved in the discontinuance were considered. Now, by way of summary, we can view the separate experiments collectively. For the most part, the individual uses of the transitional media were kept distinct in the narrative discussions. It is possible, however, to find broad interrelationships between the various experiments. Although we will not do so, it would be possible to consider the particular trials as part of a single movement in the U. S. at that time for the introduction of transitional reading media. From the preceding material, we will trace the relationships on a city-by-city basis.

Thomas Hill, while in Waltham, came in contact with both Elias Longley and Benn Pitman of Cincinnati, first through mutual friends, and then by written communication. Longley and Pitman obviously were working towards the same end and were well acquainted. Superintendent Farnham of Syracuse likewise was in contact with Longley and Pitman by correspondence. One of Farnham's co-workers, J. A. Allen,
evidently journeyed to Waltham or Boston to investigate Phonotypy, then returned to Syracuse to help introduce the method here. In addition, Farnham wrote to Hill concerning the practical details of Phonotypy's use. In St. Louis, William T. Harris, who had learned Isaac Pitman's shorthand in college, originally attempted to have Pitman's phonetic alphabet introduced into the schools. His friend and co-worker, Dr. Edwin Leigh corresponded with Longley in Cincinnati. Later, Dr. Leigh developed Pronouncing Orthography which was then used in the St. Louis schools. Further extending the interrelations, Leigh went to Boston to demonstrate his teaching method, and the system was quickly introduced there on a limited basis. Thomas Hill, then at Harvard, learned of Pronouncing Orthography through Leigh's visit, and later Hill helped introduce the method in Portland.

Though not all the communication between the principal figures in each city was on a personal basis, it is obvious that there were various degrees of information-exchange among the leading proponents. This is by no means evidence for a well-organized movement, though some of the then-contemporary literature would imply this. Perhaps more accurately, the transitional reading media were a popular topic in educational circles, and a topic about which many individuals were willing to report results.

Even though the supporters exchanged procedural information on the best way to use the initial teaching systems, the final result
was consistently the same, i.e., the system was dropped from use. This fact, like other general characteristics, applies to each of the cities involved. Indeed, it is possible to describe a single pattern of use for all of the experimental trials discussed above. Specific details may vary in the different locations, but the overall course of events is the same. The pattern is as follows.

In the first stages, a strong supporter of one of the transitional systems, who has a good deal of influence on the school authorities or is a high-level school official himself, convinces the authorities to introduce the particular transitional medium into the beginning reading classes. This can be either on a limited basis to a small number of classes or on a large scale to the entire school system. The supporters then report excellent results in using the method; the benefits range from improved pronunciation and reading progress to improved general scholastic performance. It should be noted that objective and subjective evaluations are intermingled, with the emphasis on the latter. Often the supporters who give these findings are also responsible for making the official report with regard to the continued use of the method. The trial continues on the basis of these results. Then eventually, without much discussion, the transitional system is abandoned. In just one case, Cincinnati (first trial), was the possibility or desirability of discontinuance officially reported before such action was taken, and in only two locations, Cincinnati (first trial) and Syracuse, were reasons which related to reading progress explicitly given ex post facto for the abandonment.
The pattern, therefore, is one of innovation, continuation with good reported results, and discontinuance. The time intervals of this cycle vary from about a year in the short experiments in Cincinnati to about twenty-five years in St. Louis. Phonotypy was the transitional system used in the first three reported cases, up until 1863 in Syracuse; the later experiments, beginning in 1866 with St. Louis and Boston, all used Leigh's Pronouncing Orthography.

In each city, an attempt was made to account for the discontinuance of the transitional reading system in terms of the direct historical evidence. A single predominant influence or event was often found responsible for the final action of the school authorities. In Waltham, for instance, the leaving of Thomas Hill seemed to precipitate Phonotypy's abandonment. The presence or absence, however, of the leading proponent did not seem to be important in some of the other cities. From all the material, we were not able to find a simple common factor involved in the discontinuance of an initial reading medium. Instead, there seemed to be a variety of reasons depending on the city and the individuals concerned.

In his recent paper (see footnote 2, Section Two), Dewey postulates eight reasons why an initial teaching medium did not survive. Many of these reasons can be applied, in part, to the cases presented here. We have added other causes of our own to explain the instances
of abandonment. These additional casual factors became evident from the historical material, and are included in the city-by-city discussions. All of these reasons, however, including Dewey's, tend to account for the dropping of a transitional system by factors not directly related to the effectiveness of the system. For example, the inertia due to conformity or the leaving of a principal proponent say little directly about the value of the teaching instrument.

If we try to account for the pattern of innovation in terms of the efficacy of the transitional reading medium, we can view the reasons referred to above as symptomatic of more basic considerations. Time and again, a transitional alphabet was introduced and finally abandoned. In each city, factors not directly related to reading skills such as parental objection, vested interests, etc., became important enough to result in the dropping of the system. Evidently, the transitional media did not gain enough support on the basis of their demonstrated effectiveness to offset these indirect influences. To the school authorities, the observed efficacy of the initial reading media at that time was not significantly greater than the traditional methods of reading instruction.

Overall, then, there are two ways to explain the consistent eventual outcome of the cycle of innovation seen in transitional reading media. Keeping in mind the model given in the beginning of the Conclusion in Section Two, the discontinuance in each city
could be ascribed to various factors not related to the direct results of using the medium. In this case, we must accept a list of explanations in order to account for all the cities together. The reasons on this list are highly subjective and depend on local conditions.

On the other hand, we could extrapolate one step to choose a parsimonious explanation which would draw a single thread through the entire report. In this case we would entertain the possibility that the transitional media were not effective methods of reading instruction. The repeated discountance would then be due to factors directly related to the efficacy of the systems.

The historical evidence has been presented and the possible interpretations have been outlined. The course of events can either be explained by factors unrelated to the effectiveness of the phonetic alphabets, with the implied long list of specific influences, or the reader can accept the parsimonious explanation which relates the abandonment of transitional media directly to a lack of effectiveness.

As a postscript, the similarities between the uses of transitional reading media in the nineteenth century and the current work being done in the area should be considered. Those familiar with the attention being received by the subject from the press and in the literature will note that various aspects in the historical discussion are much like parts of the present-day situation. The enthusiasm of
the supporters, the attention paid to the benefits of a transitional system, the concern for certain procedural matters, etc., seen in the previous century, all have their parallels in the current work. For that matter, the contemporary transitional media are direct offspring of the systems used above. Indeed, we could take quotations from the historical material and fit them perfectly in context into the current literature.

No contention, however, will be made about the predictive validity of the historical study as applied to recent experiments. While there are many close parallels, there are also significant differences. The current work employs more sophisticated experimental design and draws from the field of educational psychology, which was just forming during the era discussed above. Now, a more accurate evaluation of the effectiveness of transitional reading media can be made, and a decision to abandon such systems or to expand their use can be made on the basis of sound experimental evidence.

It is too early in the current work to determine whether the pattern of innovation seen in the nineteenth-century material will appear in the present-day situation. The historical pattern, however, as part of the history of education should be considered as a point of reference in dealing with the introduction and use of transitional reading media.
APPENDIX
Sample of Cincinnati Phonotypy from
Type of the Times, vol. 11, p. 123.
Where the purple violet grows,
Where the bubbling water flows,
Where the grass is fresh and fine,
Pretty cow, go there and dine.

LESSON LVIII.

When Henry was about five years old, his mother took him up on her lap one evening, and said, “Henry, it is time for you to go to bed.”
An investigation was made of various experiments in the United States during the nineteenth century to use phonetic alphabets as transitional media for initial reading instruction. The primary objective was to present a history of this little known aspect of education. Therefore, the actual circumstances surrounding each of the major uses of such transitional media are considered in some detail. The material presented is based on an extensive search of primary sources. Certain of the experiments have been previously unreported in the background literature of phonetic teaching methods. A cycle of innovation, use and discontinuance is postulated as a means of structuring the historical facts. The current relevance of the project lies in a comparison of the similarities between the report and present educational activity.