This article provides a discussion of the importance and use of a method of systematic critical analysis, metatheorizing, as a tool for understanding the current research and debate in deafness and literacy. After reviewing background information on the notion of metatheorizing, the article presents some general remarks relative to the debate on two broad issues in deafness and literacy: (1) the instruction of English literacy skills and (2) the development of English literacy skills as a realistic goal for most students with severe to profound hearing impairment. The article raises questions about the heavy emphasis in programs for deaf students on English text-based literacy skills and suggests such an emphasis may be detrimental to the development of literate thought in many deaf individuals. Contains 28 references. (Author/DB)
Metatheorizing in Deafness and Literacy

Peter V. Paul

Department of Educational Services & Research

The Ohio State University

ADDRESS FOR CORRESPONDENCE:
Peter V. Paul, Ph.D.
Dept. of Educational Services & Research
The Ohio State University
356 Arps Hall
1945 N. High Street
Columbus, Ohio 43210

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Abstract

This article provides a brief overview of the importance and use of a systematic critical analysis—metatheorizing—as a tool for understanding the current research and debate in deafness and literacy. After discussing some background on the notion of metatheorizing, the article presents some general remarks relative to the debate on two broad issues in deafness and literacy: (1) the instruction of English literacy skills and (2) the development of English literacy skills as a realistic goal for most students with severe to profound hearing impairment.
Metatheorizing in Deafness and Literacy

This article provides a brief overview of the importance of a systematic critical analysis--metatheorizing--as a tool for understanding the current research and debate in deafness and literacy. This type of critical analysis can be used to evaluate the advocacy of ASL/English bilingual programs and methods for "developing" the English literacy levels of deaf students, whether English is taught as a first or second language (e.g., see discussions in Paul & Quigley, 1994a; Paul & Quigley, 1994b). After providing some background on the notion of metatheorizing, the article presents some general remarks relative to the debate on two broad issues in deafness and literacy: (1) the instruction of English literacy skills and (2) the development of English literacy skills as a realistic goal for most students with severe to profound hearing impairment.

Metatheorizing and Other Forms of Meta-analyses

The term metatheory refers to a particular framework or view that defines the manner in which one should do science, or systematic inquiry (Baars, 1986; Bunge & Ardila, 1987). This framework dictates the development of theories as well as theory-driven and data-driven research. It is also possible to see the subsequent effects on curriculum, instruction, and assessment. Because of its nature, a metatheory cannot be judged as "accurate" or "inaccurate," relative to some other metatheory. It is a way of thinking or doing that is or should be supported by theory and
Examples of metatheories in conflict can be seen in what is often termed the "paradigmatic wars" between disciplines and, more recently, within a particular discipline. The reader might recognize these instances as—what this writer calls—"either-or" syndromes: nature or nurture, natural or structural language-teaching methods, whole language or skills-based reading strategies, and clinical or cultural perspectives of deafness. It should be emphasized that even though the term metatheory is related to other terms such as philosophy or paradigm, these terms are not synonymous. Further details on this issue can be found elsewhere (Ritzer, 1991).

The concept, metatheory, is typically the result of metatheorizing. In a broad sense, metatheorizing refers to the array of systematic, critical analyses or syntheses on various aspects of theory or theories such as the theories themselves, theory-driven research, theory-based implications, research methods, and research data (e.g., meta-analysis or meta-data-analysis; for a discussion of various types of analyses or syntheses, see Cooper, 1982; Glass, McGaw, & Smith, 1981; Jackson, 1980).

In a narrow sense, there are four general types of metatheorizing (Ritzer, 1991, 1992). One type refers to the pursuit of a better, deeper understanding of extant theory. A second type focuses on extant theory for the purpose of developing a new theory. A third type "is oriented to the goal of producing
a perspective, one could say a metatheory, that overarches some part or all of ... theory" (Ritzer, 1991, p. 6).

These three types of metatheorizing involve the study of theory and research and occur after these areas have been well developed within the field. There is another type of metatheorizing, which functions as an overarching framework and is proffered prior to the development of a theory (or line of research). However, this type is considered a weak form of metatheorizing and has been shown to cause numerous, unproductive philosophical problems (Ritzer, 1991, 1992).

In either a broad or narrow sense, metatheorizing is a type of critical synthesis or analysis that can be applied to theories, research data, and practices. These analyses adhere to scientific guidelines that are similar for conducting integrative theoretical and research reviews: (1) formulation of a problem or hypothesis, (2) selection and collection of data, (3) analysis and interpretation, and (4) presentation of the results (e.g., Cooper, 1982). Thus, metatheorizing is seen as a necessary tool because of the substantial amount of theories and research data that exist on a broad topic such as reading or a narrow topic within reading such as word recognition.

There is another reason for performing these types of analyses, relative to the field of deafness. Because deafness is a low-incidence condition, there seems to be little research data available to conduct the various forms of research syntheses, particularly meta-data-analyses. This situation makes it
difficult, for example, to establish and implement literacy programs that are based on sound theoretical and research information. However, it is possible, and indeed necessary, to use the theoretical and research results from the literature on hearing children in conjunction with the little research on deaf children to obtain an understanding of the problem of literacy and deafness (e.g., Paul & Jackson, 1993).

This is assuming that one favors the notion that there are similarities in the development of language and literacy for both deaf and hearing children, which has been supported by several lines of research (see research reviews in Hanson, 1989; Paul, 1993). In addition, there is also another assumption that such a comparison should be made—that is, from an ethical point of view. For example, should educators and researchers compare deaf and hearing children or compare nondisabled children to children with exceptionalities? Should the standards for deaf students be the same as those established for hearing students?

**Literacy and Deafness**

To address the first issue of the instruction of English literacy skills, it is important to conduct analyses of the traditional theories and research labeled reading-comprehension theories: bottom-up, top-down, and interactive (e.g., descriptions of these three groups can be found in Bernhardt, 1991; Grabe, 1988, 1991; Samuels & Kamil, 1984). Within these frameworks, reading theorists, researchers, and educators are concerned with decoding
and/or comprehension of the English written language. The focus is on the acquisition of reading and writing skills that are critical for high academic achievement. The goal is to explain how and why some children acquire these skills and why others have difficulty.

Without oversimplifying and using critical analysis, it is possible to state a few assumptions common across these three broad groups of reading-comprehension theories. This does not mean that there are few differences or that the differences are not important. However, there is a need to terminate the paradigmatic wars in literacy by focusing on or deriving common elements (e.g., see discussions in King & Quigley, 1985; Lipson & Wixson, 1991).

To obtain benefits from this type of analysis for deaf students, it is also important to answer the following questions: (1) Is literacy development for deaf students similar to or different from that of hearing students? and (2) Is literacy development in English as a second language similar to the development in English as a first language? (e.g., see discussions in Hanson, 1989; King & Quigley, 1985; Paul & Quigley, 1994b). In general, research has confirmed the affirmative responses to these questions.

With respect to similarities, it has been argued that all three groups of reading-comprehension theories assert that a working knowledge of the language of print is important prior to beginning literacy activities (e.g., Adams, 1990; Paul & Quigley, 1994b). This working knowledge includes knowledge of phonology, morphology, syntax, and semantics. Also included is knowledge of
the culture (e.g., world knowledge; school knowledge) associated with the language and knowledge of the topic one is trying to read. In essence, good readers/writers need to have both bottom-up (i.e., word identification) and top-down (i.e., comprehension) skills.

Relative to the reading of English, the word identification or comprehension "either-or" syndrome has been termed inaccurate or a misrepresentation of theory and research (e.g., Adams, 1990; Anderson, Hiebert, Scott, & Wilkinson, 1985; Lipson & Wixson, 1991). There is evidence that word identification facilitates the comprehension process, and comprehension (higher-level skills) facilitates word identification. This reciprocal interaction is dependent on the overall relationship between the conversational and written forms of the language, which is activated by the association between phonology and orthography (e.g., see reviews in Brady & Shankweiler, 1991; Templeton & Bear, 1992). Thus, it is important for all readers/writers to obtain an understanding of the link between speech phonemes of a phonetic language and the print graphemes. This understanding seems to be critical for reading/writing an alphabetic system such as English. That is, there needs to be a cognitive awareness that speech can be segmented into phonemes, which are represented by an alphabetic orthography. At least two groups of theories (bottom-up and interactive) assert that this awareness is not a natural, unconscious process; it must be taught (e.g., Paul & Quigley, 1994b).
Second-language Literacy and Deafness

It might be surprising that these "common assumptions" also apply to the teaching of English as a second language, particularly English literacy skills (e.g., Bernhardt, 1991; Grabe, 1988, 1991). Most second-language students, including ASL-using deaf students do not begin the English second-language literacy process with the same level of knowledge of the English language, letter-sound correspondences, and the mainstream English culture as first-language learners (e.g., see discussions in Grabe, 1988, 1991; Paul, 1993). It should be stressed that these students do not possess adequate knowledge about the written language of English--vocabulary, syntax, and the alphabetic principle.

It is possible to acquire some knowledge of spoken language and its written equivalent, including knowledge of the culture, by simply reading and writing in this language with explanations provided in the students' native or first language. Several ASL/English bilingual programs for deaf students seem to be based on this notion. Nevertheless, there is no compelling evidence that a high level of literacy in the second language can be obtained via exposure to the print of that target language and explanations in the first or native language (for a review of this issue, see Bernhardt, 1991; Paul & Quigley, 1994b).

Based on a theoretical and research synthesis, Paul and Quigley (1994b) argued:

... the major problem of hearing second-language students can be characterized as one of knowledge. In other words, they
need to learn the alphabetic principle, as well as other written English variables. For most typical deaf students--including ASL-using students--and, possibly, some hearing second-language students, this can be characterized as both a knowledge and processing problem ... The processing aspect might entail one or two conditions: (1) difficulty in accessing segmentals and suprasegmentals of the phonology of English, as well as its other grammatical components; and/or (2) difficulty in processing phonological information in STM working memory as evident in poor readers who are fairly adequate speakers-listeners of English... The two conditions described above might be related in some, perhaps many, deaf students... (pp. 297-298)

Literary Critical Theories

Because of the common assumptions of the three groups of reading-comprehension theories and given the persistent low levels of literacy, it might be that English literacy is an unrealistic goal for most students with severe to profound hearing impairment. That is, most deaf students are unable to achieve a reasonable level of text-based literacy by the time they leave school or graduate despite improvements in theory, research, and practice. This second issue--the feasibility of achieving English literacy within a reasonable time frame--has been motivated by the growing support for acceptance of a second group of literacy models labeled literary critical theories. These theories have been influenced by
a metatheory labeled critical theory (e.g., see discussion in Gibson, 1986). Critical theorists do not use the scientific framework to solve human problems. Their method of critical analysis focuses on the problem of "language" in theorizing. Critical theorists are concerned with concepts such as accessibility, enlightenment, and empowerment. The influence of this framework can be seen in the movement of postmodernism, especially with a focus on the research technique of deconstructionism.

In general, literary critical theorists are not concerned with the improvement of literacy; rather, the focus is on how literacy is used and valued within a particular context (e.g., see research reviews in Lemley, 1993; Olson, 1989; Wagner, 1986). Within this framework, reading and writing skills are subsumed under a broad definition of literacy. For example, in some societies, being literate might include the ability to read and write within the context of literate thought. Literate thought is the ability to engage in reflective or critical thought, for example, the ability to use logical, inferencing, and reasoning skills. In addition to the array of skills and functions associated with these areas, literacy in this framework also encompasses the views and beliefs of particular societies toward these functions and skills. This broad perspective makes it difficult to arrive at a theoretical understanding of literacy due to the variety of views that exist across societies.

Relative to deafness, literary-critical theorists and
researchers might be interested in answering questions such as (1) How should literacy be defined for deaf individuals? (2) Is the "current" view of English literacy, particularly text-based literacy, realistic or appropriate for deaf individuals? and (3) Should the focus be on developing literate thought in the most accessible mode of the language? (see related comments by Padden & Ramsey, 1993). Relative to question 3, literary-critical proponents argue that it is important to develop a first language at as early an age as possible. The nature of the first language is not important as long as it leads to the high development of literate thought. Several scholars on deafness have interpreted this to mean that American Sign Language (ASL) should be acquired as a first language for all or most deaf students (e.g., Johnson, Liddell, & Erting, 1989).

For the purposes of this section of the article, two major questions are addressed: (1) Is it possible to develop literate thought without possessing high-level skills in text-based literacy, that is, the ability to read and write printed English? and (2) Is literate thought sufficient for participation in a scientific, technological society such as the United States? The first question can be studied scientifically; however, the second question is dependent on one's metatheoretical (or perhaps, philosophical) position.

Literate Thought and Text-based Literacy

There have been several theoretical and research syntheses on
the relationship between literate thought and text-based literacy (Olson, 1989; Wagner, 1986). The general consensus seems to be that the ability to read and write at a literate level is not critical for developing the ability to engage in a high level of critical and reflective thought processes such as logic or reasoning. What individuals need is to have access to information and to have meaningful opportunities for deep, complex discussions. Some individuals might need to be taught some guidelines for critical thinking. However, with a bona fide, well-developed conversational language and access to information, many individuals should be able to think critically and reflectively about topics such as philosophy and politics. Thus, it seems that the ability to read and write well is one manifestation of the overall ability to engage in literate thought.

There is some research support for these statements (see reviews in Olson, 1989; Wagner, 1986). For example, historical research has shown that nontext-based literate individuals were able to think critically or engage in a debate about information that was either read or presented orally to them. This event occurred during an era when texts or printed materials were not common or when many people simply did not have the ability to read and write. The main task of the "speaker" or "reader" was merely to convey the information to members of the audience.

A second line of research has shown that information presented in the conversational mode (typically, spoken--but can be signed) can be just as complex and intricate as that presented in the
printed mode. "Talking books" or other recorded materials for individuals with visual impairment serves as a good example. The learned lectures of professors or thinkers is another example. The information in the lectures can be "captured" on audiotape (or videotape for signed lectures) and played back for memory purposes, just as individuals might reread difficult text materials for similar reasons.

The foregoing discussion should not be interpreted as meaning that there are few differences between conversational and written language. It is clear that written language literacy requires more than just a working knowledge of the conversational form of the language (e.g., Samuels & Kamil, 1984). In this sense, written language is more "difficult" because it requires another set of skills, and readers/writers have to deal with sentence constructions and words that are not often used in the conversational form of the language. Nevertheless, these "differences" do not necessarily mean that the "content" of the information in one mode is more "complex" than that in another mode.
Literate Thought and Society

Whether literate thought in a conversational form (speaking and/or signing) only is sufficient for an information-intensive, technological society such as the United States is difficult to assess in a scientific manner. At first glance, the answer seems fairly obvious; that is, it is not difficult to find deaf individuals--including those who know ASL only--who are functioning well in the mainstream of U.S. society. It might even be argued that these individuals could participate even more actively if they are able to access information presented in or preserved via the use of a signed mode or American Sign Language.

According to critical theorists, the sufficiency of literate thought in a conservational form is related to the value placed on this convention, not the outcome of scientific research (e.g., see Gibson, 1986). Text-based literacy is highly valued in U.S. society; it is necessary for obtaining academic diplomas and degrees and for having access to higher education, scientific, and industrial occupations, and the learned professions (Adams, 1990; Anderson et al., 1985). If most members of a particular population, for example, deaf individuals, have difficulty with access and attainment, then it can be argued that this valued position is "oppressive" or biased toward certain members of society. Consequently, it is reasoned that other viable means must be explored and developed to enable many deaf individuals to enter the prestigious socioeconomic and sociopolitical levels of mainstream society. Further progress on the sufficiency of
literate thought in a conversational form is dependent on the resolution of debate on whether having high-level text-based literacy skills is a hallmark or an epiphenomenon of advanced societies—that is, societies advanced in a scientific, technological sense (Olson, 1989; Wagner, 1986).

Conclusion

There is some discussion that reading-comprehension theories and research are motivated by a "clinical" view of deafness. That is, there is a need to "remedy" or "fix" or "improve" the text-based reading and writing skills of deaf students and adolescents (e.g., Lemley, 1993; Paul & Jackson, 1993). The development and use of these theories are motivated by the high value that mainstream society places on high text-based literacy skills. Another source of motivation is the unsubstantiated assumption that the road to literate thought is possible mainly via the use of text-based literacy skills.

On the other hand, literary-critical theories and research are said to be influenced by a "cultural" view of deafness (e.g., see related discussions in Lemley, 1993; Padden & Ramsey, 1993). That is, there is a need to understand how "literacy" is defined or should be defined for members of the Deaf culture or for deaf individuals who cannot achieve high levels of traditional literacy skills. One possible implication is the need to develop comparable alternatives to text-based information—for example, the use of ASL on video tapes.
In sum, the issue for theorists, researchers, and educators—and, indeed, for the larger society—is what literacy metatheory to adopt and when a particular metatheory should be abandoned. In education, this has enormous implications for the development of literate thought in deaf individuals. For example, this issue should call into question the validity of requiring 10 to 15 years of education to develop a first language—typically English—in some, perhaps only a few deaf students. This heavy emphasis and value on English text-based literacy skills might be detrimental to the development of literate thought in many deaf individuals, particularly if it is critical to develop a first language at as early an age as possible.

Because the needs of the child vary across the developmental age range, it is important to consider an on-going assessment of literacy development. Finally, any literacy program for deaf children and adolescents should be based, in part, on the use of metatheoretical and other forms of critical analyses, particularly those analyses that are applied to well-developed theories and research.
References


Understanding literacy and cognition (Eds.), (pp. 3-15).


