

Getting History Right: The Tale of Three-Cueing

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In 1975, America was on the verge of celebrating our country's bicentennial and naturally teachers and schools were concentrated on maximizing the opportunity to teach students about this important event from history. One of the elementary teachers in my rural Ohio community received a grant to purchase about 50 biographical, informational, and historical fiction books about famous Americans and the American Revolution which was welcomed by me, an avid reader who had already read most everything in our meager classroom library. Already somewhat obsessed with history (a fact I can directly retrace to read-alouds from my third-grade teacher 2 years prior), I dove in wholeheartedly and landed on a book about Paul Revere, a true Renaissance man for his time. He was an extraordinary silversmith, jeweler, goldsmith, dentist, engraver, public servant, and businessman, and later a cunning patriot and military leader who played an instrumental role in the success of America's independence from Great Britain. This book led me to read many others that year and across a lifetime but, as my knowledge of Paul Revere grew, I realized that what most Americans know of Paul is sadly based on myth more than fact.

To prove my point, I ask you to recall from your own experiences two things associated with Paul Revere. Firstly, ask yourself (or for fun, a family member or friend), what Paul Revere shouted on his midnight ride. Was it some version of "The British are coming" or "The Redcoats are coming?" Neither of these is factual in the least! To start, everyone at the time of his ride was British so to shout that the "British are coming" would have made no sense to his fellow patriots in Lexington and Concord (the latter of which he never made it to, despite popular lore). Everyone in the colonies was British before the war began. According to Esther Forbes' Pulitzer Prize-winning biography of Revere, based on Paul's own writings, what he really shouted was "The Regulars are out" (p. 250) which was the name that British soldiers were known as at that time and which is also why he didn't call them Redcoats.

Another oft-cited myth about Revere is that he was warned by lanterns hung in Boston's Old North Church as to which route the Regulars were taking that night. As Longfellow's famous 1861 poem goes: "One if by land, two if by sea and I on the opposite shore will be ready to ride and spread the alarm." Likewise then, most Americans believe that Revere was awaiting the signals before beginning his ride. In fact, it was Revere who concluded what route the British were taking and who directed another patriot to hang the lanterns. As Forbes (1942) states, "in spite of the poem, they were not for Paul Revere, but from him" (p. 245).

I am continually amazed how these two mistaken beliefs are pervasively held about what Revere shouted and about him being warned by the lanterns. If you, too, share these mistaken beliefs, ask yourself where you think you learned them. The answer is almost always because you remember hearing them told over and over in school or other settings. As it turns out, a lie repeated often enough often comes to be accepted as truth. Though our teachers or creators, poets, or illustrators of picture books probably never intended to intentionally lie, they did however largely try to simplify the complexity of certain facts which ultimately never were corrected — which is problematic and leads to long-standing misconceptions that sometimes lead to trouble.

Other Tales Simplified and Retold Wrongly

There is a point to my trip down memory lane and sharing about my genuine love of all things Paul Revere because there are current myths being repeated in national, state, and local departments of education and through social and educational media. Instead of shouting "The British are coming!" to signal the beginning of the Revolutionary War, there are a myriad of pleas to action about the so-called Reading Wars such as: "Three-cueing is a model of reading long disproven!" or "Three-cueing harms children!"

However, Paul Revere did not yell “The British are coming” and there is no such thing as a three-cueing system/MSV theory, model, or approach.

No matter how many times bloggers, ill-informed media outlets, or even esteemed legislators repeat this myth, it simply is not true. There are no writings by anyone claiming to have invented either an MSV or three-cueing system theory, model, or approach. When Timothy Shanahan, a well-respected reading researcher and author, was asked on his blog why he didn’t ever write about cueing systems, his reply was “...because I’m not a fiction writer” (Shanahan, 2019).

Table 1. Legislative Anti-MSV Laws From Various States

North Carolina HB 259

Prohibition against **three-cueing system model of teaching students to read.**

“**Three-cueing system**” means a **model** of teaching students to read based on meaning, structure and syntax, and visual cues, also known as “**MSV**”...Local school administrative units shall not use a **three-cueing system** or a curriculum with visual memory as the primary basis for teaching word recognition in any instruction or intervention to students in grades kindergarten through three.” (pp. 125–126)

Arkansas SB 349

(3)(A) A public school district or an open-enrollment public charter school shall not use a program of instruction for students in kindergarten through grade two (K-2) that is based in any practice or intervention program that utilizes:

- (i) The **three-cueing system model of reading;**
- (ii) Visual memory as the primary basis for teaching word recognition; or
- (iii) The **three-cueing system model of reading** based on meaning, structure and syntax, and visual, which is also known as “**MSV**.” (pp. 1–2)

Ohio HB No. 33

“As used in Title XXXIII of the Revised Code, “science of reading” means an interdisciplinary body of scientific evidence that...does not rely on any **model** of teaching students to read based on meaning, structure and syntax, and visual cues, including a **three-cueing approach**. As used in this section, “**three-cueing approach**” means any **model of teaching students to read based on meaning, structure and syntax, and visual cues.**” (p. 795)

Yet shockingly, actual laws have been passed that expressly define and restrict the use of a “three-cueing system or MSV model of reading” now exist in more than a dozen states with similar legislation brewing in others (see Table 1). Remarkably similar in language and scope, they are good examples of “copycat bills” which the Center for Public Integrity (2019) defines as bills disguised as the work of lawmakers which, in actuality, are dreamed up and written by corporations, industry groups, and think tanks to quietly advance the agenda of those who wrote them. Regardless of where such laws originated, they all share common misconceptions, enumerated in the next sections, which may make interpretation and implementation difficult or impossible.

One prevalent misconception in these copycat bills is the naming of “MSV/three-cueing System” as a “model,” “approach,” or “theory.” Firstly, there is confusion about the terms: a model refers to a general explanation or principle that explains some phenomena. If MSV or three-cueing system were an actual model of reading, one would expect to find any number of references in educational journals and scholarly writings about this theory or model. However, a simple search using the Educational Research Information Center (ERIC) looking for either “MSV Model” or “Three-Cueing System Model” in peer-reviewed research yields zero results! A similar search for such things as an “MSV theory” or “three-cueing system theory” also yields zero results.

Likewise, some copycat laws, also mislabel MSV/three-cueing as an approach, which is different from a model in that it is a specific method or technique used as a practical application or guide about how to implement a theory or model. Again, a simple search for both “MSV approach” or “three-cueing approach” yields zero results in any peer reviewed sources. In essence, using the ERIC engine to search tens of thousands of peer-reviewed studies and articles in over 2,000 periodicals, books, and grey literature (like notes and white papers from various research organizations) published between 1966 and the present, not a single entry for MSV/three-cueing model, theory, or approach can be found.

Like people repeating simplifications about Paul Revere, the authors of these laws also repeated mistaken facts without verification or research, or used simplified terms that they thought would define what needed to be eradicated to save us from an impending reading crisis. Because a three-cueing system model does not appear

to be an actual thing, these dozen states with current anti-MSV legislation—and those states with pending legislation who may choose to copycat also—may have significant difficulty enforcing this or any law prohibiting something which does not exist. In states with such laws, district officials or school administrators could effectively argue that since there is no such thing as a three-cueing systems/MSV model, theory, or approach of reading, such laws do not apply to them and could be ignored entirely as unenforceable.

Paul Revere did not wait for or use lantern signals from the Old North Church and Marie Clay did not invent or espouse a three-cueing systems model, theory, or approach.

Yet another flaw in these anti-MSV laws is that they directly or indirectly ban specific interventions, such as Reading Recovery® or Leveled Literacy Intervention practices, claiming that Marie Clay invented MSV and the three-cueing model of reading. Clay developed her theory of reading as a clinical psychologist looking for answers about how children's literacy learning developed and progressed. Her 1966 dissertation included extensive longitudinal analyses of early literacy behaviors of proficient readers. This initial research combined with years of continuous study across a myriad of interdisciplinary fields including linguistics, cognitive psychology, communication science, language development, neuroscience, and developmental psychology led her life-long quest for theoretical explanations. Like all theorists, Clay did not develop her theory in isolation; it was predicated on the works of other existing researchers and theorists, including Bruner, Elkonin, Vygotsky, Rogoff, Wood, Luria, Stanovich, and many others. In particular, Clay was most interested in two existing models: Rumelhart's Interactive Model and Holmes/Singer's Model of Subsystems.

Clay (2001) had extensively documented that young readers seemed to operate using multiple sources of information. She noted that what she had observed was also closely reflected in Rumelhart's interactive model, which likewise posited that all knowledge sources (which included symbols and their features, letter knowledge, letter cluster knowledge, word knowledge, syntactic knowledge, and semantic knowledge) are, in essence, potential decision-making sources which work interactively as learners are reading. Rumelhart (2013) theorized that such interactions with multiple sources

of information led a reader to hypothesis generation and decision making as they attempted to solve problems. These tentative decisions are then accepted, adjusted, or abandoned as more information is encountered by the reader. In short, as readers encounter letter features, sounds, clusters, and words while reading, further information regarding syntactic, contextual information at the phrase or sentence level and semantic information from the text or background information converge to influence their tentative decisions about known and unknown words. As Rumelhart summarized, "...all of the various sources of knowledge, both sensory and non-sensory, come together at one place, and the reading process is the product of the simultaneous joint application of all the knowledge sources" (2013, p. 732).

Clay also was influenced by Holmes and Singer's model of working systems which added a neurological dimension to her complex theory of reading. Holmes (1970) theorized that when readers have acquired necessary working systems, which he defined as a set of sub-abilities mobilized for the purpose of solving a particular problem, these working systems and sub-strata systems are then neurologically linked in the brain. Singer (1994) further theorized that learning to read involves the construction of complex problem-solving structures, brain systems or functional neural networks — which "can be sequentially and hierarchically organized to perform a particular literacy task. Such systems are related to improvement in the speed and power of reading" (p. 913).

But, neither model addressed the unique challenges or changes in learning that encompass initial literacy acquisition. Clay (2001) had documented the complex change over time for many young readers as they moved from slow, uncoordinated problem solving while working with limited sources of information towards rapid, parallel processing, and self-correcting behaviors using all sources of information effectively and efficiently — which led to her own new theory which she described as a literacy processing theory. This complex theory, as Doyle (2013) explains, combines and adds to the work of Rumelhart and Holmes/Singer to account for the

...neural networks, perceptual and cognitive systems, which are constructed by the learner as a result of engagement in reading continuous texts to discern meaningful messages. For the proficient reader after one year of instruction, these

working systems have the capacity to function as self-extending systems, allowing the learner to expand...competencies in acts of processing texts of increasing demands. (pp. 646–647)

Clay's literacy processing theory is complex and multifaceted, and she cautioned that "if literacy teaching only brings a simple theory to a set of complex activities, then the learner has to bridge the gaps created by the simplification" (2015, p. 105). Though she was writing about the potential problems created for children, the same applied to all learners, including adults, which is why she was reticent to simplify with a diagram how reading worked.

Across nearly 5 decades of extensive writings, Clay only provided two versions of a diagram meant to illustrate some of the potential sources of information used by readers, how those sources might interact, and to describe the various invisible behaviors engaged in by readers. Between 1972 and 2004, Clay sometimes referred to a 'square' diagram (Figure 1) which shows four, not three, sources of information used by readers.

From 2005 onward, she modified the square and opted instead for a 'cloud' diagram to further illustrate the nonlinear nature of reading, again showing more than three sources of information (Figure 2).

Of further importance is what she actually wrote to accompany these diagrams over the course of 40 years,

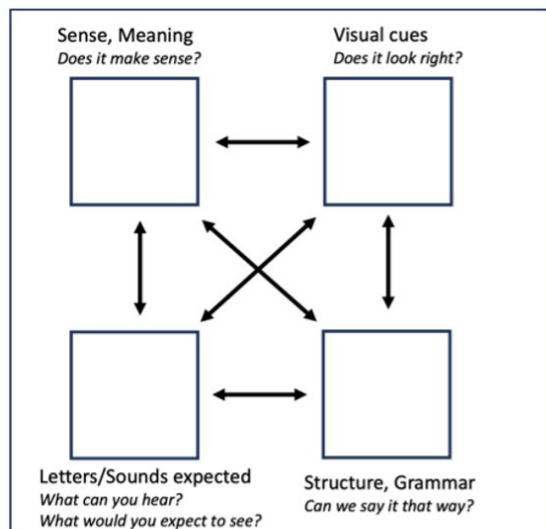
which can be seen in Table 2. Here Clay outwardly cautions against viewing these diagrams as models of reading and reiterates that there are far more than three cues or sources of information used by readers.

By examining Clay's literacy processing theory, the limited actual diagrams she used across her writings, and by reading the supporting descriptive language she used every time she published them, several truths become transparent.

- Clay did not subscribe to the belief that there are only three cues involved in reading because her theory, depictions, and descriptions all demonstrate that there are many sources readers used by readers.
- Clay did not regard these diagrams as models of reading but were instead labeled grossly simplistic drawings meant to help teachers consider the complexity of thinking processes involved (Clay 1993, 2005, 2016).
- Clay did not perceive a hierarchy of sources and attempted instead to use multiple and reciprocal arrows to demonstrate that all sources were interactive with one another.

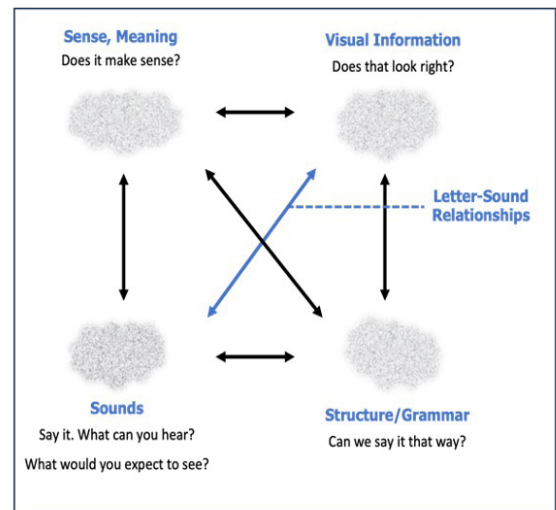
Once again, district or school administrators faced with compliance to state policies that ban the use of Reading Recovery or Leveled Literacy Intervention (Fountas & Pinnell, 2009) or any other classroom practice associ-

Figure 1. Clay's Square Diagram

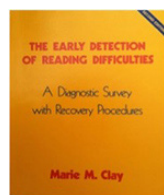


Clay, 1993, *Reading Recovery: A Guidebook for Teachers in Training*, p. 42

Figure 2. Clay's Cloud Diagram

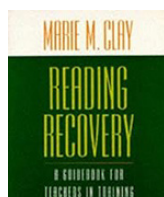


Literacy Lessons Designed for Individuals, Part II, 2005, p. 112;
Literacy Lessons Designed for Individuals, 2nd Ed., 2016, p. 129

Table 2. Clay's Descriptions of Multiple Sources Diagram, 1972–2016

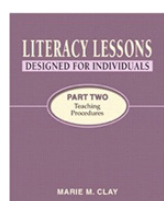
1972

“From the theory of reading behind these recovery procedures there are **four types of cues** any two of which may be cross-checked to confirm a response. They can be represented by a square.” (1972, pp. 58-59)



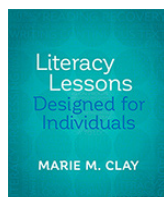
1993

“From the theory of reading behind these recovery procedures there are **many sources of information in texts** but during this program the teachers will pay particular attention to **four kinds of information** which young readers must learn to look for. Different kinds of information may be checked one against another to confirm a response. This square is a grossly simplistic diagram and **is not a model** of what amazing links the brain is making. The diagram is drawn to help the teacher think around the ‘unseen’ behaviors engaged in by the reader.” (1993, p. 42)



2005

“According to the theory of reading behind these procedures, **there are many sources of information in texts**. In Reading Recovery lessons, teachers pay particular attention to **four kinds of information** that young readers must become aware of and learn to work with. Different kinds of information may be checked, one against another. This square is a grossly simplistic diagram and it is not a model of what amazing links the brain is making. The diagram is drawn to help the teacher think about some unseen strategic activities that the reader might have used. (Note that letter-sound and sound-to-letter links are represented by the two-way arrow from the sound box to the visual box.” (2005, p. 112)



2016

“According to the theory of reading behind these procedures, there are **many sources of information in texts**. In Reading Recovery lessons, teachers pay particular attention to **four kinds of information** that young readers must become aware of and learn to work with. Different kinds of information may be checked, one against another, to confirm a response as a first step towards further searching. This is a grossly simplistic diagram and **it is not a model** of what amazing links the brain is making. The diagram is drawn to help the teacher think about some unseen processing activities that the reader might have used. (Note that sound-to-letter links are represented by the two-way arrow between sounds and visual information.” (2016, p. 129)

ated with Marie Clay can demonstrate that such policies are not binding in local decision making because Clay's theory is vastly different from what is banned.

Origins of the Myth

As researcher Maren Aukerman (2022) writes on behalf of the Literacy Research Association, “...cueing’ is not an instructional approach, reading technique, or guessing game – except in the minds of certain detractors. What the reporters are likely referring to is ... a framework for analyzing errors to understand children's decoding attempts.” Just as myths surrounding Paul Revere likely originated from inaccuracies recounted from the popular poem, “The Midnight Ride of Paul

Revere,” written by Longfellow a century after the Revolutionary War, such may be the case with Reading Recovery as well. The literacy processing theory that underlies Reading Recovery is often mischaracterized or labeled as an MSV or three-cueing systems theory may very well stem from more recent sources from Marilyn Adams, Mark Seidenberg, or from the misguided musings of podcaster, Emily Hanford.

Marilyn Adams

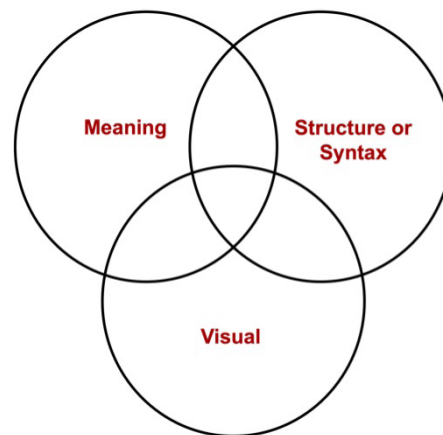
In 1998, Marilyn J. Adams, a foundational thinker associated with the science of reading movement wrote a chapter entitled, “The Three-Cueing System,” which appears among a collection of other authors in the

book, *Literacy for All*. Interestingly, Adams describes her first encounter with “three-cueing system” (Figure 3) came in the form of a question from a teacher. The term, at that time, was not recognized by Adams so she asked the teacher to draw the now infamous three-circle Venn diagram and explain what it was. Though Adams did not recognize the term three-cueing system from the worlds of academia, she did quickly recognize that what this diagram represented was what underpins all theories of reading, including her own:

Not only was the logic of this schematic clear to me, its evident message was thoroughly familiar as well. That the meaning of text is constructed by the reader as jointly determined by its lexical, semantic, and syntactic constraints had been a central theme of the reading literature in the late 1970s and early 1980s...It was, as a matter of fact, a literature to which I, too, had contributed (Adams, 1980, 1982; Adams, M. J. Adams, Anderson, & Durkin, 1978; Adams & Bruce, 1982; Adams & Collins; 1979; Huggins & Adams, 1980). I was delighted to find that the essence of the researchers’ collective effort had so enduringly impressed the practitioners before me. (pp. 75–76)

Over time, Adams (1998) described her “idle curiosity” as she encountered and collected different versions of the diagram until she realized the diagram was causing her difficulty in some of her communication with practitioners. “The problem, to my mind, was not the schematic but some of the interpretations that had become attached to it” (1998, p. 77). In short, this led Adams to seek out the diagram’s origins which led her towards several prominent reading researchers and theorists including Ken Goodman, Frank Smith, and Marie Clay. Though Adams concluded that “the description of reading in terms of semantic, syntactic, and graphophonemic cueing systems seems best attributed to early work by Ken Goodman” (p. 81) she could not attribute the diagram to him either. While Adams did recount an employee that she spoke to from an Australian publisher via an internet query who named Carolyn Burke, Ken and Yetta Goodman, Brian Cambourne, and Marie Clay as the names behind this schematic. However, recognizing this as an unreliable and unscholarly source, Adams continued her search. Despite her deep dive across all existing sources, she finally located only two scholarly depictions of this diagram at all, one from Reggie Routman in 1994 (the

Figure 3. Adams’ Three-Cueing System Diagram



source of which was not cited) and one from P. David Pearson in a 1976 article. After naming Pearson as the likely originator, Adams restated: “Again, my concerns with the three-cueing system relate not to the schematic, which I find wholly sensible insofar as it goes. My concerns relate instead, and in two major ways, to the interpretations so broadly attached to the schematic” (p. 79) which she enumerates in the remainder of her chapter on the subject. In summation, a careful reading of Adams’ writing shows that her attempts to document the source of this schematic found no scholarly attribution of this diagram to Marie Clay.

In fact, Marilyn Adams was actually fond of the work of Marie Clay and Reading Recovery prior to her 1998 chapter which, again, was more about the misinterpretation that some sources of information were more or less important than others in reading. In the late 1980s, Adams was invited to The Ohio State University to watch Reading Recovery lessons behind the glass and was quite pleased with what she observed. In her 1990 book, *Beginning Reading*, Adams names Reading Recovery as one example of a high-quality beginning reading intervention that included explicit instruction in decoding alongside a focus on text reading and said, “The Reading Recovery program has been methodically designed to establish and secure the whole complex of lower-order skills on which reading so integrally depends. But its goal extends much further” (Adams, 1990, p. 421).

Interestingly, Adams' concerns about the misinterpretations surrounding the three-cueing system Venn diagram in 1998 may have prompted Clay to verbalize a similar concern in what this author believes is her only writing that ever addressed the MSV Venn diagram. Clay (2001) echoed Adams' concerns about individual interpretations when she wrote roughly during the same time period:

...theoretical concepts sometimes get in the way of progress. For example, a claim [from outside of Reading Recovery] that three cue systems are the explanation of processing, or that there is a hierarchy of knowledge sources are two descriptions... proving too narrow to characterize the brain's many complex networks of activity. (p. 302)

Mark Seidenberg

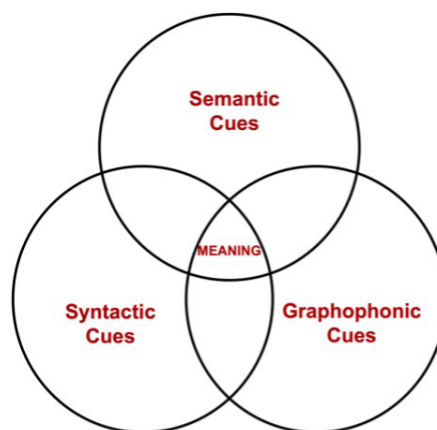
A frequent critic of Reading Recovery who has written about the three-cueing system is cognitive scientist and reading theorist, Mark Seidenberg. In this 2016 book, *Language at the Speed of Sight*, Seidenberg writes about Figure 4:

K-5 teacher has heard of something called the 3-cueing system. It is propagated through websites and slide shows, workshops, and meetings. The origins of the theory are somewhat murky, but it has been circulating since the 1980's. The idea is communicated through illustrations...typically a Venn diagram with three overlapping parts: print knowledge ('graphophonic cues'), syntax, and semantics. Marie Clay proposed a version as a way to help struggling readers who were stuck on a word: they could try different cues to figure it out (get to 'meaning'). The approach is billed as what to say to a child after (or instead of) 'sound it out'. For example, a child having trouble reading the word HOPSCOTCH in THE KIDS PLAYED HOPSCOTCH IN THE PARK could be prompted with questions such as 'What kind of word goes here?' (a noun, a 'syntactic' cue) or 'Can you think of games that are played in a park' (a 'semantic' cue). Together with 'graphophonic' cues (some letters, perhaps their sounds), the child would be able to figure out the word. The overlap in the Venn diagram is meant to convey that cues are combined. Skilled readers are thought to do the same things automatically. (p. 300)

There are several leaps taken here by Seidenberg who is someone usually known to be a careful scholar. In the first sentence, he uses "absolute language" (Beers & Probst, 2016) to say that "every K-5" has heard about this which has never been studied. In terms of scientific writings from researchers, hyperbolic statements are usually avoided because they are not verifiable by any study. (Extreme and absolute language is, however, an indication of bias and is often used for persuasive purposes). Seidenberg then mislabels three-cueing system as a theory, but at least acknowledges that the origins of this 'theory' are murky. Despite his own acknowledgement of this murkiness, he misattributes the Venn diagram directly to Clay, without citation. While Seidenberg is clearly aware of Adams' work (he cites her chapter on three-cueing later), he ignores her findings that this diagram did not originate with Clay nor is it attributable to her from any scholarly works. Next, he mislabels three-cueing system as an approach. Once again, 'theory' and 'model' are synonymous but an 'approach' is different; something cannot be both a theory and an approach at the same time.

But, most egregious of all, is his example. Again, seemingly without regard to actual scholarly study, Seidenberg creates prompts that a supposed reader of Clay's literacy processing theory would actually say if a child was unable to solve the word HOPSCOTCH in the hypothetical example. These prompts show how misinformed this writer is of what Clay's actual theory involves and/or what Reading Recovery professionals would ever engage in. In a review of the over 150

Figure 4. Seidenberg's Cueing System Diagram



prompts cited in Clay's training materials for Reading Recovery, nowhere do any prompts remotely resemble what Seidenberg proposes, and furthermore, there are no prompts anywhere in Reading Recovery that ever encourage a child to guess at a word. Clay writes, "direct the child's attention specifically to a piece of information he needs to solve the problem...Vague prompting leaves the child guessing what you are referring to. Solve the problem together smartly, both participating" (2016, p. 118). If a child comes to a word and has tried nothing with the visual information (orthographic/phonological information), that would be the first prompt to get this child to use the print because "reading begins with looking and ends when you stop looking" (Clay, 2016, p. 48). In fact, Clay outwardly cautions against the practices of inducing a word by giving specific clues such as, "Can you think of games that are played in a park?" so this is never a practice encouraged by Reading Recovery professionals. Clay (2016) also called teachers to be aware of what sources children were neglecting saying, "... the teacher aims to strengthen the child's ability to search flexibly for information from different sources to problem-solve the meanings of text. She is careful to counteract any imbalance in the child's use of information" (p. 137).

Any child who comes to a word and neglects to search the visual information (letters, sounds, clusters, etc.), especially in a word with such generative and decodable parts as the word "hopscotch" would be direct first and foremost to that source that had been neglected. Instead, Clay (2016) suggests that teachers should prompt the reader to search what he already knows that might help him *within* the word:

When the child stops at a new word, prompt him to look, selecting from

Do you know a word that **starts** with those letters?

Look for something that would help you.

What can you **see** that might help?

Do you know a word that **looks** like that?

What can you **hear** that might help? (p. 152)

Clay further advises other steps, including one or more of the following:

- Prompt to the word beginning (initial letter, onset, cluster) or to the ending (inflection or rime or to any known part).

- The child divides the word with his finger on print or uses a card to mask it in some way.
- The teacher articulates the part clearly (a hearing prompt) and the child locates the part.
- The teacher divides the word in print with finger or masking card. (p. 152)

Seidenberg neglected to research and quote Clay's actual procedures and instead relied upon extrapolations. Yet, despite Seidenberg's less than scholarly approach to Clay's actual theories and works, his misuse of terms, and invented examples, he nonetheless concludes the following about the three-cueing system diagram:

The figure conveys some basic facts. Texts are understood using multiple types of knowledge, including print (orthography), grammar (syntax), and meaning (semantics). These are intrinsic properties of language and writing. Texts cannot be understood without these components (and others); there is no option to skip the syntax or forgo the meanings of words. The figure also incorporates the idea of solving a problem such as word recognition by combining multiple cues, which skill readers do without conscious effort or awareness. (2016, p. 300)

Emily Hanford

The ubiquity of social media allows information and, likewise, misinformation to travel quickly. Recently, educators have seen an increase in claims about research-based implications for beginning reading instruction across social media platforms (Twitter, Facebook, podcasts, op-eds, blogs, etc.). Often written by reporters and or individuals publishing in non-peer-reviewed outlets, the espoused rhetoric frequently relies upon anecdotes and testimonials to make broad generalizations about beginning reading instruction. A third likely source of the proliferation that an "MSV or three-cueing system model, theory, or approach" exists comes from blogger, Emily Hanford. Disguised as factual journalism, her 2019 podcast, *At a Loss for Words*, made the following claim:

For decades, reading instruction in American schools has been rooted in a flawed theory about how reading works, a theory that was debunked decades ago by cognitive scientists, yet remains deeply embedded in teaching practices and curricu-

lum materials...The theory is known as “three-cueing.” The name comes from the notion that readers use three different kinds of information — or “cues” — to identify words as they are reading... In the cueing theory of how reading works, when a child comes to a word she doesn’t know, the teacher encourages her to think of a word that makes sense and asks: Does it look right? Does it sound right? If a word checks out on the basis of those questions, the child is getting it. She’s on the path to skilled reading. (Hanford, 2019)

Hanford, like Seidenberg whom she quotes often, creates many false and convoluted statements that cannot be backed by science. In addition, she claims that this theory is the root of the decline of reading scores in the United States, a claim that is patently false because there are no scientific studies that support this. Firstly, the reading scores of NAEP and other international tests are not in fact declining but have remained roughly the same for more than 3 decades. According to Reinking, Hruby, & Risko (2023), “what is particularly remarkable is that...plotting reading scores on the NAEP across decades results in essentially a flat line, although with a slight upward movement since the outset” (pp. 113–114). Secondly, no scientific study has ever been conducted on what theories are behind all of the instructional materials utilized in every classroom across the entire country over a 30-year period. Simply put, this is false categorically. And then there is the issue of something being “debunked” by science. In order for science to debunk something, it has to exist in order to be studied. Again, I refer to search engines such as ERIC to show that if there were scientific studies that actually debunked three-cueing theory (which was impossible because there is no such thing as a three-cueing system/MSV theory), they would be able to be located and referenced which is likely why she did not cite any source for her claim.

Perhaps, though, it isn’t called a three-cueing system theory at all but is known as something else? Hanford (2019) attempted to explain this as well, while simultaneously linking the theory, like Seidenberg before her, to Marie Clay:

Teachers may not know the term “three-cueing,” but they’re probably familiar with “MSV.” M stands for using meaning to figure out what a word is, S

for using sentence structure and V for using visual information (i.e., the letters in the words). MSV is a cueing idea that can be traced back to the late Marie Clay, a developmental psychologist from New Zealand who first laid out her theories about reading in a dissertation in the 1960. ...Clay developed her cueing theory independently of Goodman, but they met several times and had similar ideas about the reading process. ...Clay built her cueing ideas into a reading intervention program for struggling first-graders called Reading Recovery. (2019)

Once again, without citation, Hanford incorrectly labels MSV a theory, attributes it to Marie Clay and links it to Reading Recovery. As Mora (2023) points out:

Hanford claims that Clay’s theory is a ‘debunked idea about how children learn to read.’ Subsequently, three-cueing is alleged to be a practice that ‘runs counter to how the brain processes print and language’. Again, this claim is made without citing any studies or SoR research base. In actuality, cueing is not “Marie Clay’s theory.”... Researchers who find these claims to be problematic are unable to identify any empirical data to examine to either affirm or challenge such assertions. Journalists and other critics of three-cueing fail to articulate a theoretical framework or to reference specific research studies to support their condemnation of its effectiveness as a practice in reading instruction. Consequently, such claims lack empirical adequacy to support the argument.

Parents, publishers, and politicians have heard or read her messaging and believe they are hearing factual information. Hanford has frequently spoken before state and federal policymakers, and perhaps it was her work that is a source of the factually flawed copycat laws. (For more on the numerous falsehoods and misinformation in Hanford’s works see Thomas Newkirk’s (2024) *The Broken Logic of ‘Sold a Story,’* Paul Thomas’ (2022) *‘Sold a Story’ Continues ‘Science of Reading’ Misinformation Campaign,* or the National Education Policy Center’s (2022) *The Science of Reading Movement: The Never-Ending Debate and the Need for a Different Approach to Reading Instruction.*

As already shown throughout this section, the argument that Marie Clay invented a three-cueing systems model,

theory, or approach is clearly misguided and mischaracterized. Additionally, actual scholarly attribution is sorely lacking as are studies that attempt to tackle the viability of Clay's actual theory. As Tierney and Pearson (2024) pointedly summarize: "Criticisms of the three-cueing system are based on a combination of anecdotal evidence and opinion..." (p. 57).

Clay's literacy processing theory does include reference to readers using many sources of information, but this theory is just one of many other theories that posit the same idea: Both Adams and Seidenberg concluded and verbalized that ALL theories of reading deal with the use of meaning, syntactic, and visual information because these elements are fundamental to actual reading and cannot or should not be avoided. The Simple View of Reading, Scarborough's Rope Model of Reading, the Four-Part Processing Model, etc. all account for and name in various ways the use of semantic, syntactic, and orthographic/phonological information. As Seidenberg admits, "in fact, it [the three-cueing system diagram discussed earlier] is compatible with every theory of reading" (2016, p. 301).

Copycatted state laws mandate further restrictions or requirements about what models, theories, or approaches may be used resulting in an economic boon for certain program publishers (and their developers) who are ready and willing to sell their materials and the professional development required to implement them. In Ohio alone, \$1.68 billion dollars of taxpayer money are flowing out of state coffers into the hands of the fortunate few (Ohio Capital Journal, 2023). Effectively then, many districts were required to throw out millions of dollars of materials wrongly labeled as based on MSV or three-cueing and are now required to shell out even more taxpayer money to replace them with materials with approaches based upon theories or models that still feature the very things outlawed — meaning, structure/syntax, and visual information.

For this reason, state legislators who have not been shown otherwise, are enacting laws which forbid adopting or using materials based upon MSV, which means they have effectively outlawed the use of every model, theory, or approach to reading. Equally problematic is the fact that they have outlawed something that doesn't exist since there is no such thing as an MSV/three-cueing systems model, theory, or approach. In essence,

these laws simultaneously outlaw everything and nothing, leaving districts scrambling for clarity on what is or is not allowable — all the while funneling away precious state and local taxpayer dollars.

Enumerated across her lifetime in various writings, Clay's multifaceted, complex theory of reading—like the young readers she observed—evolved over time as she encountered new findings from her own research efforts and from across a number of related educational fields. The literacy processing theory that underlies Reading Recovery (which is not an MSV or three-cueing systems theory) is best articulated in one of Clay's last works before her untimely death, *Change Over Time in Children's Literacy Development*, a work often neglected or rarely cited by critics. In the book's introduction, Clay described herself as living "in a perpetual state of inquiry, finding new questions to ask, then moving on. I do not have 'a position' or a safe haven where what is 'right' exists...I search for questions which need answers" (2001, p. 3). The idea that her own research or that reading science in general could ever be "settled" was anathema to Clay and to those who are actual scientists. As more information became available, Clay clarified and altered her existing theory and the teaching procedures involved with Reading Recovery.

Getting History Right

Like Paul Revere warning the colonists about British troop movements, Marie Clay also warned Reading Recovery professionals over 40 years ago in 1980 about the very situation that we find at present:

At regular intervals an anxiety-raising article about reading instruction appears in the press purporting to be fair comment but prepared by a journalist whose work-role is not to get to understand the mazes of this complex area but to report what others say. It is not surprising that opinions which simplify the issues get reported. (p. 2)

As a lover of the American Revolution, I strive to keep facts in order and to getting the history right; likewise, as a Reading Recovery professional impacted negatively by legislation and media reports based upon misunderstandings, I am committed to setting the record straight. Because Clay warned us about the inevitability of negative media attention, I take very seriously Clay's

challenge to all teacher leaders “...to become more articulate about what they understand by the term ‘literacy processing’, the theory of reading and writing with which they work” (2001, p. 232). Current statements from some that the ‘science of reading is settled’ are confounding to actual scientists, and many practitioners, because we truly are living during a period of vast amounts of information about reading which continues to add to and change what is known scientifically. However, during this period of increased knowledge, as

We must be vociferous in pointing out the false claims, misunderstandings, and sometimes, outright slander. And we must become better at explaining literacy processing theory and the documented successful translation of theory into practice that we see and work with each day.

iterated recently by Seidenberg et al. (2021), “we know more about the science of reading than about the teaching based on the science of reading” (p. S121).

As Esther Forbes quipped, “Paul Revere started on a ride, which, in a way, has never ended” (1942, p. 247). Likewise, the impact of Marie Clay is ongoing and longstanding. Clay’s theory that describes the development of and changes across reading and writing processes for young learners did not remain theoretical; it was translated into teaching practices, developed and refined over many years, trialed and tested methodically with practitioners working with many learners representing diverse backgrounds across many contexts internationally. To date, Reading Recovery remains the early reading intervention with the most positive-effect research on What Works Clearinghouse, including substantial results from the largest controlled experimental research study ever conducted in the United States (see May et al., 2016). The teaching practices of Reading Recovery bring much to the conversation about how to translate the science into teaching methods that have shown results for millions of children around the globe. Though Clay’s constant search for questions and answers left us with a profound legacy, this legacy is

currently under attack in unwarranted and unethical ways. We must be vociferous in pointing out the false claims, misunderstandings, and sometimes, outright slander. And we must become better at explaining literacy processing theory and the documented successful translation of theory into practice that we see and work with each day.

References

- Adams, M. J. (1990). *Beginning to read: Thinking and learning about print*. The MIT Press.
- Adams, M. J. (1998). The three-cueing system. In J. Osborn & F. Lehr (Eds.), *Literacy for all: Issues in teaching and learning*. (pp. 73–99). Guilford Press.
- Arkansas Act Concerning Practices, Interventions, & Curriculum, Arkansas State Statute §349 (2021). <https://www.arkleg.state.ar.us/Home/FTPDocument?path=%2FBills%2F2021R%2FPublic%2FSB349.pdf>
- Beers, K., & Probst, R. E. (2016). *Reading nonfiction: Notice & note stances, signposts, and strategies*. Heinemann.
- Center for Public Integrity (2019, April 4). *Copy, paste, legislate: You elected them to write new laws. They’re letting corporations do it instead*. <https://publicintegrity.org/politics/state-politics/copy-paste-legislate/you-elected-them-to-write-new-laws-theyre-letting-corporations-do-it-instead/>
- Clay, M. M. (1972). *The early detection of reading difficulties: A diagnostic survey with recovery procedures*. Heinemann.
- Clay, M. M. (1980). *Reading and public concern*. Auckland Council of the International Reading Association.
- Clay, M. M. (1993). *Reading Recovery: A guidebook for teachers in training*. Heinemann.
- Clay, M. M. (2001). *Change over time in children’s literacy development*. Heinemann.
- Clay, M. M. (2005). *Literacy lessons designed for individuals part two: Teaching procedures*. Heinemann.
- Clay, M. M. (2016). *Literacy lessons designed for individuals* (2nd ed.). Heinemann.
- Doyle, M. A. (2013). Marie M. Clay’s theoretical perspective: A literacy processing theory. In D. E. Alvermann, N. J. Unrau, & R. B. Ruddell, (Eds.), *Theoretical models and processes of reading* (6th ed., pp. 636–656). International Reading Association.
- Educational Resource Information Center (ERIC). Institute of Education Sciences website. Search images retrieved September 17, 2024, from <https://eric.ed.gov/>
- Forbes, E. (1942). *Paul Revere and the world he lived in*. Houghton Mifflin Company.

Fountas, I. C., & Pinnell, G. S. (2009). *Leveled literacy intervention*. Heinemann.

Hanford, E. (2019, August 22). *At a loss for words: How a flawed idea is teaching millions of kids to be poor readers*. <https://www.apmreports.org/episode/2019/08/22/whats-wrong-how-schools-teach-reading>

Henry, M. (2023, July 21). *Science of reading enacted in Ohio's new budget*. Ohio Capital Journal. <https://ohiocapitaljournal.com/2023/07/21/science-of-reading-enacted-in-ohios-new-budget/>

Holmes, J. A. (1970). The substrata-factor theory of reading: Some experimental evidence. In H. Singer & R. B. Ruddell (Eds.), *Theoretical models and processes of reading* (1st ed., pp. 187–197). International Reading Association.

Literacy Research Association. (2022, December 7). *The science of reading and the media: Does the media draw on high quality reading research?* <https://literacyresearchassociation.org/stories/the-science-of-reading-and-the-media-does-the-media-draw-on-high-quality-reading-research/>

Longfellow, H. W. (1861). Paul Revere's ride. *The Atlantic Monthly: A magazine of literature, art, and politics* (pp. 7, 27–29.) Ticknor and Fields.

May, H., Sirinides, P., Gray, A., & Goldsworthy, H. (2016). *Reading Recovery: An evaluation of the four-year i3 scale up*. Consortium for Policy Research in Education.

Mora, J. K. (2023, July 3). To cue or not to cue: Is that the question? *Language Magazine*. <https://www.languagemagazine.com/2023/07/03/to-cue-or-not-to-cue-is-that-the-question/>

National Education Policy Center & Deans for Justice and Equity (2022, September 13). *Policy statement on the science of reading movement: The never-ending debate and the need for a different approach to reading instruction*. <http://nepc.colorado.edu/publication/science-of-reading>

Newkirk, T. (2024). *The broken logic of "sold a story": A personal response to "The Science of Reading."* <https://literacyresearchcommons.org/resources/>

North Carolina Budget Bill, North Carolina State Statute §259 (2023). <https://www.ncleg.gov/BillLookup/2023/H259>

Ohio Budget Bill, Ohio State Statute, §33 (2023). https://search-prod.lis.state.oh.us/api/v2/general_assembly_135/legislation/hb33/06_EN/pdf/

Reinking, D., Hruby, G. G., & Risko, V. J. (2023). Legislating phonics: Settled science or political polemics? *Teachers College Record*, 125(1), 104–131.

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Rumelhart, D. E. (2013). Toward an interactive model of reading. In D. E. Alvermann, N. J. Unrau, & R. B. Ruddell (Eds.), *Theoretical models and processes of reading* (6th ed., pp. 719–747). International Reading Association.

Seidenberg, M. S., Borkenhagen, M. C., & Kearns, D. M. (2020). Lost in translation? Challenges in connecting reading science and educational practice. *Reading Research Quarterly*, 55(S1), S119–S130.

Singer, H. (1994). The substrata-factor theory of reading. In R. B. Ruddell, M. R. Ruddell, & H. Singer (Eds.), *Theoretical models and processes of reading* (4th ed., pp. 895–927). International Reading Association.

Seidenberg, M. S. (2016). *Language at the speed of sight: How we read, why so many can't, and what can be done about it*. Basic Books.

Shanahan, T. (2019, March 23). Shanahan on literacy [Blog]. *Is is a good idea to teach the three-cueing systems in reading?* <https://www.shanahanonliteracy.com/blog/is-it-a-good-idea-to-teach-the-three-cueing-systems-in-reading>

Thomas, P. (2022, November 5). 'Sold a story' continues 'Science of Reading' misinformation campaign. <https://radicalscholarship.com/2022/11/05/sold-a-story-continues-science-of-reading-misinformation-campaign-a-reader/>

Tierney, R. J. & Pearson, P. D. (2024). *Fact-checking the Science of Reading: Opening up the Conversation*. Literacy Research Commons. <https://literacyresearchcommons.org>