

Code Breaker

The code breaker is able to effectively decipher a symbol system. In Freebody and Luke's (1990) model, the code breaker is able to interpret the meaning of letters in traditional print texts, recognize the sounds associated with letters, and use letters and the sounds they represent to form words and sentences both in reading and writing. Acknowledging a literate individual as a code breaker is important for history teachers for three reasons. First, history teachers must develop instructional accommodations for students who struggle with breaking the code in traditional writing – students who lack basic reading skills. History teachers can accommodate struggling readers by providing audio recordings of text, allowing parents to read with students on homework assignments, finding simple texts, or modifying complex texts into simpler language. Additionally, teachers must become involved in helping students resolve this serious threat to their academic and social wellbeing. Although it is not the primary responsibility of a history teacher to build students' ability to decode in the traditional sense, when he/she identifies a student who cannot read, the history teacher should seek the resources provided by the school, such as reading teachers, counselors, and special education departments, in order to help that student. The focus of this book is not on building students' ability to decode written text.

Second, traditional print texts sometimes contain unfamiliar conventions or symbols – codes to which history students have had no exposure. For example, the symbols BCE and CE are commonly used in place of the more familiar symbols BC and AD in working with dates. Students might need to be taught the meaning of these symbols. Similarly, students might be unfamiliar with other symbols in historical print texts, such as the “long s” symbol, commonly used in the 18th century, which looked like the letter f but represents the sound of the letter s. Further, old handwritten documents in cursive script can be hard for students to decode. When students can't decode, the teacher can either change the text, by transcribing or translating it, or change the students by teaching them new decoding strategies.

Third, when building historical literacies, the concept of code breaking must be projected onto the variety of sources used in historical inquiry, such as the ability to decode the symbolic images in a political cartoon. Much of Mr. Nguyen's frustration with students stemmed from their inability to decode the political cartoon and his failure to recognize their struggles as a decoding issue. Different formats of text, such as political cartoons, propaganda posters, artifacts, music, photographs, artwork, radio broadcasts, and debates, use different symbolic codes. When a history teacher exposes students to new sources, it is his/her responsibility to teach students to negotiate that unique symbol system. This process is part of building students' historical literacies.

To clarify, many historical sources use symbol systems that are unfamiliar to students, and, for that, to the language arts teacher and others outside of the discipline of history. For instance, a cartogram is a map with the relative size of states or nations distorted in order to represent a statistic other than land shape and size. A cartogram that represents world population expands China and India and shrinks Canada and Australia (see Figure 3.2). Someone unfamiliar with the structure of a cartogram might have difficulty decoding what the shapes and sizes mean. However, with brief decoding instruction, a cartogram becomes a valuable resource for learning history. Musicians, artists, political cartoonists, and others have unique symbol systems that require some decoding, and history teachers cannot assume that students have the skills needed to decode the multiple genres that are useful in studying history. Instead, a teacher should be sensitive to students' decoding needs and adjust instruction appropriately. Before history students can use historical texts as evidence, they must be able to decode the symbolic system associated with constructing meaning with that text.

Meaning Maker

The meaning maker constructs meaning with the code that has been broken. In traditional reading, the meaning maker can summarize a passage, demonstrating basic comprehension. Similarly, in working with non-traditional texts, such as a table or painting, the meaning maker can summarize the factual information

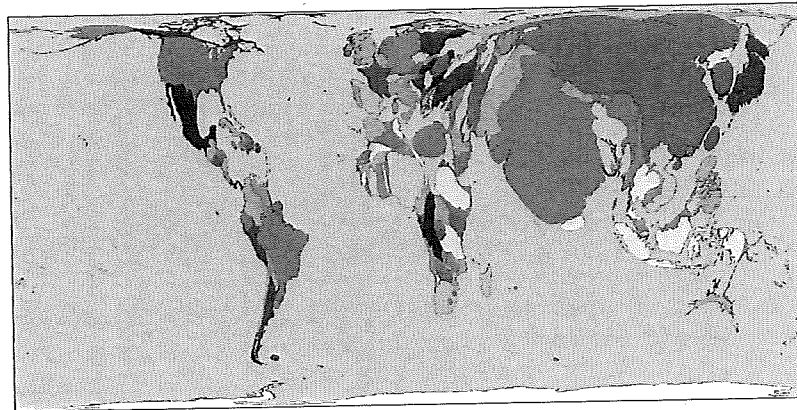


FIGURE 3.2 A cartogram illustrating relative population by nation (© Copyright SASI Group (University of Sheffield) and Mark Newman (University of Michigan)).

contained in the table or describe the subject of a painting. It should be noted that code breaking and meaning making go hand in hand. For example, as an individual attempts to break the code and find meaning in a table from an early 20th century census, he or she would have to identify the meaning of numbers located in columns and rows (see Figure 3.3). Doing so would involve some traditional decoding – reading the name of the country at the top of each column and the state listed to the left of each row; some numerical decoding – reading the numbers located in each cell; and some structural decoding – understanding the meaning of columns and rows. The ability to break this code allows individuals

Table 33 – Continued.		PERSONS								
DIVISION OR STATE AND CENSUS YEAR.		Total foreign born.	Northwestern Europe.							
			Eng-land.	Scot-land.	Wales.	Ireland.	Ger-many. ¹	Nor-way.	Swed-en.	Den-mark.
MIDDLE ATLANTIC.										
New York:										
1	1910.....	2,748,011	146,870	39,437	7,464	367,889	436,011	25,013	53,705	12,700
2	1900.....	1,900,426	135,686	33,862	7,304	425,553	499,820	12,601	42,708	8,700
3	1890.....	1,571,050	144,422	35,332	8,108	483,375	498,602	8,602	28,430	6,200
New Jersey:										
4	1910.....	660,788	50,375	17,512	1,202	82,758	122,880	5,351	10,547	5,000
5	1900.....	431,884	45,428	14,211	1,195	94,844	121,414	2,200	7,337	3,800
6	1890.....	328,975	43,785	13,163	1,069	101,059	106,181	1,817	4,159	2,400
Pennsylvania:										
7	1910.....	1,442,374	109,115	32,046	20,255	165,109	195,202	2,320	23,467	3,100
8	1900.....	985,250	114,831	30,380	35,453	205,999	226,796	1,803	24,160	2,100
9	1890.....	845,720	125,145	32,081	38,301	243,836	230,516	2,238	19,346	2,100
EAST NORTH CENTRAL.										
Ohio:										
10	1910.....	598,374	43,347	10,705	9,377	40,062	175,095	1,110	5,522	1,100
11	1900.....	458,734	41,745	9,327	11,481	55,018	212,829	639	3,951	1,100
12	1890.....	459,293	61,027	10,275	12,905	70,127	235,668	511	2,742	1,100
Indiana:										
13	1910.....	159,663	9,783	3,419	1,498	11,260	62,179	531	5,081	1,100
14	1900.....	142,121	10,874	2,805	2,083	16,306	77,811	384	4,673	1,100
15	1890.....	146,205	11,200	2,948	888	20,819	84,900	285	4,512	1,100
Illinois:										
16	1910.....	1,205,314	60,863	20,755	4,091	93,455	319,199	32,013	115,424	17,000
17	1900.....	966,747	64,390	20,021	4,364	114,563	369,080	29,979	109,147	15,000
18	1890.....	842,347	70,510	20,465	4,138	124,498	338,332	30,339	80,514	12,000
Michigan:										
19	1910.....	597,550	42,737	9,952	789	20,434	131,589	7,633	20,374	6,000
20	1900.....	541,653	43,839	10,343	839	29,182	145,292	7,582	28,956	6,000
21	1890.....	543,880	55,338	12,068	789	39,065	135,509	7,795	27,366	6,000
Wisconsin:										
22	1910.....	512,865	13,059	3,885	2,507	14,040	233,384	57,000	25,739	16,000
23	1900.....	515,971	17,995	4,609	8,350	23,544	268,384	61,575	28,100	16,000
24	1890.....	519,199	23,033	6,494	4,297	33,300	269,819	65,698	20,157	13,000
WEST NORTH CENTRAL.										
Minnesota:										
25	1910.....	543,595	12,139	4,373	1,023	15,859	109,628	105,803	122,428	16,000
26	1900.....	505,318	12,022	4,810	1,288	22,428	125,191	104,895	115,470	10,000
27	1890.....	467,356	14,745	5,315	1,470	28,011	116,955	101,169	99,913	14,000
Iowa:										
28	1910.....	273,765	16,789	5,162	2,434	17,756	98,759	21,924	28,763	17,000
29	1900.....	305,920	21,027	6,425	3,091	28,321	123,277	25,634	29,875	17,000

FIGURE 3.3 A portion of a table from the 1910 census.

Source: Durand & Harris (1913).

to then begin to construct meaning, discovering, for example, that there were thousands of immigrants from Sweden who settled in Minnesota in the mid 1800s (Durand & Harris, 1913).

It should be noted that sometimes the meaning that readers construct is highly subjective, such as in listening to a piece of music or viewing abstract art. In all cases, the making of meaning integrates both the readers' background knowledge and the content of the text being read. In some cases, two people from different backgrounds will comprehend the same text differently, a notion understood very well by historians. Even in cases where the construction of meaning is highly subjective, the teacher can discern comprehension problems. For example, struggling readers often rely heavily on background knowledge rather than the text during the meaning-making process, reaching conclusions that are unwarranted given the evidence in the text. Such was the case with Isaac, who thought the political cartoon made a statement about the impact of the oil industry on octopus habitat. Teachers can assess students' capabilities as code breakers and meaning makers by asking comprehension questions, such as "What is the main idea of this paragraph?" "What event does this painting depict?" "How many tons of steel were produced in Pittsburg in 1910?" When a teacher identifies comprehension problems he or she should provide instruction to address students' needs as code breakers and meaning makers.

Because historians, as seasoned readers, often engage in code breaking and meaning making without conscious effort, these two elements of literacy are often left out of the discussion of historical reasoning. However, code breaking and meaning making are not automatic with many students. Thus, it falls on the shoulders of history teachers to help their students with these two important elements of historical literacy, prerequisites for more sophisticated analyses. As is the case with code breaking, if students struggle with meaning making, the teacher can either alter the text, by providing a modified, simplified translation (as is done with most of the texts used in lessons on the Stanford History Education's website), or alter the reader, by fostering in him/her an improved ability to comprehend. The approach the teacher chooses should be based on his/her instructional objectives. As a student grows in historical literacy he or she becomes increasingly capable of constructing meaning (code breaking and meaning making) with an increasing number of text genres and increasingly complex texts.

It should be noted that historical meaning making can be tricky for students because historical questions require historians to seek for meaning that is often very different from the meaning intended by the writer. The historian's interest may not be in the message of the text, but in its subtext, and the message that it sends about the historical period in question. For example, the writer of a letter from colonial Massachusetts might have intended to give a description of the local native cultures to a friend in England. However, a historian might use such a document to construct meaning about the effects of Puritan religious doctrines on colonists' beliefs about Native Americans. As Lee states "historians can ask

questions about historical sources that those sources were not designed to answer" (2005, 37). Thus students need to seek for the meaning in texts that answers historical questions rather than simply the literal meaning intended by the author. Students/historians, and not the text, are the meaning makers.

Text Critic

Freebody and Luke (1990) further describe proficient readers as text critics, critically evaluating texts. Information Age technologies give individuals unprecedented access to ideas, information, and opinions. Good readers are able to screen incoming information in order to ascertain its relevance, accuracy, and usefulness. Researchers have found, however, that many students struggle to critically evaluate information, particularly when it is found online. For example, Leu and his colleagues (2007) discovered that 7th grade students accepted information on a bogus website about the Northwest Tree Octopus, a fictional species, because it was rich in details, interesting, and had colorful images (which had been digitally falsified). Even when directly confronted by a researcher and told that the site was inaccurate, some of the students continued to argue its reliability (Leu, *et al.*, 2007). One by-product of building students' historical literacies is increasing their ability to think critically about all of the texts to which they are exposed.

As described above, historians are, above all else, critical readers. They do not accept information found in texts at face value but they interpret it based on its source and how it relates to other texts. Because history requires this type of critical analysis of texts, history classrooms are an ideal location to nurture students' critical thinking. History teachers must encourage students to question every author (McKeown, Beck, & Worthy, 1993), including the textbook author; to recognize that history is always interpretive in nature, and thus open to revision; and to search for the voices of those silenced in the traditional historical narrative. Lee suggests that "Once students begin to operate with a concept of evidence as something inferential and see eyewitnesses not as handing down history but as providing evidence, history can resume once again; it becomes an intelligible, even powerful, way of thinking about the past" (2005, 37). Much of the basis for the difference between historians' reading and history students' reading is the lack of experience for most students in engaging as a text critic.

Text User

Freebody and Luke (1990) label the third role of the reader as that of a text user. After reading a novel, a text user wants to talk about it. Text users conduct Internet searches with a practical purpose in mind. They read textbook passages in order to prepare for an exam. They find in a table answers to questions that the teacher poses. Text users write with a purpose in mind, for example using digital media to remain in contact with friends. Good readers find ways to apply the understandings that they construct with texts, and quite often those applications involve authentic and self-initiated writing.

Historians provide an excellent model of professionals who use text. The work of historians is to gather and use evidence of a variety of genres to develop and support interpretations of the past. Historians' reading and writing is always purposeful. Early in their research, during archival work, historians search for texts that are relevant and useful. They evaluate evidence in terms of their purposes – does it support or conflict with their emerging interpretations? As historians gain confidence in their understandings, they reflect on how they will use the evidence to persuade others that their interpretations are sound. As they write, they quote or paraphrase texts as evidence. Thus, historians spend the bulk of their research time acknowledging a need for text, searching for appropriate text, and determining how they will use various texts. The work of historians revolves around the use of texts for particular, discipline-appropriate purposes.

Often, in history classrooms, students are asked to use texts in a manner that is irrelevant to them, uninteresting from their perspective, and only indirectly related to historical literacies. Answering the questions at the end of a chapter in a history textbook is certainly a way to require students to use text. Such an assignment might build students' general literacies, particularly the skills of skimming and summarizing. However, it does not require students to use texts as a historian would, and so, does not build students' historical literacies. One of the challenges and joys I experienced in teaching history was in developing activities that required students to engage in authentic historical inquiries – to use historical texts in discipline-appropriate ways. In the vignettes and chapters of this book, I describe ways students might use various texts to build historical interpretations.