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ABSTRACT

This paper reports on a study that represents a new approach to understanding early and middle grade children's development of historical time awareness. The study sought to embed children's time awareness in a sociocultural framework, and to move beyond linguistic symbol systems to incorporate visual data sources. The researchers began with three assumptions: (1) people make sense of and to one another to the extent that they share ways of making meanings; (2) people from different communities tend to have different ways of making meaning so that historians, as a community, tend to make sense out of historical data differently than physicists might; and (3) if educators are to communicate with children about history, they need to understand children's sense making in this area. The paper argues, in conclusion, that history, especially for children, is not a single domain. Rather, history is made up of intersecting domains, each marked by semiotic practices that provide the context against which, history, whether written, oral, or visual, is recognizable and meaningful. In order to better understand children's thinking about time specific historical material, the study drew on a cross disciplinary framework, relating social semiotics, film, and media theory to the small body of work on children's historical/chronological thinking already extant. An appendix of nine historical photographs, and an appendix outlining interview protocol conclude the paper. (Contains 42 references.) (Author/DK)

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They Still Use Some of Their Past: Historical Salience in Elementary Children's Chronological Thinking

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Introduction

> A work, or a diagram, or a gesture does not have meaning. A meaning has to be made for it, by someone, according to some set of conventions for making sense of words, diagrams, or gestures.
>
> Lemke (1991, p. 186)

The study reported here represents a new approach to understanding early and middle grade children's development of historical time awareness. Almost all previous research on the development of children's understanding of historical time has been disembedded and based on linguistic symbol systems (i.e. narrative, expository texts and/or lectures). Yet it is clear that these are not the only ways in which children come into contact with historical data. In fact, children are quite likely to encounter history embedded in visual, "environmental" forms—pictures, films, art and artifacts, the built environment. In this study, we sought to embed children's time awareness in a sociocultural framework, and to move beyond linguistic symbol systems to incorporate visual data sources. We begin with three assumptions; (1) people make sense of and to one another to the extent that they share ways of making meanings, (2) people from different communities tend to have different ways of making meaning (thus, historians, as a community, tend to make sense out of historical data differently than physicists might) and, (3) if we are to communicate with children about history we need to understand children's sense making in this area. We argue, in conclusion, that "history," especially for children, is not a single domain. Rather, history is made up of intersecting domains, each marked by semiotic practices that provide the context against which history—whether written, oral or visual—is recognizable and meaningful.

In order to better understand children's thinking about time-specific historical material, we drew on a cross-disciplinary framework, relating social semiotics, film and media theory to the small body of work on children's historical/chronological thinking already extant. Cognitive theorists increasingly recognize that human cognition partakes of both domain-specific and domain-general attributes (Keil, 1990; Levine, Resnick, & Higgins, 1993; Sternberg, 1989). They also recognize that the boundaries of what constitutes a "domain" are open to question: Keil (1990) and Wellman and Gelman (1992) note that the concept has been used in widely divergent ways, and Alexander and Judy (1988) suggest that domains have been identified as much out of convenience as empirical choice. Criticisms notwithstanding, the impact of domain-specific perspectives has been undeniable, and the proposition that conceptual organization and reasoning abilities differ significantly in different areas of thought is now widely accepted (Ceci, 1989; Holyoak & Spellman, 1993; Levine, Resnick, & Higgins, 1993; Wellman & Gelman, 1992).

This acceptance of the role of domain-specific cognition has resulted in renewed interest in two areas largely ignored in work on the "architecture" of the mind or global stages of development—the *content* of knowledge acquisition, and the *context* in which cognition occurs (Holyoak & Spellman, 1993; Cole, 1991; Damon, 1991).

With regard to content, several researchers have investigated the way in which children use their everyday experience to build understandings of the physical, biological, and social worlds; although these intuitive understandings are often quite robust and help children make sense of their experiences, they frequently conflict with adult or scientific understandings (reviewed in Minstrell, 1989; Wellman & Gelman, 1992; Vosniadou & Brewer, 1992). Although science educators have identified a wide variety of these beliefs and investigated the way in which they influence learning, the attempt to document the nature of students' understanding or beliefs in history is in its infancy. (Among the rare exceptions are Brophy, VanSledright & Bredin, 1992 and VanSledright & Brophy, 1992.) Children's experiences of history differ so fundamentally from their experience in other aspects of the natural or social worlds, however, that the search for "naïve theories" in history may be unproductive. Children's understanding of physics is based on their direct experience with moving objects, and their understanding of other people is based on their interactions with them; but understanding of history—at least any history which predates one's birth—is always indirect, mediated through their social and cultural milieu.

The importance of the mediated nature of knowledge points to the second major impact of the domain-specific perspective—the concern with *context.* Much recent work has proceeded from the assumption that human cognition and learning can only be understood by placing them in the multiple contexts—interpersonal, structural, cultural, and historical—in which they occur. From this perspective, thought is constituted in part or in whole by the community in which it is situated. To understand how people think and learn, then, one must understand the social, cultural, and historical basis of that thought; rather than attempting to examine an individual's privately constructed meaning, one must look to the way in which social interaction, structural and cultural processes, and historical heritages shape meaning. (For basic statements and reviews of some of the key contributions in this literature, see Brown, Collins, & Duguid, 1989; Laboratory of Comparative Human Cognition, 1983; Lave, 1991; Levine, Resnick, & Higgins, 1993; Resnick, 1991; Rogoff, 1991; Wertsch, 1991.)

Recognizing that cognition is situated in human communities recasts the question of what constitutes a domain; from this perspective, domains appear less as naturally-occurring components of the mind or universe than the result of social discourse. Academic disciplines—whether physics or history—can be seen as both shapers and products of particular discourse communities (Levstik & Pappas, 1992). "Learning history," then, involves children's developing facility with the symbolic forms in use in the several history communities to which they may belong and to which educators want to introduce them. One of these symbolic forms is chronology— ordering events in linear time; another is the visual text[1]— capturing a moment in time.

The notion of symbolic *form* focuses attention, not just on the context within which learning occurs, but on the form of the content as it is presented. In particular, there has been renewed interest in the impact of visual texts on learning. Research in this area has been going on for some time (Eisner,1985; Gardner, 1982; Winner, 1982; Arnheim, 1981; Olson,1974), but only recently has it focused on history, and then generally on adolescent cognition, not younger children's thinking (cf. Epstein,1994; Singer, 1991). Importantly, these works point out some of the distinctions between the visual symbol and the event it represents. The most obvious distinction is that while an actual event is ephemeral, changing before one's eyes, still images are fixed in time. They can be contemplated and analyzed undisturbed by the changing moment, by movement or the emotional fluctuations that were part of the actual event (Arnheim, 1981; Gombrich, 1974; Kennedy, 1974). Because the images *are* preserved, they become part of other contexts that may be only marginally related to the original event. The images used in this study, for instance, were contextualized by the researchers as a chronological sample of a portion of American history. Any one of these photographs, however, could be understood in relation to several other contexts, depending on the referents—or intertexts— available to the viewer and the context within which the pictures are viewed. The photograph of a farm family during the 1930's, for instance, could be read as commentary on family organization, as New Deal propaganda, as documentary art, as evidence of a unique experiment in employing photographic artists, or as data about interior design. Attention to a visual image, then, is allocated selectively as the participant brings prior knowledge to bear, simultaneously analyzing cues at many different levels (Neuman, 1992). Meanings evolve as relationships are constructed between the symbol system(s), the content and particular contexts (Goodman, 1984; Lemke, 1991). In other words, the learner "collaborates" with the medium to construct meaning and knowledge (Kosma, 1991). Film theory further supports this perspective. Boyd (1989) suggests that viewers seek answers to two basic questions: "What really happened here?" and "Who is this character?" In order to answer these questions, the viewer searches for some fact to be discovered, some person who is key to the mystery. In addition, the viewer searches for a social context that connects the pieces of the image--values, ideas, actions (Kosma, 1991; Brown, 1989).

Visual information is also distinct from linguistic information. While both are conveyed through symbol systems, each is represented differently in memory (Baggett,1989). Mental representations of visual images contain more qualitative information and open up more possibility to "mean" at several levels of symbolic reference (Baggett, 1989; Goodman, 1984). Visual images convey meaning beyond the linguistic points they may be intended to make, and are understood through the relations between and among their symbolic elements (Arnheim, 1980; Langer, 1957). Visual images also provide learners with a rich field of possibilities for *associative linking*— associating seemingly unrelated bits of information and linking them together to form new ways of thinking about a problem (Mazur, 1993). The more replete or rich with qualitative data the visual image, the more cognitive "hooks" are available to connect to other information. Of course, this also means that there is a greater likelihood that learners will construct misleading linkages (Mazur, 1993).

Given this background, we suggest that in understanding children's developing sense of historical chronology it is important to account for message (the content), medium or form (the symbol system with its conventions and rules) and context (the purposes for and situation within which the message is introduced[2]) components of the historical material to which they are introduced(Ricoeur, 1984; Lemke, 1991). For the purposes of our research, it seemed that historical chronological data presented through visual images could be a fruitful approach. In particular, richly detailed images that provided more potential for associative linking, for answering the questions "What happened here?" and "Who is this character?" seemed likely to call on prior knowledge and problem solving skills and to elicit richer data on children's historical time awareness. Finally, a social semiotic perspective that considers both the discourse of a domain, the interpretive nature of reading symbol systems, and the sociocultural nature of interpretation, seemed more likely to provide insights into children's representational schema regarding historical time and to better ground those representations in particular contexts.

The Study

Population. Data from fifty-eight students at seven grade levels (K-6) from three population groups (inner city, suburban and rural) and two regions (Central Kentucky, Northern Kentucky) were collected. Except for Kindergartners, all students were in classes with ongoing social studies programs. Eight children per grade (4 males, 4 females) were identified at kindergarten and grades 4-6. Twenty six children (14 males, 12 females) were identified in the equivalent of grades 1-3. Slightly more than half of the primary age students were in non-graded settings. They were coded by matching their age to approximate grade level. Thirty percent of those selected were African American, and less than four percent were members of other racial minorities. Most children were from lower or middle socioeconomic background, although a minority came from an upper-middle background. Teachers were asked to identify students representing the range of performance in social studies in their classroom.

Method. Working from several sets of historical pictures, we selected those that we thought most adults easily could arrange in chronological sequence. They could, individually, have been interpreted in a variety of ways. As a set, however, they were selected as representative of one chronological sequence associated with American history. In general, we chose pictures we thought would closely match well-known periods of American history—such as the Colonial era, the Depression, the 1950s—and which contained a variety of "cues" that might be considered historically salient in determining chronology. We limited our selections to post-contact American history in order both to simplify our task and to insure that participants would have some familiarity with their content. After selecting several such pictures, we tested them with approximately 90 college students who had completed their general studies requirements (including at least one and usually two college level history courses). On the basis of their responses, we narrowed the pictures to one set as follows:

- Traditional political and diplomatic images (i.e. wars, presidents) generated little conversation or debate about placement--they were either known or not known. They were eliminated as unproductive, at least in this initial study.
- Images that included much racial or ethnic diversity were extremely difficult for test students to place in time and thus were eliminated in favor of a narrower set of images against which further work, using more diverse images, might be compared.
- Discussion of twentieth century images and images more closely spaced in time generated much more and more richly detailed conversation with more associative links appearing in student conversation. As a result, we put more emphasis on the twentieth century in our final set.

We chose our final set, then, based largely on the extent to which they matched historical periods that adults consider recognizable; we made this decision because we wanted to maximize children's ability to complete and discuss the task. Two disadvantages are readily apparent, of course. On one hand, the task omits images which, as educators, we may consider important. The task would not necessarily reveal very much, for example, about children's understanding of changes in minority relations, gender roles, or politics. On the other hand (and somewhat ironically), it also partly reproduces a limitation we have criticized in previous studies—namely, evaluating children on their ability to conform to adult expectations. We used more images from the twentieth century, for example, because as adults we have more categories for the twentieth century than others: most of us undoubtedly have more sharply differentiated mental images of the 1940s, 1950s, and 1960s than we do of the 1740s, 1750s, and 1760s. We cannot claim, then, simply to be allowing children's temporal understanding to emerge completely unfettered by our adult expectations.

In essence, our task stakes out a middle ground, chosen partly for pragmatic and partly for theoretical reasons: we presented children with images whose chronological order adults generally recognize but which do not necessarily correspond to standard curricular or academic expectations. Future research might productively explore children's responses either to pictures which include important curricular content (for example, from different periods of the African-American experience in North America) or which are chosen completely at random, without regard to adult chronological distinctions. For the purpose of this initial study, however, we chose images that we thought would result in the greatest amount of recognition. We then reproduced the set of nine images as black and white glossy photographs, individually mounted them on heavy stock poster board, and laminated them so that children could handle the pictures without damaging them. The list below provides the order in which we presented the pictures, the actual date of each, and brief descriptions of their contents; expressions in brackets denote the shorthand descriptions which we have employed in this paper (see Appendix A for copies of pictures).

1a	1956	Teenagers at a drive-in restaurant	[1950s]
1b	1872	Family and covered wagon on the prairie	[West]
2	1924	Men and women in bathing suits in front of a car	[1920s]
3	1837	Political cartoon of an urban scene	[Antebellum]
4	1938	Family reading and sewing at home	[Depression]
5	1772	Fort with soldiers and Native American Indians	[Colonial]
6	1899	Schoolroom with teacher and children	[1899]
7	1993	Large, modern building with cars and people	[Modern]
8	1967	Demonstrators and police at a university protest	[1960s]

We interviewed children by using an open-ended protocol. (See Appendix B). After explaining the interview process and obtaining their assent, we showed children the West and 1950s picture simultaneously and asked them to place the one from "longest ago" on one side, and the one from "closest to now" on the other. We presented each of the other pictures one at a time, and asked children whether each belonged between two others, before the others, after the others, or at about the same time as any of the others. By using the sequence above, we initially presented children with what we considered an easy choice, followed by pictures whose correct placement necessitated placing some before, some after, and some between others. For each picture, we asked children to explain why they put the pictures where they did, and we frequently probed their explanations. After they had placed all the pictures, we asked when they thought each picture was from. Finally, we asked a series of questions designed to explore children's conceptions of history and the past and their own experiences with history (See Appendix B).

Data analysis. Since the topic of historical time awareness has not been studied in quite the way proposed in this project, descriptive, ethnographic techniques were used initially to develop coding systems to analyze each type of data collected (i.e. task responses, interview data). For example, a sub-sample of the task responses were reviewed to develop a category system to code responses according to how they represent children's explicit, implicit and elaborative interpretations of the chronological data presented to them. These coding categories turned out not to be particularly productive, focusing on details, but missing the sense students seemed to be making out of the task. We then reanalyzed the transcripts, coding for broader patterns that subsumed the categories we had developed initially.

The subject of this paper concerns the types of representational schema children drew on when confronted with time-specific historical material. We were particularly concerned with three things: (1) what things struck children as salient in establishing the chronology of a set of history related images, (2) how children established that something was "history," and (3) the extent to which children participated in history communities. Historians, for instance, may belong to several tightly intersecting history communities (i.e. archival, museum, academic). While each of these communities has some unique discourse and activities, they have many in common, so that historians can generally communicate between discourse communities with relative ease. To what extent are these practices shared by children, and, in particular, what kind of sense do children make of the chronological organization common to history communities? In the next three sections of this paper, we discuss these issues in relation to the findings from our study. In the first section, we briefly discuss the types of "history" genres used by the children. In the second section, we discuss the features of the visual texts children found salient in chronological sense making. Third, we look specifically at the sources of their historical and chronological information.

At the Crossroads:
The intersecting history genres of elementary children.

While the elementary children in this study did try to make sense out of history and historical time, they were not full participants in the semiotic communities of historians. Instead, they employed semiotic practices that work in their community. Some of these practices barely intersect with academic history. In the younger children's parlance, for instance, the term "history" can be a warning: "If you don't watch out, you're history!" Sam explained, "Like they tell you you're history, I think it means that they're going to kill you." History is also part of a public discourse of which the children are at least peripherally aware, in which something historical "isn't here any more," is about to be torn down, or is "gonna go out of business and never come back in" (Chad).

Gradually, however, children acquire a more academic history genre in which they use what they learned in school studies of history, or have been introduced to in visits to historic sites and the like to talk about the past and change over time. We specifically asked them what they could tell us about how things had changed over time based on the pictures they had just chronologically ordered. The most common response was to itemize changes in material culture. Some form of this occurred at all grade levels. The excerpts below are typical of responses at each grade level. Note that by grade three[3], there is some evidence of attention to social as well as material change.

Grade One:

Mindi

At first they didn't even have horses and carriages, and then they had them, and then they invented the car, and then it changed and it changed into the cars we have now.

Grade Two

Daniel

Well, they started building wood houses, and then back there they started building like brick houses, and they had these old, old cars, that didn't run as fast as the cars down there (points to more modern picture).

Grade Three

Kenny

Times have changed from this one [Depression], this one definitely looks like the rocking fifties cause you can see dad's all sitting in his rocking chair reading his newspaper, mom's sitting in her rocking chair knitting and the kids are on the floor looking at the comics. And times have changed definitely from this [1950's] see you don't have these old convertibles anymore, you have some of them, but they're very rare, see.

Carolee

We've gotten more modern things, polluted the air more and made a big hole in the ozone—um—polluted the water more, gotten more things like TV and water spouts so we don't have to go out and get water in a bucket from the well—um—got newer and modern guns for police. I think that's good, cause then I don't—what they're called?

Criminals?

Criminals will have less of a chance.

* * * *

Mostly they used more natural resources, like you use horses instead of a car.

And the horse is more natural than the car? Because nobody had to build the horse?

Well—sort of—somebody built the horse. God.

Grade Four

Deanna

Well I could definitely tell you that there's a lot more technology and—um—a lot of better thinkers like their brains have developed and—or something like that, and—um—because of the buildings they have like increased, they're bigger, they're better, like back here they have those really neat windows, they make things out of windows and glass and back here they don't have anything made of glass except for the windows basically and then back here they have, and back then they didn't even probably use glass and just had holes you know and then the things they they used are different. Back here it looks like this is brick and wood and wood, back there, and when you get up here we're getting into metal and still using wood and brick, and then we're getting into glass and then whatever that is. I think its brick?

* * * *

Most of all we've kind of gotten over it (the past) and we've kind of moved on to different things. Our past has helped us build up to what we are, we have today.

Are there some things you think we maybe should have hung on to?

Well, there's a lot of war going on today, in Greece and like that, but back then they were a little bit more peaceful, even though they still had fights and arguments but you could still walk the streets you know, and we should have kept that in mind.

Grade Six

Nedra

Now there are cars, photography has improved, the cameras have improved, and the—there's a difference in the buildings, and —um—the buildings look more modern.

Children at all levels also talked about change over time in terms of cause and effect. Bambi, a first grader, is typical of this group: "the city was growing and growing and growing because of the construction work and—uh—*they built schools because they thought children needed to help*, to help like that (emphasis added)." As with other primary age children, Bambi's discussion is fairly general. She may have had some history instruction to draw on, perhaps in a unit on community. In any case, there appear to be some general schema for change over time that are used by the children. In the excerpts below, more specifics have been added to the schema, including the generalization that in war "you got more land and stuff, and claimed it ." The use of terms such as "claimed," and the idea that bigger boats could get you to far places" are interesting additions to the historical discourse.

Grade Four

Ryan

Well, the technology is like improved. Well, they—they—uh—didn't have like cement and everything and they couldn't build houses as easy or anything, they—like—built houses out of logs and things, and it was just harder, they didn't have as good as tools, or anything, and then they had to get water out of a river instead of just turning on a faucet, and getting your glass of water, and you had to build your home instead of go buying it or something and that's about it.

* * * *

Things like wars and things that have—that— uh—changed —uh—how the future would be and stuff like that, like—uh—if, when they fought a war, you got more land and stuff, and claimed it—um—uh—and we like—uh—um.

Amber
Well, when I start at the beginning (of the chronology), things were just regular, they didn't have much, for these two [west and 1900], then when you got to these two [colonial and 1837] these people started having bigger buildings, and they started having—um—boats that you could travel on to get to far places. Here (West, 1900) you could have boats, I think, too, but these look much bigger, and here (colonial, 1837) you could go to the store and buy stuff, and you wouldn't always have to grow your crops like back then.

Tyler
(Looking at Depression picture) Wait—uh—they had oil lamps, so they didn't have electricity then, and I think that's about right. I don't really think . . .wait, they did have newspapers, and they had to have a printing press to make the paper (places the picture closer to present).

Gradually, children provided more specific historical information, connecting change over time to topics more typical of academic history. They connect specific events and chronology—statehood and slavery, for instance. The excerpt below combines these elements in a discussion that indicates some of the historiography to which the child has been exposed.

Primary Three

LeRon
I like the city picture—umm—Kentucky was the fifteenth state, and this has 15 stars, so this could have been when Kentucky became a state.

* * * *

Um, this look like a couple of slaves in this picture.

Do you think there was a time when there weren't slaves in this country?

Yeah, back here [oldest pictures] and then this [more modern]

When did we get rid of slavery?

After the war had ended, the North had beat the South, so the slaves were free to go, and Mrs. H. told us that some people asked the people they had had for slaves if they wanted to work for them for money.

* * * *

I want to go to Jamaica, and I think that I would like to be sailed away on this blimp [in 1870's picture] and get away from slavery.

See, he's got a whip. That look like a black man there.

Or maybe an Indian? It's hard to tell with this kind of picture, isn't it?

They left Indians alone, after they took their land, and they could escape. Christopher Columbus wasn't the first one to discover South America. The Indians, and what's those people called who have the horns, they weren't pirates, but the were—uh—

Oh, Vikings!

They was, the Indians and them were probably the first people in North America.

An enormous leap occurred between fourth and fifth grade. Fifth graders' comments were grounded in the discourse of academic history. They could talk about change over time in terms of specific events, and cause and effect (if not always multiple causation), and they could make judgments about those changes. The fifth grade excerpt below is typical of such students. Rodney outlines what he considers the major chronology represented in the pictures, including some of the events behind the pictures. In response to a probe, then, he also concludes that not all these events were for the good. It is interesting to note that his example relates to Native Americans. While we have no way of knowing what kind of instruction the children we surveyed were receiving about Native Americans, it was clear that this was a common topic, and that where students were familiar with Native Americans, they were also familiar with the idea that these were the first peoples in the Americas and that "we" forced them off their land.

Grade Five
Rodney
I can tell you that things have changed a great deal because see on the first picture—um—the 15 or 1600's we weren't a country we were beginning to come over here. We had established 13 colonies and then English started taxing us and we got fed up with that, that was after the French and English War. So then we came to this picture and we got our own independence and George Washington was our leader. That was way after the Boston Massacre and the British—um—the Revolutionary War and the Battle of Lexington. It was not this Lexington, it was Lexington, Massachusetts. And this one was 1900's. You can tell that's coming into the 1900's cause that's when we started a couple of ** and people got in wagons and start moving westward to find new lands and settle and stuff because they didn't even know what was back there.

Would you have liked to have done that?

Settle land and stuff? Well, it would have been an adventure, but I'd a lot rather have it now. I think it's a shame that we tore down all those trees and ran off the Indians, cause it was their land in the first place. The least we could have bought it or something like that.

Well, in some instances we bought it from them, but they didn't understand *what*

Yeah, sort of took advantage of them, cause we were trying to con 'em—um—tell 'em that if they signed this petition paper, they'd still have land, this small portion and they did that cause the colonists knew that the Indians couldn't read. They could read their signs that they made but they couldn't read the English—um.

Reading the Visual Data

A closer analysis of the children's responses provides some explanation of what data seemed most cogent in establishing chronology. The task presented to children called on them to interpret visual data—pictures. One of the things we wanted to know was how children read such data. A picture may be worth a thousand words, but it is much less clear what those "thousand words" mean to any individual child. As students talked their way through the task of chronologically ordering the nine photographs and prints, and responded to the follow-up questions, they used a variety of visual clues to help them. They inferred relationships between the pictured data and their own social situations and background experiences and, as they had more background knowledge of history, they also applied that to the task.

The initial task was designed to elicit clues children used in assigning sequence or period to the pictures. We had anticipated that some children might not complete the task, but even the youngest children identified some clue that they claimed helped them establish a chronological sequence. One fifth grader explained the task as analogous to a "Where's Waldo" exercise:

Rodney

When I was really little I started out with Waldo, and then up to these * books, I Spy, and I've found everything in the pictures. . . . There's not a book yet that stumps me, even the ones with Waldos. That was the hardest one! The Land of Waldo. You can tell by certain little clues and how the picture's shaped, and they had some similarities that you could imagine.

While Rodney was more explicit about the game aspect of the task then were most children, his technique was not uncommon. From kindergarten on, children searched for "clues" in the text that could point to either sequence or period. What clues counted as salient, however, varied. The categories below distinguish the ways in which children approached the task of reading visual data for historical and chronological information.

Facts to be discovered. At all levels, children searched for specific facts that distinguished between "now" and "then." Material culture—technology, clothing, architecture, food—was the single most salient "fact" used in establishing chronology. At the most basic level children gave only the fact without indexing it to a specific time, event or period.

Kindergarten:
Melody
. . . and why did you put them like this?

Cause of this cart and the horses is attached onto the cart.

Cathy
Cause it has . . . . . .men and ladies and horses and a boy and a girl.

How do you know that that was a long time ago?
. . . .

Is that a hard question?

Uhhuh.

O.K. How do you know that that one is closer to now?

Um. . . . . . It gots people and girls.

Second Grade:
Daniel.
They had ice cream or cake and hamburgers.

The items—cart, horse, people, and food —were simply listed as reasons for the placement, without explicit connection to a time or historical event. There may be an implied comparison between the items mentioned and either the past or present, but that comparison is not made clear. There is some support for this conjecture as the chronologies these children created were more accurate than their limited comments would indicate.

Probing also failed to elicit any connection between the items and any historical event or era. In fact, probes were generally greeted either with silence or a repeat of the initial facts. One child tried to explain her placement, saying that she "can tell by the picture" where in the sequence it belongs but she did not explain what connection she made between the facts in the picture and the chronology she created. Few children beyond second grade maintained this stance.

A second group of children made explicit comparisons between past and present: If we don't have it, it must be long ago. If we do have it, it must be close to now. This pattern was common with early primary age children, but tapered off by third grade:

Kindergarten
Mickey

[1960s] Long, long time ago. Real long. 1993. Go's all the way on the end. Cause, cause some people don't works for the army no more.

Grade One
Bambi
Well, um, because the people had like big ships and trains back then and they had buildings and not houses like us. They don't have like electricity, like we do, and , um, chairs like we do.

Grade Three
LeRon
[1920s] The clothing. People don't wear this kind of stuff any more. Girls wear bathing suits.

Beginning as early as first grade, some children explicitly compared items to other pictures within the set. Clues didn't simply distinguish between then and now, but between pictures. Thus, as more pictures were added to the task, students were more likely to rearrange the sequence. For instance, one first grade child explained that after looking at the full sequence, she needed to move the modern picture to between the 1950s and the antebellum picture because "that car picture—um—before the—the one I did before the last one, because—um—the cars are like the black one * they look newer from back then." Older children elaborated more on these comparisons than did primary age children, though still emphasizing material culture.

Grade Two
Akeel
No. . . in between . . .cause this is a long time ago and that be a long, long time ago, cause I can tell them don't have no same clothes. People wear the same clothes as these (points to next most recent picture.)

Grade Three
Kimberley
Uh, the steering wheel is different, and this one (antebellum), it—um—was sketched, not a real picture, and then with—uh— the one where they only have a cloth is <colonial> because that picture they don't have any clothes, all they had is one cloth.

Grade Four
Amber
Because it (1950s) can't be before covered wagons, cause you can—

there's a lot of—more— um— there's a lot of kinds of the newest, new stores, and there's not really a lot of big stores in this one (west).

Grade Five
Greg
This one, that one right there (1950s) is old because it has the building in it, and this one *** the horses, the wagon, the people they're dressed differently.

Grade Six
Garrett
About the same time, because of the clothes (points at each picture) , the way they're dressed it looks sort of the same and—um—its how the family is set up where like the father and mother sit in the chair and at the end of the day and the kids are sitting on the floor doing homework or reading a book or putting on a * * *.

Caitlyn
This would be the earliest, I think. Yeah. Because the building, the structures—um—look like a little bit more primitive than the ones in the pictures right after it, and—um—some of the people are dressed in old rags that are wrapped around them, and the next picture and all the ones after it, they're dressed in—um—jackets and pants and ties and things like that.

Associative linking: A sociocultural context. Some students moved beyond simply identifying or linking "facts." Instead, they sought actions, ideas or values that pulled a single picture or set of pictures together. They tended, either in their initial "think alouds" or subsequent follow-up discussions, to try to answer Boyd's questions: "What really happened?" and "Who is this character?" In doing so, they made historical and ahistorical connections, and some used history as a backdrop to more personal or social concerns.

Ahistorical connections—links that do not rely on any historical information— were apparent in younger children's responses. For instance, one first grade child (Jonah) turned each picture into a narrative composed of odds and ends of information from a variety of sources mixed with a good deal of narrative license. For instance, he named characters in one photograph, and fantasized about the school in another picture being caught in a storm. Other children identified a theme that provided a tenuous, though not particularly historical or chronological, association with other pictures. This thematic contextualization involved placing texts within the framework of some larger, familiar thematic pattern of semantic relationships. A first grader, for instance, identified schooling as a thematic context for a subset of the pictures (see excerpt below). Apparently "history," at least as it was presented in this context, was not yet a rich enough category to allow these children much interpretive room. Their meaning-making, then, was built on other experiences. They did not refuse the task, nor find it impossible to accomplish. Rather, in almost every case, they constructed some context that allowed them to respond.

Grade One
Jonah

(Looking at 1700s fort) I know this is the same time (as 1837 cartoon of urban corruption) because, see, these sticks of wood and everything and they're making a house and this house has to be made for you to go to make this one, and this whole place was by a wreck and they were making houses out of this and out of bricks and they took these trees and chopped them down and took more trees and chopped them down and they cut logs into slices of wood like this and this and they're building houses. They built houses everywhere. Someone made 500 houses and they get lots of money and money and money and money and, if someone <built> 400 houses they could get 400 dollars, and if someone made 300 houses****** and if someone made ten hundred of five houses they could get 160 dollars.

Chad
I'd say this <is the same as these> (1920s/1930s/1950s) because back then, because in every picture its kids like going to school, like this is school (1900 schoolroom), school (1930s family), and these kids (1920s) are going to lifeguard school, and these kids (1950s) are probably in college.

More often, children associated the pictures with social and sometimes explicitly historical thematic contexts. Sometimes these links were made despite confusing or disconfirming details. Many students, for instance, found it difficult to read the photograph from 1967. As one first grader said, "because there's a lot of people crowded around, I can't tell if its bad or if its a good picture." This was particularly true for African American respondents, who read the racial makeup of the crowd, linked that with armed soldiers, and decided that this event could have been either a rally against racism, "like when Martin Luther King was alive," or a dangerous place if one were Black. While this was not the most common interpretation of the picture (it was more often identified as Civil War era), both black and white children sometimes indexed it to civil rights, race, or issues of justice. The excerpts below are typical of such responses at the primary and intermediate levels.

Grade One
Matthew
These people were fighting for justice, but there were all these soldiers but a different kind of helmets ****.

Grade Three
Tamar
It looks close to where Martin Luther King was.

How long ago would Martin Luther King have been?

Umm—well. . . 1930 or 20s? The guns, the people and the big building right there. The people are in a crowd, and maybe listening to someone like Martin Luther King at a speech.

Why this? (points to soldiers)

Um—somebody up there is speaking and they are to protect to make sure no Blacks come around.

****

Maybe they all white and if I went to that place they might start shooting at me.

Fifth Grade
Evan
I think this is in the—like around over there—I think its in like the 70s or 80s cause you have like protests about like race or something and because of the clothing, the soldiers uniforms—well—it could be about like black rights—uh—but I don't see any black people, but I guess they could be carrying the signs.

Finally, some children linked sociocultural issues, history, and personal concerns. They commented on the racial issues already mentioned, attitudes towards Native peoples, homosexuality, and changes in family roles and activities. A common response to the Depression era photograph, for instance, was to comment on the family structure. Several children noted that a contemporary photograph of the whole family in a room together would show everyone facing the same direction: toward the television. As one fifth grader explained, "they would be in front of it (television) and staring at it like I would be on an afternoon when I haven't got any homework or either no one was outside playing, I would be there staring and glaring at the TV."

Some pictures and questions triggered more poignant responses. Two of the follow-up questions asked children which pictured time they would most or least want to visit. A third grader, pondering which of the pictured times he would want to visit, shared his personal ambitions:

LeRon
I'm going to be the president of the United States.

You are! Well, I'm especially glad to meet you then. Are you going to *be a Democrat or a Republican?*

A Republican.

A Republican president? Well, we've never had an African American Republican run, so that would be really important. You're gonna be like Jesse Jackson, except you're going to win.

Umhmm. Did Jesse Jackson run for president?

Yeah, he did, except he didn't get that far. He lost the nomination to the Democratic Party.

He a Democrat?

Umhm. He's a Democrat. That O.K.?

My mother says that under Bill Clinton's skin he's kinda Black.

I hope so. What would be good about that?

He'll try to help other people, besides his color.

****

Who are your favorite Presidents?

John Kennedy and Bill Clinton.

Kennedy and Clinton. They're both Democrats. How come you decided to join the Republican Party?

It's a party??

A fourth grader, contemplating the 1872 picture of a covered wagon explained that he would not want to visit that time:

> **Cedric**
> "cause back then there were slaves back then and they'd take me back cause I'm a—like a chair, and I'd be a slave and that's hard."

A fifth grader, after explaining that he would have been on the side of colonial rebellion against England, acknowledged that, as an African American, he would have been a slave. Note how his language shifts from the impersonal third (academic historical discourse?) to the first person at the end of his comments.

> **Rodney**
> I didn't like that, the slave, and there was these, forget what they

were called—um—but they wasn't slaves but they had to ***

Indentured servants?

Indentured servants! They come over here, they want to come here to America and the only way they could accept them, they have to promise to * some work, and give some of their pay to pay for their trip, so they were sort of slaves, but Blacks, mostly they was slaves. They worked these big farms called plantations, and we grew lots of roots and rice and plants.

A sixth grader also made clear the personal links between history, public issues, and her own life. In response to a follow up question asking "what is history," she provided a brief definitional response and clarified it with a very personal example linked to a current public debate.

Caitlyn
Well, I think of history as being what's happened in the past and how in different times different people and the government worked and how the government would act on certain things cause I know that in like the early 1800's if you got gays in the military it would be like "Gays? Shoot them!" It wouldn't be a debate, but in this time we're actually debating over it.

You think that's progress?

Um—yeah, I think its progress because I personally—I think —um—that—you know just because someone is gay doesn't mean he can't fight for his country, and in the 1700's they wouldn't have said that.

Umm—In the 1700's they wouldn't have used that language. They would have had other words to use. I don't think it was a question they asked. It would be interesting to find out when we started asking those questions.

Yeah!

So progress would be that we would stop worrying about whether people were gay or whatever?

Or their race.

Does it seem to you that that's gotten better?

It seems to me that—um—at least to me its like at least we're thinking about it now. It may not be the best views that we have but at least we're thinking about it because one of my family

> members is bisexual and—um—he went to march on Washington. In the earlier times, a gay to march on Washington. I don't know, it just doesn't quite fit in.
>
> *Probably if you have a family member, it makes sense for you to be thinking about this.*
>
> Yeah, that's what I hate most about—um—school with some of my peers who are making jokes about "What are you, gay or something?" like that. It's just hard to deal with. There are a lot of boys in my class, there's this song, "I love you, you love me" I just try not to pay attention, but they talk about lesbians and that kind of thing, I don't want to hear about it, you know, I think a school should be a place where you can get away from what my parents are trying to pressure me into, cause my parents aren't really happy about it, and you know cause my parents are pretty religious and everything. And I'm trying, like I'm going to confirmation classes, and I'm trying—um—i'm trying to go with God on these things, but sometimes I just don't think I agree. I really don't know what to do.

Aesthetic Commentary We had expected some of the children to notice the difference between artist's renderings, photographs and the cartoon. Given how often the children mentioned technology as salient in establishing chronology, we expected that some would notice the technology of the image. These issues, however, went largely unmentioned. One first grader assigned chronological sequence by color, even though the images were all black and white. Another mentioned that photographs came later in time than artists' renderings: "someone made a photo of this and they took some black and white and they rolled it and they made it." Several fourth, fifth and sixth graders made passing reference to the differences. For the most part, though, students looked through the image, as if it were simply a window on the past, without creative intention.

The artists' renderings did elicit some commentary on features of composition. For instance, several primary children did not like the 1700's picture because the trees were oddly rendered. The etching technique used also meant that clouds were blank spaces amidst a sky of etched lines, and several children mentioned that these clouds did not "look like ours." A few children noted that it would be easier to assign chronology if they could tell which of the pictures had been in color and which were originally black and white. We also expected that the composition of an image—what was foregrounded, what was bolder—might influence what clues children found salient. This was sometimes the case. In the 1700s picture, for instance, younger children sometimes focused on the falling wood or the Indians in the lower right foreground and missed the fort and/or the British soldiers. In the Depression era picture, the woman's foot was pointed into the center foreground of the picture and several children focused their comments on shoes and socks. In some cases, this concentration on a single element led children away from the overall sense of the picture. The crowd and guns in the 1960s picture, for instance, led some children to conclude that this was a Civil War setting. Older children, such as the fifth grader who suddenly noticed that "British" soldiers were marching down a street in the United States 61 years after independence, sometimes found themselves confused by what seemed to them to be incongruities between a piece and the whole. The tendency to concentrate on details of the whole, however, was also a product of the task in which children were specifically asked what features of each image helped them to establish chronology. No matter the age of the child, however, the task was read as a semiotic performance replete with clues that could be understood against a background of experiences with other texts and contexts.

Texts and Contexts

As we mentioned above, the semiotic practices that make up the various discourses of history are not always shared by children. As a result, the sense children make of history texts is not always "historical." Students in this study connected images, words and events to more familiar patterns. The patterns might be drawn from images or events in the same picture, or from altogether different sources. These sources, or *intertexts*, were the context within which students selected chronological "clues" and interpreted the set of pictures used in the study. The "think aloud" exercise provided some evidence of the intertexts against which children read the images. In addition,we asked the children if they learned about history or the past either in or out of school (See Appendix). Although some children claimed never to have learned anything about history or the past, either in school or out, their comments indicated that a number of their intertexts were historical. The following categories of intertexts were most often cited by the children:

Family Stories Family stories appeared from kindergarten through sixth grade. They were stories told by a friend or relative (most often a grandparent) about war, schooling, family history, or famous events that the storyteller had experienced. The stories were often linked with: pictures, documents, toys and the like, and with a child's exploration of these artifacts. Some children who reported not liking school history--finding it irrelevant and boring--were never-the-less fascinated by family stories. As they ordered the pictures in the study, they sometimes recalled an event, style or piece of technology from one of these stories and dated a picture by calculating the probable age of the storyteller. Younger children reported less detailed recollections of these stories. Perhaps they had heard them less often; perhaps the historic details were less important to them than other features of these story events.

Kindergarten:
Anthony
You know how I know all this stuff? Cause my Granny tells me.

Mickey

Have you ever learned about history or the past or long ago outside of school?

Yeah, My Papaw went to this old town when he was a kid.

Grade One
Candi
It reminds me what my mom told me about—um— the olden days.

Grade Two
Matthew
Like—my grandpa, he's—he's 85 years old and he's real old. They've got different fences *** (refers to picture detail)

Darrell
I can remember where [I learned about history].

Where?

Out at my grandma's house * * * * *. I don't know what she told me.

The descriptions of eight and nine year olds (Grades three and four), were more specific. The children recalled the details of life in other times--whether it was how a windshield curved, or how life on the farm or for African Americans was different then than now. They also seemed to enjoy the explorations of things that were, as one child explained, "old, old, old."

Grade Three
LeRon
(looking at picture of 1920's) Cause of this right here and then this (points out features of the car) looks like its pushed out, and this is a windshield that goes up and usually the windshield the cars have—they have one that goes like that.

Curves, huh?

My mother told me that she got cut on one of these cars before. She was climbing on top of one and it cut her.

Carolee
Actually, I learn more at home because my grandmother tells me more than I learn at school.

What does you grandmother tell you?

Actually, now she's dead, but we found a whole lot of things that have to do—she saved the paper Neil Armstrong first stepped on the moon, and some horse won the derby and—um—she saved a bunch of papers—they're real important, on china (China?) and stuff. Old, old, old, stuff.

I thought you told me you didn't like history?

Sort of I don't. When somebody is trying to teach it to me it sort of seems boring, but when you're looking through something and you find something it doesn't seem like you're learning history.

And that's fun?

Like she has a big, big desk and I had to go through the desk and she has a alphabet, a Indian alphabet she gave me, and we go through that stuff, she gave me a old, old, old thing that's crumbling its so old she said its older than her grandmother, so my grandmother's grandmother. Its an old jewelry box from France. We pull out these old doors and one almost crumbled when we pulled it out, and she had an Indian rug, and she was going to be an architect—I don't know what you call it?

Archaeologist? An architect designs buildings and an archaeologist digs into other civilizations.

An archaeologist—shows you how much I know about history!

Grade Four
Ryan
Um—like—um—like when we go to Grandma and Grandpas' house they tell us a whole bunch of things cause my Grandma's a teacher, and

What kinds of things do they tell you about?

Like—uh—they tell us like the wars and then my Grandpa was in the war and he had dogchains and stuff and he told why they had them and stuff and then they have a lot of antiques and stuff and they tell us what they are and things like that, like she has this shelf thing, it has all these little things, like a gumball machine, that looks like a little figure, and it's glass, and she has a bunch of those things, and they tell us all about those and how they got there and why they made them and stuff.

You like hearing about that?

Yeah.

Yeah.

And we went over to one of her friends, his name's Bob, and he makes all of these things, cause he's from Germany, and he taught me how to count in German, and then I saw this statue one time and it had a Chinese guy with a really big head, and he said that represents long life **.

Hmm.

And he had, he has all these things from China, cause he teaches—uh— people from China English and stuff.

Cathy
Um—my mom —she hasn't really just sit down and tell me it, but when we go by stuff, she'll say like, that's from the old ages or something, and whenever we go to my grandma's house—uh—my mom's grandma, she has—um—like a lot of stuff my mom used to play with, when she was little, and she tells me about what they did, like different things that they did on the farm that usually you don't do now, and—um—my other grandma, my dad's grandma, also has a lot of things that my dad used to play with, and whenever we go there, we sleep in her children's rooms, and there's a lot of like old dolls and stuff in there that we can see.

Cedric
My brother told me a few things, about Black people and all this stuff, and they didn't get paid much and all like that and tell 'em that you didn't have all the privileges.

What kind of privileges do you have now that you wouldn't have had back then?

I would be separated from my friends. I couldn't have like pets and things, and—uh—I couldn't go to like—if I had a friend—like a white friend like I have now? I couldn't go to like the same stores with him, or restrooms, or things.

Fifth and sixth graders also mentioned these stories, but less frequently than did the younger children.

Grade Five
Elliott
My dad, he—he was—he lived in history, and he tells us all about that kind of stuff and

So your father talks about how things were a long time ago?

Yeah, that and my ma, and my grandpa, my grandpa talks about all that kind of stuff. Get him in a conversation and he won't stop!

Evan
Well—um—I kind of learn from my dad cause he like teaches me things and he buys me things. Like we go to historical sites like if we go somewhere, like my brother's going to be in like a reenactment.

Oh, like the Civil War? Here in Kentucky?

Yeah.

What side is he going to fight on?

Its the 4th Kentucky. That's the Confederate one.
So he's got to do all the fancy uniforms and all that kind of stuff?

Umhm, and like they tell you they kind of make it kind of rough. They talk about history but they're talking about what they're going to do.

I take it you enjoy studying this?

Yeah.

Rodney
You'd have a totally different kind of lamp cause my mother was born in the sixties, and my grandmother was born in the fifties. Wait a minute. My grandmother was born in 1914. My grandfather was born in 1910 or 12. My grandfather's dead. My grandmother's still alive. She's 76. She lives with—she can't tell us what she used to, cause she's got alz . . ?

Alzheimers?

(nods)

Oh, dear.

But based on what she used to tell us, when I have a question I think back then.

Grade Six
Patricia
My grandmother, she has—um—she has a bunch of documents and papers that were back from when she was a little girls and her parents had came here from Germany, and she has a lot of papers, and she told us that they were known for bringing over the flower

called the buttercup and I leaned a lot about where my different family came from, from them—um—learned a lot about World War II because my grandpa was in World War II, he had to go fight, and I learned the different, the different places where they had fought—fought—that I didn't learn here at school—um—they really didn't tell us that much what happened. He says that he—he was in the Navy, he was telling me about Pearl Harbor, and * * * * and fighting Japan and stuff, and that was basically about most of the stuff I learned from them.

Family Activities. In addition to stories and related artifacts shared by family members and friends, children designated other family activities as related to history, the past or long ago. While historical information from these activities might be only partially recalled, the experiences provided an intertext for children's other encounters with history. In some cases trips also became an interpretive lens through which children viewed particular aspects of history.

It is also clear that at least some of the parents connected family vacations to their children's school studies. This marks an economic difference among the children we interviewed. While two of the excerpts below were drawn from children whose families might be characterized as low-middle or low SES, the others were middle class children. When we asked children if they learned about history or the past or long ago outside of school, not all the children understood the question. When that happened, we asked if they had ever gone anywhere, maybe on a vacation, or seen anything near where they lived that had to do with history. A number of the lower SES children were still unsure of what we were asking. One first grader responded that the only trip he had ever taken was to the dump with his grandfather. On the other hand, other children we interviewed had traveled internationally (Japan and England), and many more had traveled in the U.S. and their own state, and been to a variety of historic sites. The excerpts below are representative of family activities during which children thought they learned something about history, the past, or long ago.

Grade Three
Kenny
Um—when I was on vacation—my dad's a truck driver—he works for Perkins. You ever seen those trucks? Well, my dad used to work for those, and like every spring break or every summer break I used to go with him for three or two weeks, and we'd go up to Vermont, Maine, we'd go out on the ocean, and all that sort of stuff, and—uh—in Vermont we used to see all these things with Indians' statues, real feathers and all sorts of stuff like that. We were in the middle of a woods, and also one night when we were coming home it was like midnight, and we were driving right through the middle of the woods and it was dark <like>—like wolves—well wild dogs ***and you could definitely tell what it was like back in the caveman days, cause you felt like something was

going to sneak up on you and pounce.

Carolee

Have you ever learned about history, the past or long ago outside of school?

Museum. Got penny candy, which we liked. Actually, we got about 10 pieces for a dime and a big long licorice was 10 cents and we got to go into the school (at Ohio Village, a reconstructed 19th century village). We took the longest trip.

Grade Four

Ryan

When we went on vacation to Pennsylvania and saw the Battle of Valley Forge. . .

Mm-hmm

And like, we saw this house where the only civilian got killed by a stray bullet in the Battle of Valley Forge.

Hmm.

And then we went to Tennessee to sees "Unto These Hills," how the Cherokee got to—uh—like—uh—how they lived and how people treated them.

What do you remember about that?

Well, it was a play and—uh—the Cherokee were like—uh—trying—they wanted to get land, and the soldiers and stuff would just push them off and then they'd like go to the President and he wouldn't really do anything about it, and just let them set aside land and stuff.

Cathy

We went to see a play called "1776," when Thomas Jefferson signed the Independence—or the Declaration of Independence—and I learned a lot of stuff about the Declaration of Independence and what happened back then, and—uh—a lot of times when we go to—uh—places that, some of them aren't even in Kentucky, but when we go there they usually have like, how they used to make salt and stuff like that. and then we go in and see the slide show of it, and I learned it from there.

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We went to—um—Michigan, and there were a lot of Indians there and they have a lot of historical places that you can go to and—um—they have like you learn about headdresses and like their past so its very interesting

*****

I think that my favorite place that we visited was this one (Michigan) because its really historic and how the Spanish came and the Indians and its really neat how they have—they still use their past and its really fun to learn.

Grade Five
Greg
See, sometimes I go down to Falmouth and see the old cars, that's back in the past

Rachel
My family goes to a lot of places like Spartansburg, or Fort Boonesborough.

How does that help you learn about the past?

They tell you about how Fort Boonesborough started and how Daniel Boone led us into Kentucky, and like that .

Grade Six
Deanna
The governor's—um—place we visited that—where—what's it called? The place in Frankfort?

Capitol?

Capitol, yeah. Um—like, you go in and you read like the panels and its says stuff like that. And—um—the Horse Park. You learn about the history of how it got started, and places you go like sometimes you go to restaurants, and it says like the founder of it.

Nedra
Last year we learned about the colonies. Um—well—this summer we went to Canada and Vermont and Massachusetts. We went to see the tall ships and we saw the tea ship from the Boston Tea Party, but—um—we saw all the tall ships. They don't come in very often, and I've seen the redwood forest in California.

Caitlyn
Most of the time when my family goes on vacations and stuff, we try to—you know—"Do it for Caitlyn's sake," and they try to do that. Just this past spring break we took a tour of the New England states and—um—we saw a lot of the capitals. In seven days we went to thirteen capitals.

There aren't thirteen New England states. Good heaven, where did you go!

I can't remember them all, cause we also went to Washington, D.C., Maryland, New Hampshire, Delaware, Maine and New York and Pennsylvania. Its interesting to see all the different—um—ways that the capitals are built for the different time periods.

Yeah, Albany

We were in the New York capital with that million dollar staircase, or whatever, that has like no light except for the—um—sunlight and my grandfather was with us cause after that trip he's been to like all the state capitals except for Alaska and Hawaii cause they weren't states when he went there, and when he went "Million dollar staircase? When was it bought? And it was bought in the 1800's for a million dollars then, which was a whole lot of money then, and you can see how like the value of money changes.

That would be an incredible amount?

A million dollars now is something you win in the sweepstakes.

Popular Culture Historians are not, of course, the most likely interpreters of the past for children. Rather, popular culture interprets history to children. An array of history related media were referenced by children in the study. There were the expected references to television. "Happy Days" showed up in discussions of the 1950's and "Little House on the Prairie" appeared in reference to the picture with the covered wagon. In addition, at least one student referred to "Dukes of Hazard" and others mentioned television news or informational shows. Movies were also intertexts, usually in reference to cowboys and Indians, but not always. There were also less expected reference to toys (The American Girls doll collection and Nintendo), comic books and television shows such as "Unsolved Mysteries." Children also referenced newspapers. Finally, one group of children, students at an arts magnet school, Daniel on art, music and drama intertexts.

Kindergartners mentioned the fewest popular culture sources of any group. One child mentioned cowboys and "Unsolved Mysteries," another mentioned newspapers. The most interesting (and singular) response is excerpted below. While no other child mentioned trolls as historical figures, other primary age children did refer to fantasies such as Charlie and the Chocolate Factory that appeared to them to have historical settings.

Kindergarten
Monte
"Now that you've looked at all these pictures, what can you tell me about how things have changed over time?

Dinosaurs, trolls.

Trolls? What about trolls?

They used to live a long time ago.

In the primary grades, children mentioned the television shows "Little House. . .,""Young Riders," and movies with "malls and the cars and the schools" because "I've seen movies about then, and I know more about them than any of the other pictures." Others included baseball cards (Hank Aaron) , and toys.

Alicia:
When I watch shows, I watch mostly old-days shows. I watch the "Young Riders," and I watch some black and white movies.

Thomas
I could tell, but those, it was real easy because I watch—I watch some shows that have this in them, the nineties and stuff, and its very easy to tell.

Primary children also connected history with the news, though some news coverage seemed about as confusing as dinosaurs and trolls. One young man, for instance, had seen a news story on the dedication of the Holocaust Museum at which President Clinton and Elie Wiesel were speakers.

LeRon
Was it true that him (President Clinton) and three other people were held in a ring of fire and they let off an oath and I think it was an old museum that they'd had for years?

Do you mean the Holocaust Museum?

Umhm.

By fourth and fifth grade students were much more explicit about how they used popular culture. The excerpts below demonstrate the kind of history acquired from these intertexts, how conscious the children could be of how adults might perceive their choices, and how powerfully these intertexts captured children's historical interests.

Tina
I think it (1900's picture) goes in between these two (antebellum and 1920's) or very close to this, closer to this than this cause this

is long, and the way the desks are made, and they're stuck together, and, God! the doll again! I don't have her desk but— Samantha— and she was in the very early 1900's and she had a desk like that, it was about 1907, and also the way that they're dressed the same, the girls are wearing long dresses with stripes, and the boys [are wearing] britches. And the teacher, she has her hair way up in a bun, and an apron.

****

Oh, we've got video on that, there were these children taking over the school, they were sitting on top of the ledges and everything, and they were taking over and there were all these soldiers there, and it said it was children protesting against their country, soldiers shooting them down. Nothing like this in our past? Not at all! And then it goes and shows this kind of thing from the past, like the British and the Americans. Cool. I'd like to know where they are.

Rodney

This is the 1900's simply because of the desks and these bands, cause last year we did a play, "Miss Louise and the Outlaws," and it took place in the 1900's around that time, and that's when the bands were coming, so that gave it away.

****

I go to the library a lot. I read history like the history of comic books, because I'm a big comic collector. I've learned about the history of comic books, and the first comic books, and its real interesting. Some people think that comics are a waste of time, and really when you think about it, they're a part of history, too, because they're literature, they're interesting, some people must have used them, and I've learned about the great composers, like Bach—um—and other great composers, not in comic books, but in music, cause when I go to the library I check out some music, jazz and rap, and I've learned about lots of rap people, and great baseball players, like Babe Ruth, I've learned about great football players, basketball players. I learn this from books. I've learned a great deal about composers and Michael Jackson, lets see, Stevie Wonder. I've also learned about Edgar Allen Poe, Shakespeare. Those are the main two I've learned about. At least those are the two on my mind right now. And I've learned from Nintendo, so I've learned a great deal about the history of how those were made, and stuff, so that's not really a waste of time, and I've learned about the cars and cars in the future.

By sixth grade the children made fewer explicit references to media. When asked about influences outside school they mentioned TV, movies, the

Bible and church. Specific popular culture references included the American Girls dolls and books, "Happy Days," and a local 50's decor diner, The RockaBilly Cafe. They described a picture as looking like "something out of Little House on the Prairie," and one student called the fifties picture "the Happy Days picture." Patricia provides evidence of a move towards more"informational" television as she explains that viewing included " some kind of show on the other day about the sixties, and like Vietnam, and—um—different things about the A bomb and Hiroshima, and you know that's probably the only places that I've learned stuff."

Tradebooks Children used fiction and nonfiction trade books as intertexts. While some of these were books assigned as school reading, others were selected as personal reading by the children.

In the primary grades, children mentioned historical fiction and fantasy, and one child reported looking at books an older sibling was reading.

Bambi:
We read a book, Charlie and the Chocolate Factory, and it was interesting with that book and . . the people looked just like that (1837 picture) in the book.

Alicia:
I've read a lot of books about this time (1900's), people had to wear suits and they couldn't come to school, see this kid has a suit on **.

Thomas
I remembered because I have this book at home, it has a lot of old pictures and new, and when I look at it, it has some of these pictures in it, and I can remember when it's at.

Carolee
I like—I have a collection of American Girl books, and my favorite one is Samantha and she looks like this (1900's picture). In Samantha Learns a Lesson, and it shows and I've got the catalogue. $83 with softcover book; hard cover book $86. It will take me a year and a half of my allowance.

By fourth, fifth and sixth grade, students reported more library use and the fantasy references dropped out, replaced by more traditional historical fiction, including Johnny Tremain. American Girls books were still mentioned.

Tina
(Pointing to writing on chalk board) And the curly writing. It said in the book I read that back then they taught really, really curly writing and—um—girls they really wanted to write like their teachers, so I guessed it.

****

I read in a book—I read that mothers would put on dresses onto two year olds and three year olds because they didn't want them to get into trouble and when you were trying to climb up it would trip you and you'd fall down and you couldn't get it.

****

Some of the little kids want to visit 1700 because they think it would be clean and no pollution.

But that's not true! I was reading in this book, and it was a—it was a graph, and it showed the pollution from caveman days to our days, and in caveman days all of a sudden it went like that (points upward), there would have been a lot of pollution and things.

Caitlyn
I've read the Laura Ingalls Wilder books.

Instruction School learning appeared in two ways as intertext for children's sense-making about chronology. First, as they placed the pictures in chronological order children sometimes explained their choices by relating the picture(s) to their school studies. Second, the follow-up questions first asked children if they had found the task difficult or easy, and why, and then if they had learned anything about history, the past or long ago in school. This provided interesting information about what children thought they were learning about history in school, what topics seemed to either be most common or most memorable, and which helped them anchor historical data in some chronological framework.

While no kindergartner reported learning about history in school, first graders reported several history topics. One explained that in a study of Africa they had learned that "the mosquitoes and the stuff that kills them hadn't been invented (in the past)," another reported that in his class history "is the future too and the past," and another recalled that history had been studied, but wasn't sure of much more than that. Two child who, just prior to the interview, had participated in class discussions about English history, stated that they did not study history in school. Another child who thought that there hadn't been much study of history in school, none the less mentioned the Ku Klux Klan, World War II, George Washington, and the Vietnam War in placing the pictures. Others knew that they had studied a time when "they didn't have a lot of schools, or—uh—they didn't have a lot of—uh—food, and, or a lot of the clothes." Two children reported participating in "Heritage Day," and dressing up in clothes that were "worn a long time ago."

Second graders also mentioned Heritage Day, riding in a horse and buggy and seeing a man shoot off a gun as school related history. There was some indication that second graders had been introduced to Pilgrims and pioneers, though they sometimes confused the two, identifying the pioneers in the picture as Pilgrims. Beginning in second grade most children made some mention of Indians or Native Americans, though these were not always related to school study. As one second grader explained, "history is when people aren't alive anymore and all that. Like the Indians, some of them aren't alive anymore." Several of the second graders knew that Indians were the first people "over in America." In addition, most of them knew something about Black history, at least as far as knowing that African Americans had been slaves and recognizing that Abraham Lincoln and Martin Luther King had something to do with freedom or rights for African Americans. One child even defined history as "Like in the Black people's days, back when there was Black history times." In the excerpt below, one young man explains his experience with Black history:

> **Kareem**
> *What have you learned about history or the past or long ago in school?*
>
> Martin Luther King was shot, Frederick Douglas died in February, and Hank Aaron was the best baseball player. My friend read about Hank Aaron and I read about Frederick Douglas for a report. Frederick Douglas helped Haiti and all that.

Third graders reported studying about the flag and "Betty something, Martin Luther King, Abraham Lincoln, George Washington, Indians," Christopher Columbus and slavery. Hank Aaron reappeared. One child described a study of "dinosaurs and stuff. We've been doing research." Another explained that she had learned about Indians for several years "and we—uh—played—read books about them and Indian folktales, and how the Pilgrims took over their land and all that." The children appeared to have acquired some information, though it was not organized in a discourse that would necessarily be recognized as either historical or chronological.

By fourth and fifth grade, however, an important shift occurred in the instruction intertexts drawn on by the children and the discourse used in describing these intertexts. There was a leap in the use of what might be called a "history genre." Students placed the pictures in relation to their school studies of history as well as the more personal and out of school "family stories." They were more likely to refer to specific historic events, eras and the like, to include references to political history and rely less on technological change. They used dates more often, constructed causal narratives drawn from historical data, and, knowing more, found the task of placing things in chronological order much more complex. Increasing historical knowledge sometimes misled them as they struggled to apply newly emerging theories about the past.

Fourth graders provided more specific information about Native Americans and Black history than about any other topics. They used somewhat more differentiated language—Hopi and Sioux instead of generic Indians, for instance.

> **Fourth Grade**
> **Ryan**
> (Explaining how he ordered the more difficult pictures) Well, I didn't really live back then, and I didn't really know that much

about it, but I've studied it in school.

Can you remember any specific things that you remember studying before this year?

Uh—um— like Pueblo Indians, and—and like—uh—how they made their homes and stuff .

Cathy
We studied about the Indians that are past in history, the Sioux, and the Hopi, and, more kinds of Indians that I can't remember their tribe names.

There was also evidence that the children had studied some specific historic events related to each of these groups.

Nick
I remember about the American Revolution, French and Indian War.

Cedric
Learned about the Indians how they had to work for their food, learned about the slaves how they had to grass land, and people owned them, and some people lost their money and build houses like grassland house, under the ground.

Have you ever learned about Black people who weren't slaves?

Oh, yeah! Like King, Malcolm X. There's another one, we saw a movie about him, but I can't remember his name, he wrote, but he wasn't a slave, he wrote books and like that.

Booker T. Washington, George Washington Carver?

Something like that. Washington Carver, he was a scientist.

As fourth graders have more specific historical information to draw on, they are more likely to see historical connections as salient in establishing chronology. In the excerpt below, a fourth grader grounds her chronological analysis in background information about the history of white settlement and Native American displacement. Her initial inference is tentative—"*Maybe* that's about the time . . .," but supported by specific historical references to pioneers and Indian clearances. She goes on to explain, in much more general terms, one of the inferences she is drawing from her study of history: that some things from the past are Cathyd over into the present.

CF4
I notice in the picture that there are Indians? And then there are

> sailors or pioneers and then later in this picture (West) there are pioneers and there's—and it looks like there are no Indian tribes or anything around it so maybe that's about the time when they cleared out the Indians.

****

> Most of the time when I've learned about history or the past, I've learned it and mostly in social studies, and we've learned about the Indians and we've learned about the world, like different places and we're learning about how they started off and how they're growing and it changes a lot, but they still use a little of what they used long ago, so they still use some of their past in what they do today. Like when we are studying, which we are right now, we're studying the southwest and they had a person that had long ago they made pots out of clay and like that and she's earning her living today making pots out of clay

Grade five was particularly interesting because the students were involved in a year long study of American history. The state curriculum, though in a period of transition during our study, recommended that the fifth grade social studies program be American history from First Peoples through Reconstruction. At the time of our interviews half of the students had just completed the American Revolution or were only slightly beyond that point, so most of the pictures represented a time beyond what they had studied. The other half were involved in a more topical or thematic approach to American history. What makes this year particularly interesting in relation to instruction as an intertext for sense-making in history, however, is the impact of instructional method. While all of the fifth grade students we interviewed were studying American history and were at approximately the same point in their study, one of the schools approached this subject by incorporating the arts into instruction across the curriculum and relating the "academic" curriculum to study in the arts. Thus children entered fifth grader having seen or participated in history related plays ("Chris Crossed," "Miss Louise and the Outlaws"), studies of musical eras and the like. In fifth grade, their social studies teacher used drama as a regular part of the study of history, including a trial set at the time of the Boston Massacre. She also used primary source documents in activities such as trying to decide who fired the first shot at Lexington Green. Responses from these students tended to be more expansive and were more likely to include interpretive statements. This was true in both the picture analysis and the follow-up questions.

> **Grade Five**
> **Greg**
> *What have you learned about history, the past or long ago in school?*
>
> We just learned about immigrants, but we've learned about the Pilgrims.
>
> **Janet**

We talked about the slavery, about the people coming to America. . umm. . about the new inventions.

Elliott
We've learned about the Oregon Trail, and all them kind of trails, we've learned about—uh—different stuff, like how the world has changed from back then, back then to now, and we've learned about, we've learned about the slaves and all that stuff.

Rachel
The first picture has—um—a car and they—uh—and when they were moving across the United States—um—well I don't think that they had that much buildings back then and back then the thirteen colonies were—uh—the flag wasn't like that—um—that it looks like its before all the thirteen colonies were in.

Rodney
This [school picture] is the 1900's simply because of the desks and these bands, cause last year we did a play, "Miss Louise and the Outlaws," and it took place in the 1900's around that time, and that's when the bands were coming, so that give it away.

***

What have you learned about history, the past, or long ago in school?

We've been studying, well, lets see we do—have done—have to speak correct grammar!—we've done lots of things—um—we're getting ready to do a case on the Boston Massacre this Thursday. Um—we learned about the thirteen colonies, the wars we've had—we're not yet to the Civil War, and the—uh—we haven't got there yet, but we studied the Battle of Lexington, Paul Revere's ride—uh—the Stamp Tax, the Stamp Act, we're past the Revolution. Right now, we're holding on the Revolutionary War because we're trying to find out who said fire and caused the soldiers to fire at the Battle of Lexington. The Americans probably had the advantage there, because we knew the land better than the British, so when they came through, they don't know where we could attack them, and we could disappear just like that cause we knew the land, and they didn't.

Evan
When do you think each of these pictures happened?

I thought it was like the Oregon trail, or something like that, going out west and this one like the early sixties or fifties. (covered wagon)

I think this is in like the 1700's like the colonies cause their—like the English—like suits—or like during the Revolutionary War like this is a fort. (1700's fort)

What have you studied about history, the past, or long ago in school?

Well—um—we're up to the Revolutionary War and the Congress. What I always like to study about is the Civil War.

Yeah? What makes that one interesting?

Well I say its interesting cause its fought in the United States and there were soldiers from both sides and it was like the first modern war.

Umhm. When somebody says something like that—that its the first modern war—what does that mean?

It means like it had—they used railroads and machines and the Monitor, like modern weapons.

Tina

Which of these pictures did you find most interesting?

This one (1837) because it has a lot of things to see in it, see it says "all those who trade on borrowed capital should perish credit," something like that . . .

A lot of stuff in there that doesn't make a lot of sense?

No! I like it! I like it. It gives you a lot of things to see, and also the flag, I forgot to tell you about that, its not full, and its a very old fashioned flag. I think in the early 1800's.

***

In this picture, the school one, they're all behaving very well, they're sitting straight and this one people see a drunk here, and I'm sure there were a lot, but they're showing a drunk, and they've got British soldiers, walking down the street—oh—wait a minute. If they've got British soldiers walking down the street, I didn't' see it before, O.K., I don't get that, cause it says this is the sixty-first anniversary of our independence.

Are you sure they're British?

Yeah!

How can you tell?

The hats! Its weird!

It wouldn't have been possible by then for Americans to be dressing like that?

I don't know.

Be interesting to find out. Maybe they were good friends by then?

I really don't think so, because England would have probably been still mad.

And we had another war with England.

Yeah, in 1812. It could have been in 1812, and they could have been patrolling the streets, they could have taken over some weird place.

Do you know of any place the British

No, because we haven't studied that yet, we're just getting over the Revolution. We had the trial.

How did that go?

Yeah, bah! The British won, but in the real trial the British didn't win, but the jury **but I'm a colonist, I'm a patriot. She (teacher) showed us all the evidence, and she showed us everything that happened and we studied it, but she didn't tell us anything that happened after that and—um—and she said alright, are you for the British, because the British, on one hand—um—were taxing the colonists and the colonists had no way of representing they could not vote for people who were running in England and they had no say in their taxes they were going to do it upon them so—um—that was on the colonists' side, but the British on the other hand, they were being thrown rocks at. My name was Archibald, and I didn't know that I had already broken my wrist—um—on a British officer, so when I got on the stand and they said have you ever assaulted a British officer, then he said we have evidence you broke your wrists off a British officer, and I went OOH! I didn't know, but I shouldn't have said that, because in the book it said, "Beep, you Yankee bloopers."

****

They used to use pence, yeah, they used British money because they were citizens of England, so they would use pence, but during the war they would have used these little tickets, these food stamps, and they would use those as money and then the fifties and so on so far we've used just coins and dollar bills and so on, and checks, and credit cards.

Sixth graders were not studying American history, although some were studying ancient history. For most, however, their curriculum involved a geographic and anthropological study of the world. This made their responses interesting on two levels: first, to see if they used any of the American history they presumably had in fifth grade, and second, to see if their current study of other parts of the world was brought to bear on the task. While they did use their studies of Native Americans and the Westward movement, they relied more on material culture clues and especially on technology. When asked what they recalled of history instruction in school, some reported categories: presidents, newspapers, inventions, wars, buildings, clothes, slavery, how people lived, Some provided more specific examples to illustrate categories, or just listed topics: Oregon Trail, American Revolution, Great Depression, lame duck, Amerigo Vespucci, ancient Greece and Rome, World War II, Germany, Vietnam, Hitler, Jews, Atomic bomb, Somalia, Columbus, Mozart, Bach, Baroque period, Japan, Africa, London, Wales, Scotland, Sherwood Forest, Glasgow and Edinburgh, and the United Nations. Sixth graders also tended to make more history and time related generalizations in describing the past.

> **Caitlyn**
> [The hardest pictures to place were] the earlier ones. I had to look for clues. That is a time when I kind of blank out. There's the twenties and then there's the fifties and I don't know what came in between.
>
> *Have you studied that at all?*
>
> Not really. We talked—about in fourth and fifth grade—we talk about older times, and then not much after this, and then just seeing various pictures here and there, cause like in our other classes we've been watching—um—documentaries on the film business and that kind of thing, so I've seen that kind of thing and what the actors and actresses looked like, but then we didn't see too many films in that era.
>
> ****
>
> *What have you learned about history, the past, or long ago in school?*
>
> We learn a lot of specific dates, you know, what happened when, and then we learn general stuff : at this time people thought this, and now people thought this, and how peoples views change over time. A lot of people's views change, but not everybody. We still have things like the KKK around. And you still have that kind of thing around so obviously their views haven't changed since like the Civil War and stuff, but I think most people's have. Not necessarily everybody. Plus, like in class, we study like "At this

time everybody was trying to get along with the blacks," but not necessarily everybody will have. There's definitely still prejudice around, not necessarily just about Blacks and Hispanics, either.

Patricia
Well, we learned about—um—the ancient Egyptians, and the Romans, we learned about, we're learning about World War II right now, and, another thing is, is we learned about—um—like the president during inauguration time and we had to learn different stuff he had to do to become president—um—another thing is that we learned how to run our own business around Christmas time. We got to have our own businesses, and we learned how a business works, and what the different terms were that they used. We learned about the Civil war—um—the Revolutionary war. We learned about settlers, like Christopher Columbus and different people like—um—Amerigo Vespucci, that came along and people that basically discovered the land, and we learned a lot about the different laws, like Congress, how they make the laws, and what the presidents' job is and we learned what the lame ducks were, another thing is—is—we learned about—um—different places in the world, we studied the state, the state's past about Kentucky's past.

Do you remember studying anything about history or long ago at school before fourth grade?

Um—no, not really. I don't think they concentrated too hard on making us learn different stuff that went on, I don't think they—I don't think they were teaching us and getting us ready for fourth grade history that we were having then. I think they should go on and have it because I think its important to know about it even when you're like first, second or third grade.

Conclusions

The results of this study provide increased evidence regarding the kind and sources of children's historical knowledge, and how they deploy that knowledge. The most accessible historical knowledge for early and middle grade children apparently relates to changes in material culture and the patterns of everyday life. It appears, too, that the intertexts that inform children's historical understanding, especially prior to fourth grade, provide better information about material culture than about other aspects of change over time. Family stories and activities often relate to material culture—visits to historic sites, conversations related to artifacts and the like. In addition, popular culture referents— whether dolls in period costumes or television shows in which current issues are acted out against a historic backdrop— add information (and misinformation) about material culture.

There was some evidence, even at the younger grades, that instruction made a difference in children's understanding of history. For instance, there was recognition that exploitation of both Native Americans and African Americans occurred prior to the Civil War. That some children thought both were confined to the past is, we think, an artifact of instruction that focused on the distant past of these groups. None the less, children remembered both the information about Native American life and African American slavery, and the interpretation that displacement and slavery were historic evils. In addition, some children at all grade levels linked history to personal issues. Certainly family stories made these links explicit by telling children that their ancestors were actors in history, but children made other connections as well. The willingness to take history personally showed up as children discussed role-playing the parts of historic actors, and was triggered by specific details in the pictures.

While fifth grade children continued to deploy many of the same sources of information in assigning chronological sequence as had younger children, they were also learning a new reference system that consisted of specific eras (Colonial, Revolution), events (Boston Massacre, War of 1812) and relationships (British taxes, lack of colonial representation create pre-Revolutionary tensions) that allowed them to make more discipine-related interpretations (British and colonists had legitimate, but differing points of view). This represents a considerable intellectual challenge. For many, this was their first systematic encounter with chronological history covering more than a state or region. In addition, academic history did not always intersect very closely with their preexisting history domains. Academic history tends to rely on verbal symbols and a chronological sense that is, at best, shaky at this stage. It should not be surprising, then, that fifth graders were sometimes uncertain in applying this new genre, or that they sometimes misconstrued the details. Rather, their willingness to engage in this new genre, and the facility with which some students managed the transition has, we think, important implications for instruction.

If the most accessible knowledge for younger children relates to material culture and the patterns of everyday life, then it makes sense to ground history instruction in social history. If children's facility with material culture is due, at least in part, to their direct experience with it, and thus their ability to notice change in this area, then it also makes sense to place greater emphasis on history that can be seen. "Seeing" in this instance is twofold. First, it means providing a rich array of images of what things looked like, what people did and how they did it. Second, it means that instruction must mediate the interaction between child and image. The children in our study were comfortable with pictures, but they were also uncritical of their veracity. Unmediated by instruction, visual images, as other data source, can be misleading. The role of instruction, then, might be to present a variety of images for discussion and interpretation and to encourage the creation of images of both historic and current events, so that children come to see pictures as intentioned creations. In a sense, this type of instruction invites children to assume two stances in regard to history. The first is a dynamic perspective in which the child views events in progress, altering his or her interpretation as each new piece of information is added. The second is a synoptic perspective in which the child can step back, review the whole sequence of actions and draw at least tentative conclusions.

These two stances, combined with children's access to material culture and their tendency to make personal connections between their lives and the history they encounter suggest that a good starting point for instruction might be local history. This approach has several advantages. It taps history domains already available to young children. The sources for a dynamic perspective are in place: children can take pictures, interview people, compare pictures of now and then. They can view first hand the results of some sequences of action in time. Finally, they can create their own interpretations, share them with interested others, and, perhaps, come to see that other sources of information about history are as intentioned as their own work. In this way, children are introduced to the semiotic practices of an academic history community in a way that appears to be developmentally approriate.

Finally, it is worth noting the impact of the arts on some of the children's understanding of history. While there were too few of these students to make any but tentative conclusions, their interviews are striking in comparison with their peers. Most of them were involved in music, drama, dance or fine arts performances separate from their academic studies. Partly, they remembered historic details from these events because their involvement in a performance required regular practice and multiple performances. By sheer repetition they were more likely to remember the history involved. More importantly, from our point of view, was the impact of drama used in academic instruction. The fifth grade students who staged the Boston Massacre trial, for instance, spoke at considerable length about the experience, noting the differences between their trial outcome and the real event. They were cognizant, too, of point of view in historical interpretation and willingly considered alternative perspectives and possible motives in relation to historic events. They situated themselves in these events, considering how it would have felt, what choices were open to historic actors, and the like. Recognizing that such simulations have been recommended for years, we suggest that this largely untapped resource appears to be an important way to connect children to history.

Footnotes

1. "Text" here and throughout the paper refers to a record of social action, whether it is a piece of writing, a photograph, picture, film, or video.

2. From a social semiotic perspective, an action is made meaningful through the relations we construct between it and its contexts. Since every action is placed in many contexts, the kind of relationships we construct between actions or events and contexts provides insight into how these actions or events are understood.

3. Tapes were coded to protect student anonymity. Where names are used, they are pseudonymous. Conventions of transcription taken from Wells and Chang-Wells, (1992) were used as follows:

—	Incomplete utterances or false starts are shown with a dash, e.g., "Well—er—"
.	Pauses are indicated with a period. In the case of long pauses, the number of periods corresponds to the number of seconds of pause, e.g., "Yes . . I do."
?!	These punctuation marks are used to mark utterances judged to have an interrogative or exclamatory intention.
CAPS	Capitals are used for words spoken with emphasis, e.g., "I really LOVE to read."
<>	Angle brackets are used to enclose words or phrases about which the transcriber felt uncertain.
*	Passages that are impossible to transcribe are shown with asterisks, one for each word judged to have been spoken, e.g., "I'll go ***."
(Gloss)	When it is judged necessary, an interpretation of what was said or of the picture being referred to is given in parentheses.
****	Break in the transcription. A portion of the transcript is being omitted.

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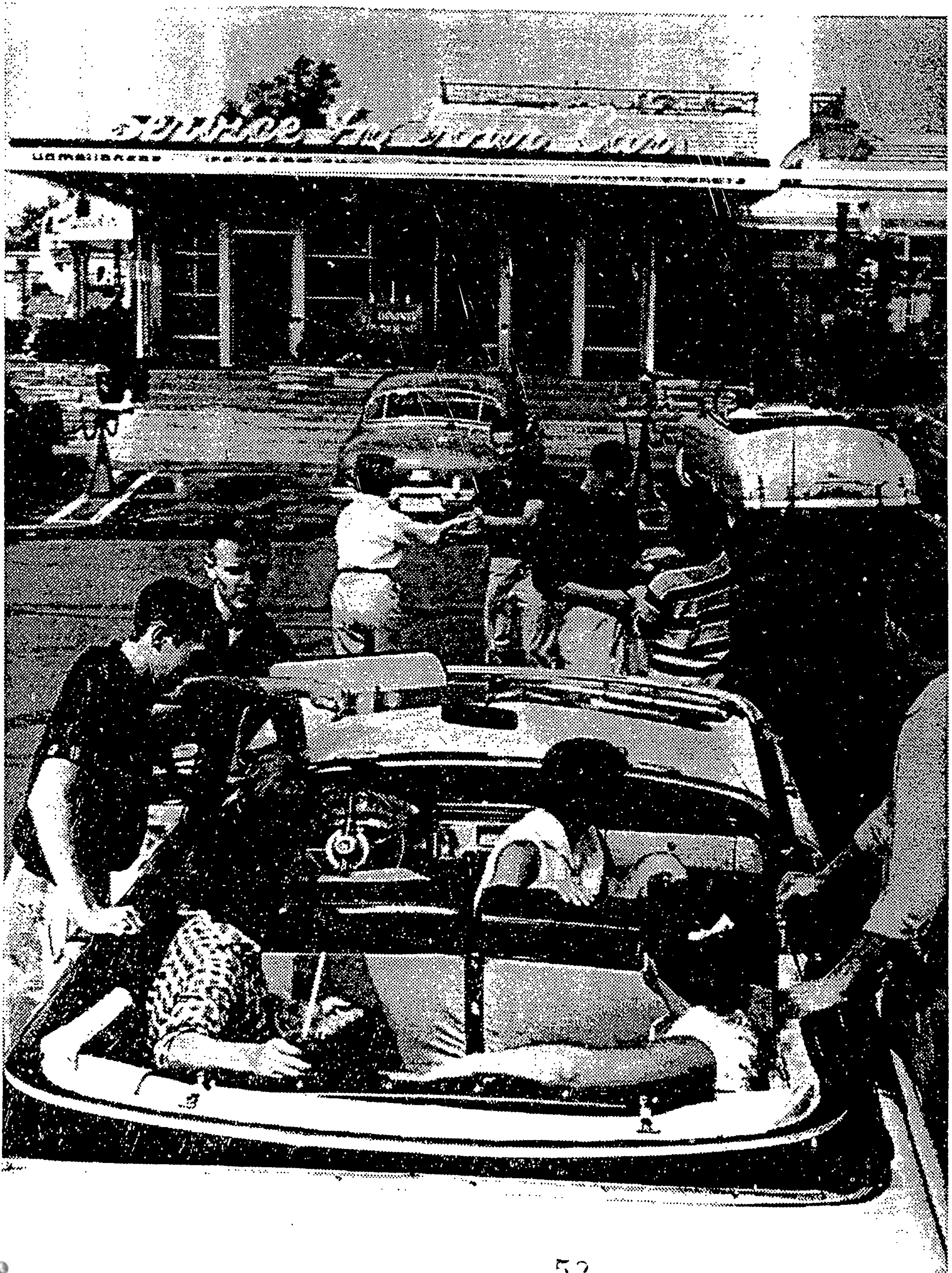
Appendix A
Pictures

Picture 1a



BEST COPY AVAILABLE

Picture 1b

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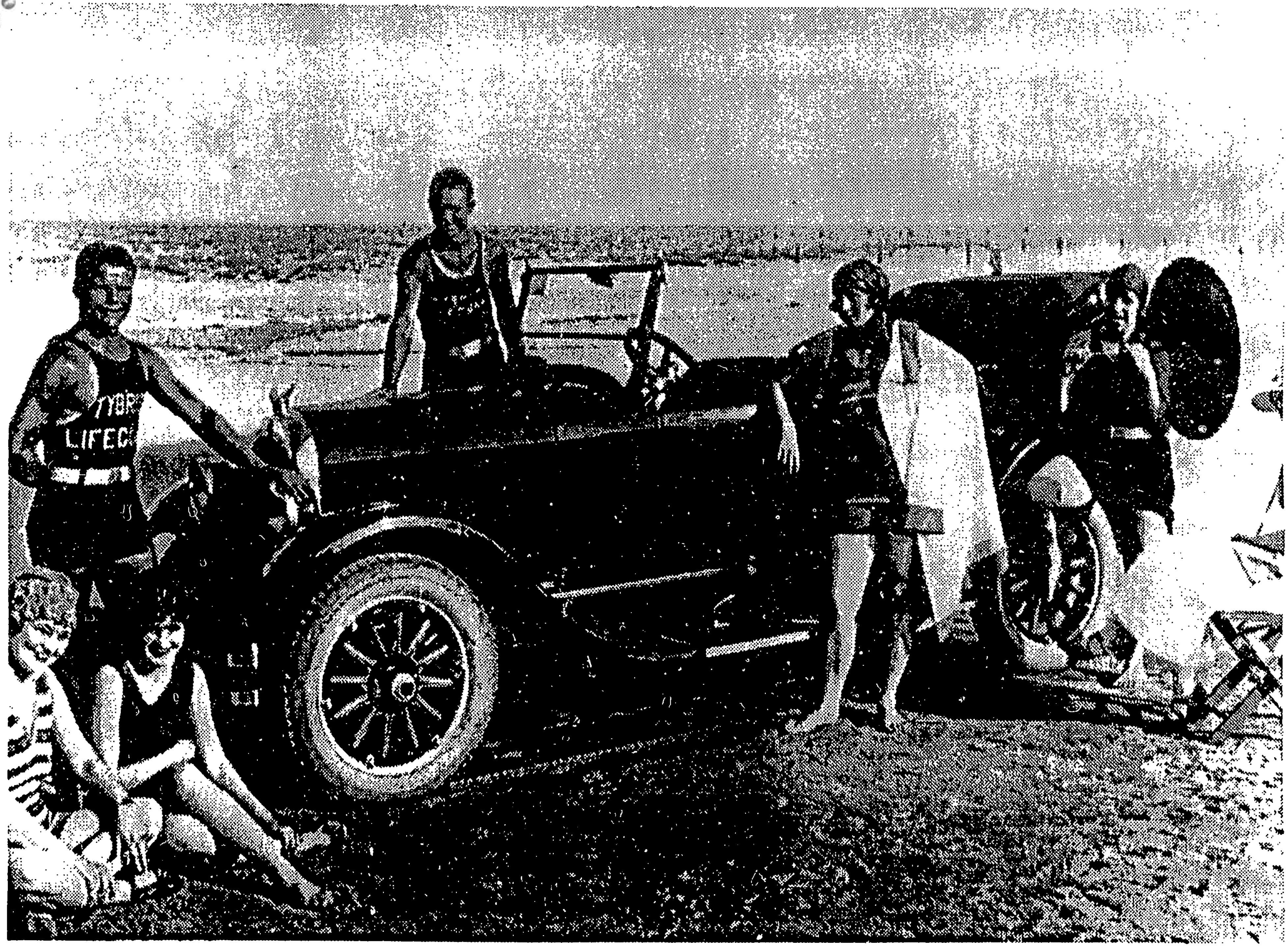
Picture 2



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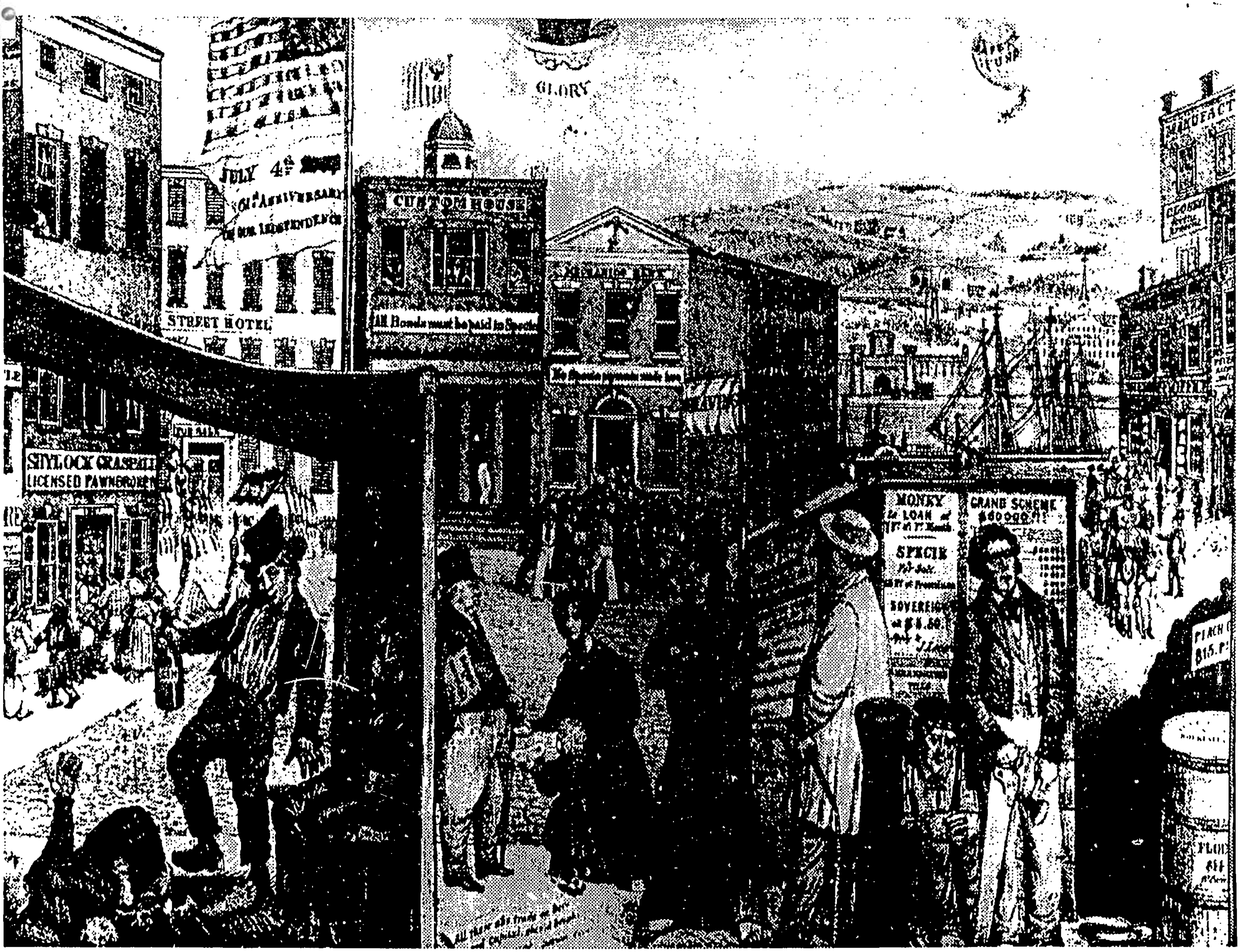
Picture 3


GLORY
JULY 4th
61st ANNIVERSARY
OF OUR INDEPENDENCE
STREET HOTEL
CUSTOM HOUSE
All Bonds must be paid in Specie
SHYLOCK GRASPIT
LICENSED PAWNBROKER
MONEY to LOAN
SPECIE For Sale
SOVEREIGNS
GRAND SCHEME $50000

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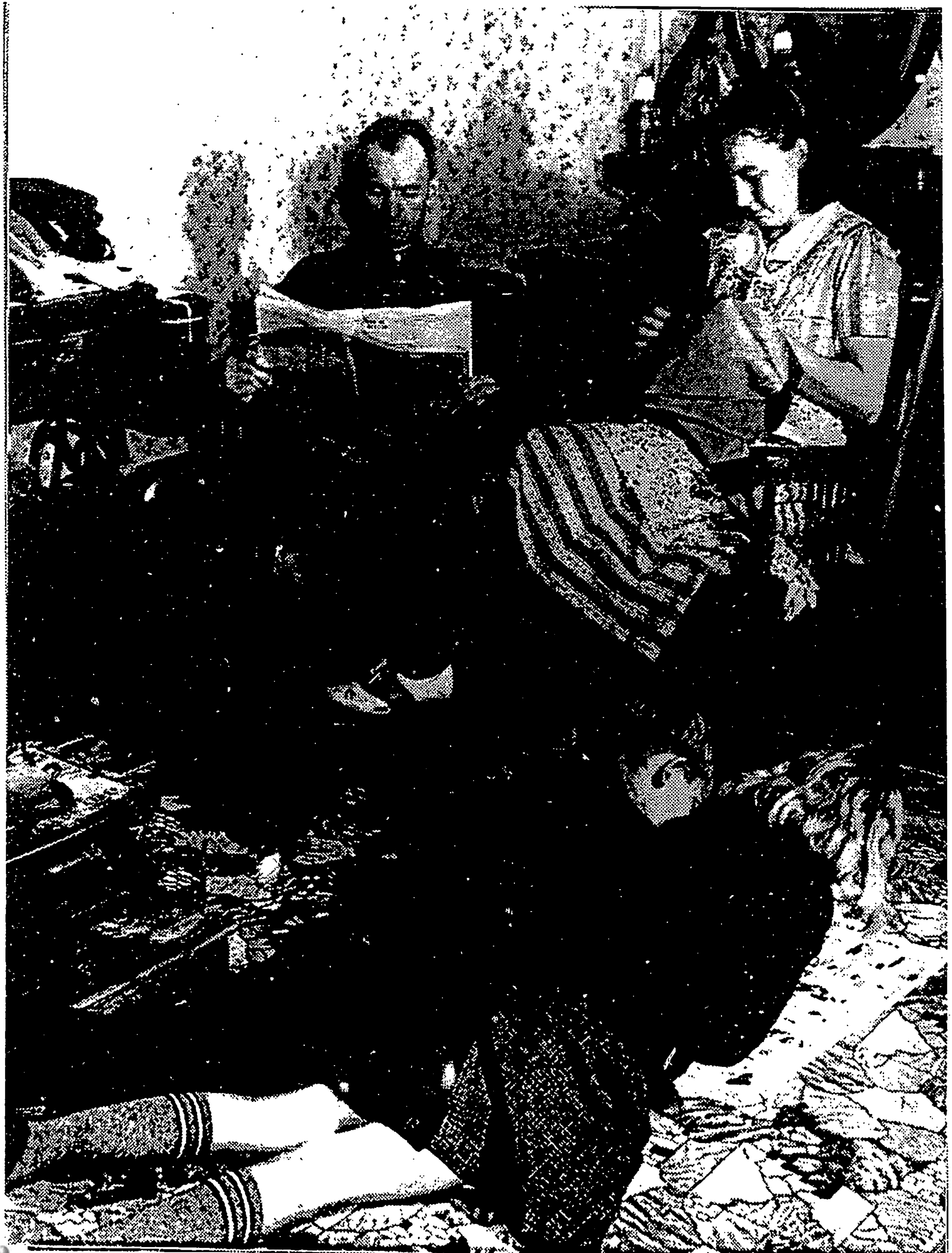
Picture 2



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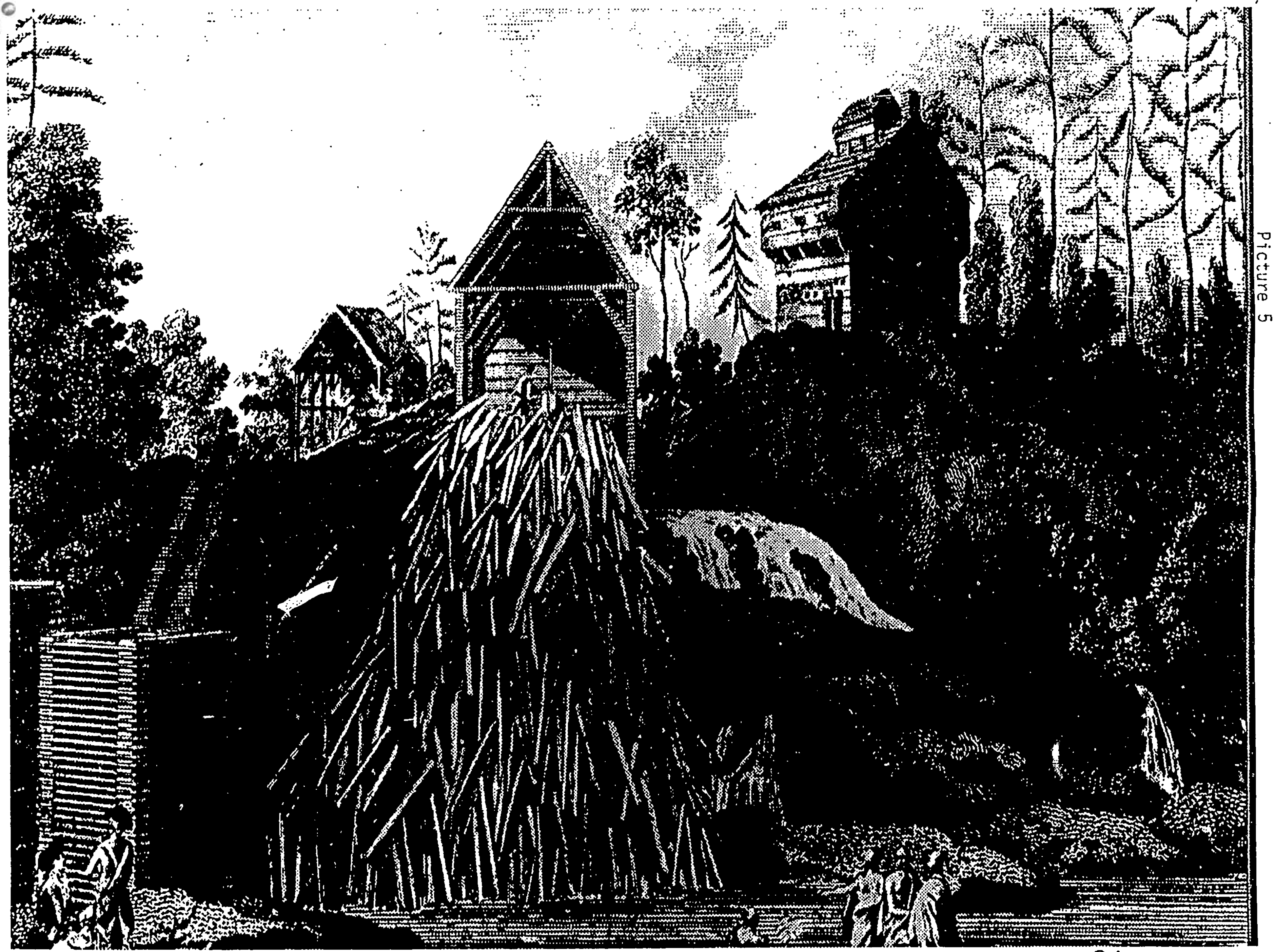
Picture 5



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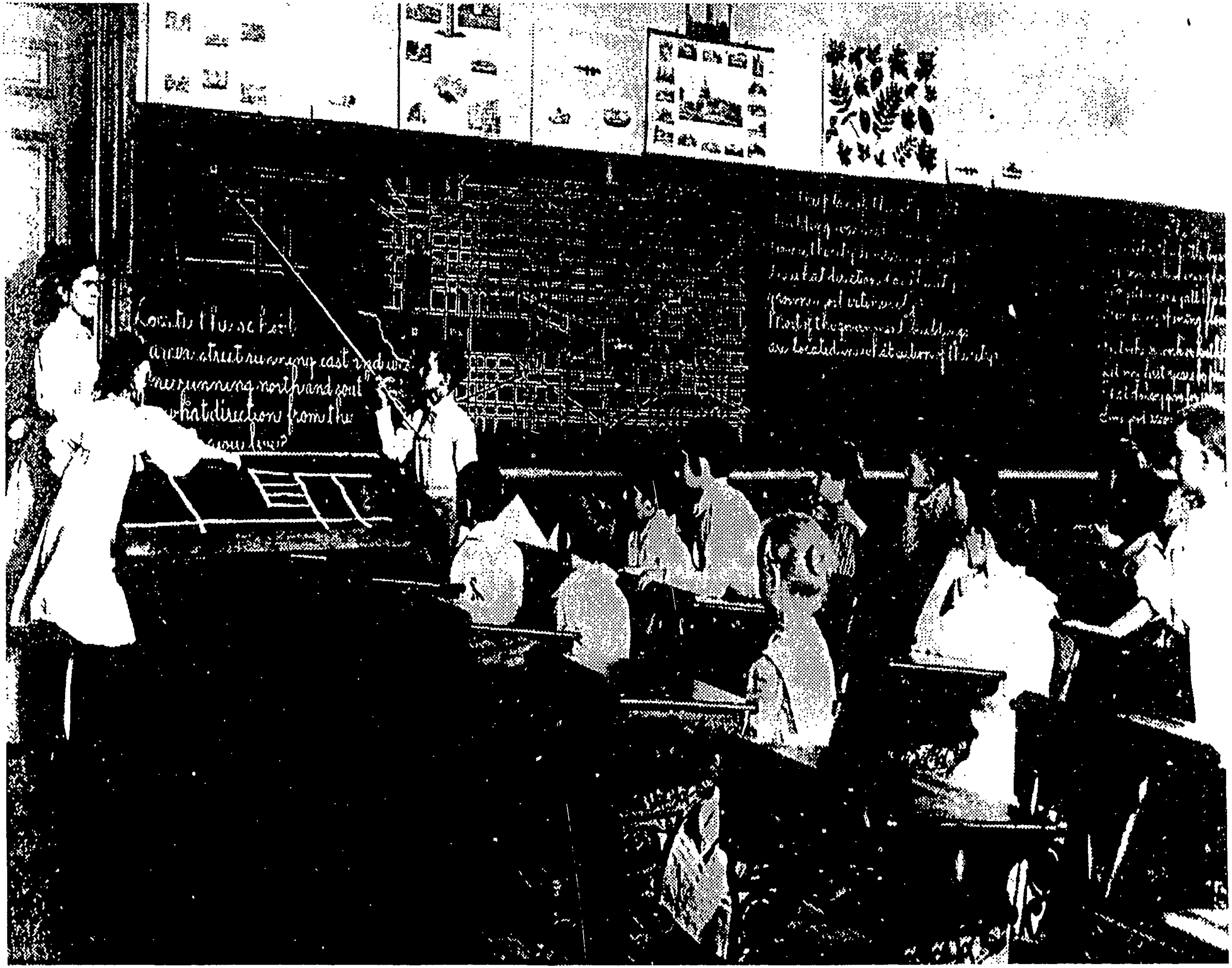
Picture 6



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Picture 7

LEXINGTON HERALD-LEADER

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Picture 8 (division not in original)

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Appendix B

Interview Protocol

After introducing self to child and obtaining assent, say:

Here are two pictures from different times. Take a few minutes to look them over. You may not know exactly what is going on in each picture. That is all right. I'm not interested in whether you know exactly what the picture is, but in how you decide how old the picture is or about when the picture could have happened. There are two things I would like you to do with these first two pictures on the table. First, I would like you to put these two pictutes in time order. Please start with the picture that is from the longest time ago (point to the child's left), and then put the picture that is the closest to now right here (point to child's right). You can start in just a moment. Second, while you are putting the pictures in order, I would like you to think out loud about why you are putting them in that order. What I mean is; I want you to explain to me what you are thinking while you are doing it. What things in the picture help you to decide which picture happened longest ago, or most recently? Do you have any questions before we start? (Do not answer questions about pictures.) Remember to tell what you are thinking as you are putting the pictures in order.

Once the child has completed the first part of the task, say:

Now I have some more pictures. I am going to give them to you one at a time. For each one, tell me where you think it goes—in between two of them or at about the same time as one of them. Explain why you put them where you did, just as you did with the first two pictures. Do you have any questions about what you will be doing? (Stop adding pictures if child expresses frustration or can't complete the task.)

Once the child has placed all the pictures, say:

Now that you have done all of them, are there any pictures you would like to move around? If you do, explain to me why you are moving them.

Point to each picture and say:

When do you think this is?

End of task questions:

1. Did you think this was easy or hard to do? What things made it easy or hard?
2. Which pictures did you think were the easiest to figure out? Why? Which pictures did you think were the hardest to figure out? Why?
3. Which pictures did you think were the most interesting? Why did

you like that one (or those)?

4. Now that you have looked at all of these pictures, what can you tell me about how things have changed over time?
5. What can you tell me about how things were different a long time ago?
6. What is history?
7. What is the past?
8. What is the difference between history and the past?
9. What kinds of things have you learned about history or the past or long ago in your classroom?
10. Have you every learned about history or the past or long ago outside of school?