Sample in a Jar: Oral Culture in a Literate World

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Abstract

The number of languages spoken in the world today is estimated at nearly 7,000. The majority of those languages are not written, but as Western Culture spreads, more and more communities are making the transition to literacy. This paper aims to explore the effects of this transition and the attitudes of the people undergoing it. I begin with some background on literacy and a review of literacy attitudes through history. I then take an in-depth look at the attitudes and practices of the Cochiti of New Mexico, a group that rejected writing and have had a successful language revitalization project. There is a strong bias towards written language in Western thought. Through my analysis I attempt to dispel some of the assumptions about written language that are widely held in both academia and the wider population. Spoken and written forms of communication are very different, and neither is inherently superior. I suggest that there is no one answer to the question of whether or not to adopt a writing system. As with most decisions facing small or endangered language communities, the decision to write or not write a language must be made by the community, and only after careful examination of the relevant factors. *

1 Introduction

Of the nearly 7,000 languages spoken in the world today (Gordon 2005), most are not written. The vast majority of them exist in purely spoken forms. This is changing as languages make the transition to literacy, and the effects of the transition are powerful and far-reaching. Literacy is spreading rapidly as a consequence of

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globalization. Because the written word has become so dominant in the Western world, a strong bias towards it has developed. Take, for example, this excerpt from the UNESCO *Regional Report on Literacy*.

"The illiterate man's thought ... remains concrete. He thinks in images and not in concepts. His thought is, in fact, a series of images, juxtaposed or in sequence, and hence it rarely proceeds by induction or deduction. The result is that knowledge acquired in a given situation is hardly ever transferred to a different situation to which it could be applied" (UNESCO 1972).

This quote reveals a gross misconception of the relationship between thought and language. In the following pages, I will explore literacy and the written word through their social, cognitive, and psychological effects, and attempt to dispel the views that have inflenced this quote and others like it.

Does literacy cause fundamental developmental changes? This has been a hotly debated issue, and despite a significant psychological study showing no direct correlation between literacy and abstract thought processes (Scribner and Cole 1981), the misconception persists today, twenty-five years later.

What effects does the introduction of a writing system have on a predominantly oral culture? The bias that is so prevalent in the Western literary tradition would have us believe that the effects are entirely positive, yet writing can have serious negative effects on a language community as well. Oral cultures are disappearing, and with them, unique forms of expression (Harrison 2006).

What are the attitudes of predominantly oral cultures towards writing? The written language bias is widespread, and even in communities where literacy is not the norm, the written word can hold enormous power. In communities where

the bias has been ingrained, the prestige of a written form can provide an important boost of enthusiasm necessary in language revitalization (Terrill 2002). In other cases, however, the opposite takes place. Communities with a history of oppression can come to see writing as a tool of their oppressors. In these cases, communities have firmly rejected writing (Benjamin et al. 1996).

1.1 Oral culture

In many societies in the world today, writing is either nonexistent or mostly unused. Knowledge in these societies is maintained and preserved though a massive feat of collective memory. Language, it turns out, is an excellent tool for encoding knowledge, and with the help of various memory systems, everything from technical knowledge to epic stories can be maintained and transmitted from one generation to the next.

Books, manuals, magazines, and even the mighty Internet do not exist in primary oral societies. Even in societies where people are literate in a second language, cultural knowledge is often maintained in oral form. Despite the lack of these seemingly indispensable sources of information, oral cultures maintain vast amounts of knowledge in their collective memory and consciousness. Take, for example, the navigation system used by Micronesian navigators. Micronesia is an area of the Pacific filled with small islands separated by large stretches of open ocean. Micronesian navigators are able to travel from one island to the next using a technique that does not require maps or writing of any kind. The method has been passed on orally for generations (Hutchins 2005). Such accomplishments seem incredible to many in the literate world, but they are commonplace and essential in oral cultures.

These rich oral traditions can tell us a lot about human cognition. The human brain is a mysterious black box whose inner workings continue to elude both biologists and psychologists, but the often complex and extremely clever techniques that oral cultures use to encode and store such vast amounts of information can begin to shed some light on the internal workings of memory and language.

It is important to remember that non-literate does not mean primitive. Our Western ideas about modernity unfairly conflate literacy with modernity. *The Savage Mind* (Lévi-Strauss 1966), is a good example of this phenomenon. The book is a very dense study of the thought processes of non-literates. More recently, in *Orality and Literacy*, Ong describes orality as an "earlier state of consciousness" (Ong 1982: 174). In fact, oral cultures often encode elaborate systems of knowledge that are maintained for generations. Many oral cultures maintain complex plant and animal taxonomies, others posses elaborate counting systems. These systems enable the transmission of valuable information about the environment in a very concrete way.

Even when written language becomes the norm in a society, purely oral traditions often persist in very specific domains, like religious and traditional ceremonies. Writing systems developed largely as a method for keeping financial records (Daniels and Bright 1996), and only became an outlet for artistic expression later. Oral traditions tend to persist longest in very private and sacred domains where the very words that are spoken are an important part of the tradition. The ephemeral nature of speech can be intimately tied to the ceremony. Writing down a sacred verse or a favorite story fossilizes it and releases it from the moment (Dauenhauer and Dauenhauer 1995). It becomes cold, lifeless, and the spoken words are no longer special.

1.2 The written language bias

There is a strong bias towards written language. It is viewed as a mark of modernity. Those who lack written language are often seen as backwards and uncivilized. It has been suggested that the technology of written language brings with it new, more advanced cognitive abilities. In addition to its prevalence in the general public, this opinion is also held in academia. Consider this passage from Ong (1982: 78): "More than any other human invention, writing has transformed human conciousness." As we will see, this idea has its roots in the Western literary and academic tradition that began in post-Homeric Greece. This misguided belief that written language is equivalent to, or even superior to, spoken language has far reaching consequences for both the study of language and the languages themselves.

Linell (1982) argues that writing is the "metalanguage of linguistic description." Writing systems developed as a way to symbolically represent spoken language. Writing is an artificial system that simply mimics a natural one. It is a very useful and powerful technology, but the written word is still an imperfect representation of speech. Much is lost during the transcription. Consider the difficulty of rendering any number of speech phenomena to words on a page — sarcasm, inflection, mood. Of course, written language has its own way of realizing some of these intangibles, but the translation from one form to the other is often difficult, and rarely one-to-one. Unfortunately, linguistic theory (and many other fields as well) is heavily dominated by the study of text. When we draw syntax trees, the leaves are written words. When we study discourse, we pore over transcripts. Our understanding of speech is based on language that has been put through a filter. We are limited by what we can write.

Still, writing is a powerful technology. The advent of writing has been linked with the emergence of new social and political structures, advances in science, and even logical reasoning (Goody and White 1968). These claims are not ridiculous. The ability to write down and preserve ideas is absolutely an enabling technology, but it has been shown that there is nothing developmentally transformational about writing (Scribner and Cole 1981). Scribner and Cole studied the tri-lingual Vai people of northern Sierra Leone for many years. The study of the Vai will be discussed in much greater detail later, in section 2.2.

In some cases, the bias extends beyond the literate world into the non-literate world. The Lavukal people of Solomon Islands are mostly non-literate. Despite low literacy rates, Terrill (2002) found that publication of a dictionary in their indigenous language was a source of great pride for the people, despite their inability to use it. They attached great importance to the document based on attitudes they had developed from contact with other cultures that had writing. A dictionary had a similar effect on the Deaf community in the 1960s. When William Stokoe created a dictionary of ASL, the Deaf community began to see ASL as a real language (Humphries 2007). In other cases, a community may reject the idea of writing their language. The Cochiti of New Mexico made a conscious decision not to develop a writing system as part of their revitalization efforts. Their revitalization continues to be successful (Pecos and Blum-Martinez 2001). The significant differences in these cases suggest that the decision to develop a writing system must be considered carefully. There is no universal right answer.

2 The debate

The study of literacy is fraught with conflict and controversial theories. The term *autonomous literacy* has been used to describe the theory that literacy automatically endows the literate with increased cognitive abilities — improved memory, higher logic, and more abstract thinking (Goody and White 1968). This theory was put to the test by Scribner and Cole (1981), and the results contradicted the original theory. Despite these findings, the idea that increased cognitive abilities are somehow inherent in the act of writing remains popular.

2.1 Autonomous literacy

The theory of autonomous literacy stems from the belief that literate and non-literate societies are inherently and completely divided. This division is known as the Great Divide. The divide manifests itself both cognitively and socially. Cognitively, we have the assumption that literacy is not only a precursor, but a predecessor to the developmental changes in the brain that produce higher-order thought processes. Socially, literacy is viewed as a prerequisite to the economic, social, and political development necessary for global participation. In the extreme, it becomes the responsibility of the literate to spread literacy throughout the world. (Grenoble and Whaley 2006)

In their influential paper, "The Consequences of Literacy," Goody and White (1968) put forward the strong argument that literacy fundamentally changes human cognitive ability. The paper begins with a very idealized view of humanity and writing. Before they even begin to make their main argument, they claim that, "the alphabet makes it possible to write easily and read unambiguously about anything which the society can talk about" (Goody and White 1968: 316). The claim

serves nicely as an introduction to their misguided and idealized view of language. Language, spoken or written, is nothing if not ambiguous. The expressive powers of language come from its ambiguity. Even in the highly specialized realm of contract law, ambiguity is a common problem (Solan 2004).

Their argument begins in post-Homeric Greece, the birthplace of the Western academic and literary tradition. At this time, literacy was beginning to become commonplace. There was still skepticism. Plato himself was very suspicious of the new technology. It was shallow and lacking in content. In *Phaedrus*, he warned that it would, "create forgetfulness in the learners' souls." But even Plato couldn't hold out forever. His *Republic* is one of the most well-known and influential books in the Western literate tradition.

At that time, Plato and Aristotle were developing the idea that there might be some generic structure for formalizing thought — that there might be a set of abstract rules for thinking about problems in general. Goody and Watt argue that this logical process is essentially literate. They find it difficult to believe that such complex arguments could be developed and transmitted in oral form.

At the same time, formal education was also becoming more common. Goody and Watt attribute the availability of formal schooling to the emergence of written language. They claim that schooling is a direct result of literacy. It seems likely that emergence of the two at around the same time is not a coincidence. They certainly are mutually beneficial. But there is no evidence to support this hypothesis, just speculation. In fact, Hutchins (2005) describes the Micronesian navigation system, a very complex and powerful system for navigating between islands that is taught and performed without any written records. So, given that writing and formal schooling emerged at around the same time and that complex systems can be learned and transmitted without the aid of writing, is it any more of a jump to

assume that widespread education was the main fuel for the growth of Western thought? Or, more likely, that it was the combination of the two that provided for the rapid changes and growth?

2.2 A surprising study

The theory of autonomous literacy was widely accepted by the academic community, but it had never been tested in the field. The theory was based entirely on speculation. Much had been assumed and written about it, but little had been done to validate it. Scribner and Cole (1981) set out to change all of that. When they began their research, the prevailing opinion was that, "written language promotes abstract concepts, analytic reasoning, new ways of categorizing, [and] a logical approach to language" (Scribner and Cole 1981: 7). They did not find fault in the lack of empirical evidence in the theory. In their opinion, sitting around and thinking about things was the realm of sociology, while testing hypotheses was the realm of psychologists. So they, as psychologists, set out to test the theory.

They decided to work in a language they already had some experience with. The Vai are a small group who live in a 35–40 mile wide area spanning the border between Sierra Leone and Liberia. Scribner and Cole cite the 1974 census and put the population of speakers in Vai country at about 12,000. Current Ethnologue numbers put the speaker population at about 105,000 (Gordon 2005), but this seems to include the entire population of speakers, including those in Sierra Leone and other areas. Some of the Vai have moved to cities in pursuit of jobs, but many Vai still live in Vai country where the main activity is farming. The land requires that crops be rotated frequently. As a result most Vai towns are small and separated by large distances.

Most of the Vai living in Vai country are illiterate, but there are opportunities for becoming literate in Vai, English, and Arabic. The Vai script is not formally taught, but is acquired mainly through traditional means. Formal English education is not available in most areas, although there are public schools in some of the larger towns. Most towns have at least one person able to read and write complicated official documents. Arabic is taught through Qur'an schools, though the level of literacy achieved varies greatly since these schools consist mostly of repetition of verse. Literacy is generally higher in Vai than in either English or Arabic. The variety of education and literacy options available in the Vai community makes the Vai particularly well suited to this type of study.

Scribner and Cole wanted to test for cognitive changes as broadly as possible. They make an important distinction between developmental change and learning. Developmental changes refer to actual changes in the way the brain functions that bring about new capabilities like logical reasoning and abstract thought. Learning, on the other hand, refers the acquiring of new skills. They were entering unexplored territory, so there was very little background in the psychological literature at the time. Instead of developing new tests from scratch, they decided to adapt existing cognitive tests. The tests they used were developed to test general mental abilities in children for use in school assessments. They had some reservations about using tests designed to test for developmental changes in children with a fully mature population, but they decided that as long as they made sure to evaluate the results in the context of "general cognitive change" they would be safe (Scribner and Cole 1981: 114).

The tests were designed to evaluate the subjects in five categories: abstract thinking, categorization, memory, reasoning, and reflective knowledge about language. These are the same basic concepts that Goody and Watt had a hard time

believing that a non-literate person would be capable of. As they performed the tests, they gathered data on both whether the subjects correctly performed the task and how they accomplished it. The tasks were accompanied with interview questions about the mental processes that the subjects were following. Multiple regressions were performed on the results, and the results showed that the only factor that significantly affected cognitive abilities was formal schooling. Literacy on its own showed no correlation.

As for Goody and Watt, their arguments were largely proven to be wrong. The rather strong assumption that literacy, in and of itself, produced cognitive change, was refuted. Those who were literate but received no formal schooling were no more able to perform the tasks than their non-literate peers. Those who had received schooling were much better equipped, and their ability to perform increased with the amount of schooling they had received. This suggests that the kind of cognitive development investigated in this experiment had less to do with the system of writing itself, and more to do with repetitive and prolonged exposure to higher-level thinking that formal schooling provided.

2.3 Pros and cons

Given the results of Scribner and Cole's experiments, it is important to keep the goals of literacy in mind. Literacy is a tool — a means to an end, not an end in and of itself — and as such it must not get in the way of the larger goals of language revitalization and language in general. The goal is not to teach people how to read and write for its own sake, but to teach them to use a writing system to communicate in the literate world. As we saw with the Cochiti, native language literacy is not always desired or useful. Hinton (2001) outlines the general considerations

that should be made when considering whether or not a writing system should be developed. The following list of pros and cons will be epanded on in later sections as they relate to various language communities that have considered or are considering writing.

2.3.1 Pros

Pride Remember the written language bias? Many communities have come to believe that written forms of language are innately superior to oral forms. The Lavukal showed a bias toward the written word despite the fact that most of the community could not read. The pride associated with a writing system can be very powerful. The Lavukal will be addressed in more detail in section 3.2.

Documentation Particularly in endangered language communities, documentation can play a major role. Written records can never fully replace the vibrancy of oral tradition, but as a last resort, they can preserve much of a language. Written documentation is invaluable to revitalization efforts in endangered languages because it persists even as the community begins to shrink.

Practical uses As a tool, writing serves many practical uses in a community. On a social scale, writing enables the development of literature and teaching materials, among other things. On an individual scale, writing provides for such conveniences as lists and notes.

Expansion of language Written language allows for new forms of creative expression. It opens the doors to new and interesting domains for a language. These developments can foster the general expansion of both language and culture.

2.3.2 Cons

Written English serves most practical purposes Many of the practical functions served by written language can be fulfilled by a major world language like English. Of course, this is only the case in a community that has established bilingual education. This is not yet the norm, but bilingual education is becoming more popular, and more small-language communities are choosing to embrace a major world language while maintaining their indigenous language.

Loss of ownership of one's words Indigenous languages often persist the longest in very specialized domains, like religious ceremonies. Often, ceremonial speech is considered very private. If a sacred verse that was known only to the village elders is written down and circulated among the community, the verse can lose the mystique that made it special in the first place. This is the case in the Cochiti of New Mexico, who are covered in detail in section 4.1.

Written documentation freezes and decontextualizes language As discussed before, the written version of a speech event is an imperfect representation of the original event. A written transcript of an epic story lacks the vibrancy and vitality of the real thing.

Writing may slow and impoverish language learning Languages are most readily learned through speech. Unfortunately, due to a lack of teachers and teaching materials, language classes in small communities can become focused on the rote learning of vocabulary, with lessons being taught in English, or some other dominant language. If a writing system does not exist, or is not yet widely accepted, the goal of education can be lost in the task of

3 Literacy attitudes throughout history

Western society is spreading across the globe, and with it, the notion that literacy is an ultimate goal. It can be difficult to understand why anyone would pass up the opportunity to gain literacy, or be worried about its effects. Historically, however, attitudes towards literacy have varied widely. Many of the pros and cons we saw above are echoed in the attitudes of real communities towards written language. As we will see, some people are very skeptical of the merits of written language while others are extremely enthusiastic. This is not a matter of enlightenment versus ignorance. There are compelling cases to be made both for and against written language. If there is anything that we can learn from this wild difference of attitude it is that we cannot make generalizations about the importance or suitability of writing for oral cultures.

3.1 Plato

Even Plato, the icon of Western thought, had reservations about written language. In Plato's time, Greek literacy was to the point where many people had attained some degree of proficiency. Plato was skeptical about the virtues of written language. In the dialogue, *Phaedrus*, he said, "this discovery of yours will create forgetfulness in the learners' souls, because they will not use their memories; they will trust to the external written characters and not remember of themselves ... they will be tiresome company, having the show of wisdom without the reality." The main emphasis of his argument was that the written word was shallow. He feared

that once people came to rely on it, their ability to ponder and remember complex ideas would be replaced with a bunch of shallow facts and a lack of deep understanding. He says, "written words seem to talk to as though they were intelligent, but if you ask them anything about what they say, from a desire to be instructed, they go on telling you just the same thing forever." Plato believed that the essence of truth was only available through dialogue. Words on a page were unable to convey the deeper truths that they were intended to represent.

3.2 The Lavukal

Lavukaleve is one of the indigenous languages of the Lavukal people of Solomon Islands, a nation composed of a chain of islands in the southwest Pacific. Lavukaleve is an endangered language, with a community of about 1,700 speakers. Solomon Islands does not have an official language, and there are around 80 indigenous languages spoken throughout the country. Schools are taught exclusively in English, but most people outside of the cities do not speak English. The closest thing to a national language is Solomon Island Pijin, which is used in some newspapers and radio broadcasts.

Terrill (2002) writes about her language documentation project and the effects writing had on the Lavukaleve community. Very few people use written Lavukaleve. Despite this, the Lavukal were very enthusiastic about the prospect of having materials written in their language. Terrill's two projects were a dictionary and a storybook. The documents were extremely well received even though they served very little practical use to the community. The question that she asks is, "why do people who don't read want books?" In the case of the Lavukal, it seems that it is a matter of prestige. Western culture has slowly permeated Solomon Islands, and

after years of contact with English, a bias towards written language has developed despite the fact that very few people are actually literate.

3.3 A Tuvan storyteller

Harrison (2006) describes an encounter with a Tuvan storyteller, Shoydak-ool, one of the last people to practice the art of Tuvan storytelling. During the course of his study of the language and culture of Tuva, Harrison became aware of Shoydak-ool's talents and sought him out in order to document him and his stories. During their time together, Shoydak-ool expressed regret that his traditional oral genre was disappearing along with the rest of his culture. "Nobody wants to hear the old stories anymore ... " he said (Harrison 2006: 202).

Despite his sadness, he refused to perform for the camera. "I've got to have an audience — I only tell my stories to people" he insisted (Harrison 2006: 202). His refusal to perform solely for the camera illustrates the importance of life and vibrancy in the Tuvan oral genre. Whether consciously or sub-consciously, it seems that Shoydak-ool fears the petrifying effects of preservation. Even though his art is in danger of disappearing forever, he has the integrity of the performance in mind.

4 Contact with literacy

As Western culture spreads, more oral languages are coming into contact with writing. In groups with established cultural practices, writing is sometimes met with skepticism or mistrust. Just as positive contact with a written culture can associate prestige with writing in a primary oral society, negative contact with a written culture can introduce strong feelings against writing in a community. Writing

can irrevocably change the nature of an oral culture, and in societies where tradition is important, the effects of writing can be unwelcome.

4.1 The Pueblo de Cochiti

The Pueblo de Cochiti is located to the southwest of Santa Fe in New Mexico. According to the 1990 census, there were approximately 900 members of the tribe. Historically, the Cochiti devoted all of their arable land to farming, but in the last few decades, the amount of cultivated land has dropped significantly (Benjamin et al. 1996).

The Cochiti have survived a tremendous amount of cultural pressure from both the Spanish and the United States. Ever since the arrival of Spanish colonizers in the 1500s, the Cochiti and the other Pueblos in the area have been systematically oppressed by whoever was in power. In recent years, they have been put under enormous pressure to give up their native culture and assimilate into American culture along with other displaced native groups. This pressure created an interesting situation in the Cochiti. Rather than continuing to outwardly resist their oppressors, Cochiti life developed into "two basic spheres," one that was exposed to outsiders and one that they took underground (Benjamin et al. 1996). In this way, they were able to maintain their native culture while avoiding the kind of persecution that had been troubling them for centuries. As time passed, however, their culture did begin to fade.

Religion plays an important role in Cochiti culture. Religious leaders hold important positions in the traditional government. Community is also important to the Cochiti. Members of the community are selected to fulfil certain governmental and ritualistic positions in the community, and they are expected to accept. Central

to all of this is their native language, Keres. It has been slowly disappearing along with the rest of their native culture, and its disappearance could have profound effects on the workings of the community. The theocratic government depends on religious practice, and religious practice cannot take place without Keres.

In the mid-90s, the Tribal Council began to address the issue of cultural revitalization. The council decided unanimously that revitalization of Keres was central to the revitalization of their culture, but they firmly rejected writing. They made a conscious decision to not write their language. After centuries of oppression and pressure to assimilate, writing seemed like a tool of the oppressors. In some ways it truly was. Benjamin et al. (1996: 124) talks about the "restrictive and hegemonic effects of literacy, which has acted as a form of social control." The Cochiti were aware of the negative effects that writing could have. They had witnessed plenty of oppression, and they were not willing to allow a writing system to slowly erode their rich oral traditions.

In addition to the directly destructive effects writing could have on their society, the Cochiti were also leery of the effects writing might have on their religious ceremonies. Religion is an extremely private and secretive affair, and any kind of intrusion would be very upsetting to the Cochiti. If their religion were documented anywhere other than in the collective consciousness of the community, they would lose control over something very important to them.

Culture revitalization has been been moving along slowly but successfully over the years since it began. Much of the success can be attributed to the way in which the leaders have approached the problem. Every step in the process has been reviewed in the context of Cochiti tradition and culture. By keeping the entire community involved in the project, they have created a positive environment and fostered a positive attitude within the community.

4.2 Mong

The Mong are an ethnic group from southern China, also known as the Hmong. There are several dialects of the language, but there is no official naming convention for the groups that speak the different dialects. Informally, the speakers of Mong Leng dialect are called the Mong, since that spelling corresponds to their preferred pronunciation. Many of the Mong moved to Laos during the 18th century. In 1975, Laos was taken over by communists, and many of the Mong fled to the United States after being recruited by the CIA to assist the United States in military operations in Laos.

Thao (2006) spent time speaking with Mong elders in the United States and listening to their stories. To the Mong, understanding of the oral traditions is critical to the maintenance of cultural ideals. The oral nature of their culture is important to them on a spiritual level. Like the Cochiti, the Mong have a wealth of sacred knowledge — chants, ritual songs, etc. — that exists only in the oral form, and "writing down the sacred knowledge is a form of forgetting the traditions because people no longer carry the knkowledge with them in their heads" (Thao 2006: 3).

5 Conclusions

So, it seems clear that writing is a very powerful tool. It has certainly played a part in the advancement of Western society, and its uses are inumerable. In spite of all this, we must remember that writing is an artificial system designed to emulate a natural one, and as such can be no more powerful than any other artifical tool. The misconception that thought and language are equivalent has lead to a widespread notion that written language is in some way superior to spoken language — that

writing enables higher cognitive functions and is a precursor to civilized life. This notion has been refuted, but continues to be prevalent. Complex systems of knowledge can and do exist in the absence of writing. In fact, in some cases literacy has been refused by communities becase of the destructive effects it can have on oral culture. Writing is a powerful tool, and it can be used to preserve a dying culture, but the act of writing down oral culture fundamentally changes it. We can preserve oral culture with writing, but the bodies of knowledge become lifeless, like samples in jars of formaldehyde.

We have seen that community involvement is key to many of the language revitalization projects we have observed. Because the decision to write or not write a language has such widespread effects on culture, the entire community should be involved in in any decisions that are made. Literacy is not an end in-and-of itself, and so it must be considered carefully. Writing has been an integral part of some revitalization projects, but not not writing has been equally important in others. There is no one easy, universal answer.

References

- Benjamin, Rebecca, Regis Pecos, and Mary Eunice Romero. 1996. Language revitalization efforts in Cochiti: Becoming "literate" in an oral society. In *Indigenous literacies in the americas*, ed. Nancy H. Hornberger, 115–136. New York: Mouton de Gruyter.
- Daniels, Peter T., and William Bright. 1996. The study of writing systems. In *The World's Writing Systems*, 1–18. New York: Oxford University Press.
- Dauenhauer, Richard, and Nora Marks Dauenhauer. 1995. Oral Literature Embodied and Disembodied. In *Aspects of oral communication*, ed. Uta M. Quasthoff, 91–111. Berlin: Walter de Gruyter.
- Goody, Jack, and Ian White. 1968. The Consequences of Literacy. In *Literacy in traditional societies*, ed. Jack Goody, 304–345. New York: Cambridge University Press.
- Gordon, Raymond G., Jr. 2005. *Ethnologue: Languages of the World, Fifteenth Edition*. Dallas, Texas: SIL International.
- Grenoble, Lenore A., and Lindsay J. Whaley. 2006. Literacy. In *Saving Languages:* An introduction to language revitalization, 102–136. Cambridge: Cambridge University Press.
- Harrison, K. David. 2006. Silent Storytellers, Lost Legends. In *When languages die:*The extinction of the world's languages and the erosion of human knowledge. Oxford:
 Oxford University Press.
- Hinton, Leanne. 2001. New Writing Systems. In The green book of language revitaliza-

tion in practice, ed. Leanne Hinton and Ken Hale, 239–250. New York: Academic Press.

Humphries, Tom. 2007. Scientific explanation and other performance acts in the re-organization of DEAF. In *Signs and voices: Deaf matters in language, arts, and identity*, ed. Doreen DeLuca, Kristin Lindgren, and Donna Jo Napoli. Washington, DC: Gallaudet University Press.

Hutchins, Edwin. 2005. Material Anchors for Conceptual Blends. *Journal of Prag- matics* 37.10.

Lévi-Strauss, Claude. 1966. The savage mind. Chicago: University of Chicago Press.

Linell, Per. 1982. The Written Language Bias in Linguistics. Accessed at http://eserver.org/langs/linell/, Dec. 9, 2006.

Ong, Walter J. 1982. *Orality and Literacy: The Technologizing of the World*. New York: Methuen & Co.

Pecos, Regis, and Rebecca Blum-Martinez. 2001. The Key to Cultural Survival: Language Planning and Revitalization in the Pueblo de Cochiti. In *The green book of language revitalization in practice*, ed. Leanne Hinton and Ken Hale, 75–84. New York: Academic Press.

Scribner, Sylvia, and Michael Cole. 1981. *The Psychology of Literacy*. Cambridge, Massachusetts: Harvard University Press.

Solan, Lawrewnce M. 2004. Pernicious ambiguity in contracts and statutes. *Chicago-Kent Law Review* 79.

Terrill, Angela. 2002. Why Make Books for People Who Don't Read? A Perspective on Documentation of an Endangered Language from Solomon Islands. *International Journal of the Sociology of Language* 155/156.

Thao, Yer J. 2006. *The Mong Oral Tradition: Cultural Memory in the Absence of Written Language*. Jefferson, North Carolina: McFarland & Company.

UNESCO. 1972. Regional report on literacy. Tehran: UNESCO.