This paper explores the strategies used by the Ifugao people of the Philippines to remember and recite their epic *hudhud* chants. The *hudhud* have been recited almost unchanged since the 7th century, and represent the most successful oral tradition of a largely nonliterate society. To explain the success of the *hudhud*’s transmission from one generation to the next, I apply Rubin’s (1995) model of memory in oral traditions to the text of the chant. This model posits three different types of memory cues present in oral traditions which aid in their memorability: thematic, imagistic, and poetic/sound cues. An analysis of the text of the *hudhud* shows all three types of cues to be at work in the chant, thus lending more strength to Rubin’s model. As this model is firmly based in the thought traditions of a Western, literate society, however, it seems insufficient to describe the phenomenon of *hudhud* recitation. Instead, the collective process of reciting the chant seems to be the main factor that enables future generations learn the text, and helps chanters to recall the epic as it unfolds. I apply a distributed model of cognition to the collective process of chant recitation in order to explain the phenomenon of *hudhud* recall in its own cultural terms.∗

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the names of streets and landmarks, the distance to the next town, or the speed limit. At school, classes would be held without the aid of textbooks, libraries, or the Internet.

Most Westerners find this kind of life difficult to imagine. Our own culture is steeped in the written word. Writing provides a medium of communication across great distances. Newspapers, letters and chat rooms allow us to receive and relay information around the globe. Through writing, we enact a common cultural experience as it continually unfolds. It enhances the simplest cultural activities; whenever we page through a sales catalog, read the scoreboard at a baseball game or open a hymn book, we are using the written word to engage our immediate cultural world.

Besides enabling participation in daily cultural life, literacy also gives access to our culture’s past and to a sense of accumulated history, a history that is kept in books. This history is largely that of the economically powerful and privileged, as they were the educated minority that determined what information was to be recorded and prioritized. The history of the underprivileged has only recently found its way into print. Despite these deformities and oversights, our culture seems most evident in the works of our greatest thinkers: Shakespeare’s tragedies, the United States Constitution, Toni Morrison’s The Bluest Eye. These texts are centrally important to our culture. And yet, because they are physically present as texts, most members of literate societies never bother to memorize their contents. Instead, they trust in their ability to find this cultural knowledge again, if such retrieval becomes necessary.

The written word defines Western cultural experience in both its historical and ongoing manifestations. But for many cultures across the globe, life without literacy is the norm. According to the Ethnologue, an extensive catalog of world languages and
their characteristics, 6,912 known languages are spoken on the globe today. Of these languages, many exist without any writing system whatsoever, and many more make limited use of writing. Though many of these languages are relatively small, boasting at most a few thousand speakers, taken altogether they account for a significant portion of the world’s languages.

In such societies, the performance of a culture’s spoken interactions necessarily takes on an entirely different shape. Direct communication must occur face-to-face; extended and intimate contact with people who live at a distance must occur through a chain of communication. Ideas are transmitted directly from person to person, and each transmission involves the active and sustained participation of both parties. Instead of leaving ideas in libraries to languish, culturally important traditions, histories and beliefs are kept alive in human memories. These traditions take the form of sayings, proverbs, songs, and epic stories. They are relayed from one generation to the next through oral/aural means, finding homes in countless memories over the years. Ideas and traditions that lose their cultural relevance are forgotten, and simply cease to be transmitted.

Today, the majority of the planet’s inhabitants use oral traditions—from the praise-poetry of the Zulu, to the Southern Indian Pabuji Epic, to the South Slavic oral epics—as a primary mode of communication (Foley 2002). This fact is often overlooked by those immersed in a literate society, where purely oral traditions are often shorter and more informal, appearing in the form of jump-rope rhymes, proverbs, knock-knock jokes, or folk songs. The more formal traditions told in nonliterate cultures are long, often running to hundreds of lines, and are related over the course of hours or even days. That
these bulky oral epics continue to be remembered and recited reflects their ongoing vitality to the people who tell them. They exist not merely as entertainment, but contain culturally important advice about things Western culture might call law, biology, history, or ethics. In places where nature is harsh and natural events can have life or death consequences, these traditions are often cautionary tales designed to teach care, such as in the Inuit tradition. Oral traditions provide suggestions for solving typical societal problems, or ways to become reconciled to those problems that seem insoluble (Lord 1995). They exist as a major store of accumulated cultural knowledge, not unlike libraries in our own. As such, they are invaluable sources of information about the societies that tell them. The stories themselves open a window into the culture that invented them, by highlighting the significance of settings and situations, problems and solutions, to that culture. Further, the practices surrounding oral poetry recitation has much to teach, from the manner in which the stories are told, to the initiation and instruction of the next generation of taletellers.

Beyond the insight oral traditions give into the unique structure of these cultures, a general study of the transmission of these epics from generation to generation sheds light on the complex workings of human memory. In contrast to the creative and individual mental processes valued by such Western oral traditions as slam poetry or free-style rap, formal oral epics rely on a collective, conservative effort on the parts of their tellers. Each generation remembers as much of the epic as it can, and passes it on as faithfully as possible. As the tale passes through each memory, it is shaped to fit the abilities, both creative and limiting, of that mind. Over time, the rough edges of the epic are ground down, much like a pebble being worn smooth through repeated retellings.
After years of the smoothing, what remains is the essence of the story, its most successful and most memorable manifestation (Rubin 1995). A comparative analysis of these oral epics shows that they are each structured to contain a number of common hooks, or cues, which work together to help an epic teller unfold their story based on what has come before. According to Rubin, these cues can be grouped into three essential categories: thematic, imagistic, and poetic/sound cues.

It is this model of memory that I apply to the transmission of one particular oral tradition--that of the Ifugao hudhud chants from the Philippines--to see how it applies. The hudhud were chosen to act as a microcosm of the larger phenomenon of memory in oral traditions because they represent an exceptionally successful tradition in and of themselves: the chants have existed in an almost unchanged state since at least the 7th century CE (Dulawan 2001). Given this remarkably faithful transmission of the chants from one generation to the next, it seems probable that the text of the hudhud is girded with strong memory techniques and cues such as the ones posited by Rubin. And indeed, an analysis of a brief excerpt from the hudhud shows many of Rubin’s assumptions to be correct. The hudhud employs repetition of common themes and characters, vivid descriptions of scenes and characters, and strong assonance and rhythm within the chants’ text (Lambrecht 1960). These characteristics seem strong aids to the memorability of the hudhud.

However, a closer examination of the phenomenon of hudhud transmission shows that more memory strategies may be at work than just those set forth by Rubin and other Western cognitive scholars (e.g. Roberts 1964, Hutchins 1995). Rubin’s model of memory, and those posited by others like him, are strongly based in their own literate,
Western academic tradition. In order to fully understand how primarily oral cultures such as that of the Ifugao transmit their complex and extensive oral traditions from generation to generation, one must attempt to step outside the bounds of Western, individualistic assumptions. In this study, I attempt to show that another, more collective memory technique is being employed in the recollection of the *hudhud*. The chanters of the *hudhud* rely heavily on culturally constituted environmental stimuli to help them remember the chant. Objects such as rice harvesting tools, familiar bodily movements, and the songs of other chanters help to distribute the burden of chant memorization. It is only when these individual memories work together that the whole text can be recalled. In this way, we can begin to understand more clearly the theory of distributed cognition, and how it is manifested in the context of a nonliterate society.

**A Quick Note on Literacy Bias**

Before this paper begins in earnest, I think it important to discuss the vocabulary used in the paper to refer to cultures that exist without the use of writing systems. The terminology surrounding literacy and nonliteracy has strong, if unconscious, connotations for people living in literate cultures. In such cultures, literacy has come to stand for intelligence and engagement in cultural thought. Those without letters seem to lack a certain capacity of mind, or else are underprivileged. Illiteracy as a word and concept is mainly pejorative, “signifying those who have been left behind in the battle of life, mainly because they are not bright enough” (Havelock 1982).

These negative connotations are amplified when applied to an entire culture. For those living in relatively wealthy, literate societies, there is a tendency to view people
from countries with low literacy rates as backward, unproductive, and inferior, and much of this bias seems to be related, either directly or indirectly, to their illiteracy. An editorial, which appeared in the *New York Times* in October, 1970, clearly demonstrates this viewpoint:

> Between a third and a half of the world’s people suffer from hunger and malnutrition. The people of the undeveloped world are the majority of the human race, and are breeding faster than the people of the Soviet Union, the United States, or Western Europe. There are one hundred million more illiterates in the world today than there were twenty years ago, bringing the total to about eight hundred millions. (Havelock 1982: 42)

Here, hunger, malnutrition and high birth rates—traditionally benchmarks of underdevelopment—are presented by the editor as a direct result of illiteracy. Further, the language used to describe the illiterate section of the world’s population is clearly disdainful. The only aspect of their lives that is described is their suffering. Instead of reproducing, or having children, these people ‘breed.’ To avoid calling up this bias, I use the word *nonliterate* in this paper to describe those cultures without the use of writing systems. While the word ‘illiterate’ calls to mind people who are somewhat deficient, people who don’t quite meet the standards of a literate society, ‘nonliterate’ suggests a people who exist outside the bounds of that societal standard. Similarly, calling oral traditions ‘oral literature’ reduces these traditions to the variants of writing (Ong 1982). In this paper, I will try to avoid referring to oral traditions as ‘literature,’ but must occasionally reference the ‘text’ of the tradition as I make my analysis.

It is also important to note that, while the words ‘literate’ and ‘nonliterate’ are useful in the context of this paper to describe a crucial and pertinent cultural distinction, this binary often breaks down practice. Most individuals exist somewhere between full
orality and full literacy in their everyday lives. In fact, humans use a variety of different modes, or ‘registers’ of communication, to get their ideas across, and switch registers fluidly to best suit their intentions (Foley 2002). Speech and spoken information is of primary importance to people of all cultures; the written word, where it is present, always serves to augment the spoken word, not the other way around, but people around the world use speech, writing, pictures, and gestures in endless combination to get their ideas across.

The Ifugao and the hudhud

The word Ifugao can be used simultaneously to refer to a people, a language group, and a province located along the Cordilleras of the island of Luzon in the Philippines. It is here that the Ifugao make their home, existing as wet-rice cultivators who have perfected a system of sustainable rice terracing. These terraces were built into the mountainside 200 years ago without the aid of machinery, and are well suited to the heavy rainstorms that periodically drench the area. These terraces are a primary tourist attraction in the region, especially after being named a UNESCO World Heritage site in 1995.¹

Among the Ifugao, four distinct dialects are attested. These dialects—Amganad, Batad, Mayoyao, and Tuwali—are Malayo-Polynesian languages of the Austronesian language family, and represent about 170,000 speakers in total (Gordon 2005). Most speakers of Ifugao have acquired second languages, such as English or Tagalog, but use of Ifugao remains vigorous in all realms, including those of religion, commerce, and political administration. The Ethnologue reports that language attitudes among the

¹ http://whc.unesco.org
Ifugao are very positive. Those who speak the language take pride in it, and use it in all aspects of their lives. This positive language attitude is reflected in the actions of neighboring language groups, who pick up Ifugao in order to do business in the province, or when they marry into an Ifugao family.

Ifugao is not an entirely nonliterate language. A writing system using Roman script was developed for the Ifugao decades ago by visiting missionaries, and remains in use today (see also Conklin 1991). The literacy rate of the Ifugao is highly variable from dialect to dialect. The speakers of Amganad report only 20% literacy in their first language. More striking is the fact that 65% of Amganad speakers are literate in a second language, suggesting that, while these speakers see the usefulness of literacy in some realms, a written form of Ifugao is deemed largely unnecessary in day-to-day life. Both the Batad and Mayoyao dialects report 50-60% literacy in both first and second languages. Speakers of Tuwali present an interesting case. They have the highest literacy rate by far, with 83% of people literate in Ifugao and 60% literate in a second language. Almost all Tuwali speakers are multilingual by the time they finish high school, but the Ethnologue notes that people over 40 years of age are much more likely to use English than the younger generations, which is quite the opposite case than most other small languages (Gordon 2005).

In Ifugao, we find a language somewhere in the middle of the literacy spectrum that seems to have maintained several key characteristics of primarily oral cultures. Though the majority of Ifugao speakers are literate, or have been at least exposed to the concept of literacy, many choose not to use writing in their daily lives. Ifugao is spoken in homes and marketplaces, in the fields and in the street. Use of writing and reading is
largely limited to specific venues such as school and church. In other domains, writing is unnecessary. In fact, in the case of the Amganad dialect, children are taught entirely orally until they reach middle school (Gordon 2005). Ifugao provides an example of a culture in which oral communication and nonliteracy are valued, and remain alive and well despite extended exposure to writing.

The oral traditions of the Ifugao come in many different varieties, but the oldest and most well-known tradition is that of the hudhud. This series of over 200 chants descended from one original chant (Dulawan 2001). In this story, Aliguyun, a culture hero, appears to a group of women harvesting rice to tell his tale. Before he leaves, he exhorts these women to continue telling his story. They do, and this epic has grown over time into a family of chants that continue to be recited on the rice terraces each year during harvest (Lambrecht 1960).

Presently, each valley or group of villages has their own version of the epic, but each versions resembles the others closely in form, theme, characters, and vocabulary. Not only is the venue and manner in which the hudhud are chanted the same from town to town, but so are the words used to describe common features of the chants. In each epic, feasts and battles are described extensively, and are illustrated by the same vocabulary. In addition, the melody used to chant these stories remains constant, both within the chant and across different versions of the song (Lambrecht 1960). The chants differ only minimally, and when these differences occur, they can be found mainly in the order of plot elements and in the emphasis placed on the importance of specific characters.
The *hudhud* is chanted by no fewer than five women (Echols 1968). One woman acts as the chant leader, or narrator. She recites the bulk to the chant, and is rejoined in her verses by a larger chorus. These women add mainly formulaic responses, noting when or where an event occurred, or commenting on the genealogy of a main character. It is the narrator who moves the action of the story along; she is responsible for the unfolding action of the epic (Lambrecht 1960). An example of a *hudhud* verse is presented below in its English translation. The italicized text represents the chorus’ response to the narrator, whose lines are written in normal type:

Lo! They the mates, spirit-invokers and they center the center, *center-place of the center of Hananga* and they drink-and-drink the yellowish rice-wine their at the *center-place of the center eeeeeya at Hananga nema eeehem*.

(from ‘The Hudhud of Bugan With Whom the Ravens Flew Away at Gonhadan, Lambrecht 1961:249)

This passage shows the integral role the chorus plays in the chanting of the *hudhud*. They rejoin the narrator, helping to remind chanters of characters relationships’ to one another and of their relationships to the places they live. They act as place markers in the long and rambling epic, helping to tie the chant together and to keep it going. The rejoinders of the chorus also give the narrator some time to think about what parts of the story come next, providing a welcome break from her ongoing tale telling.

This passage also illustrates the basic form of a *hudhud* verse. Many oral epics present challenges to English translators, as it is not always evident where line breaks should be placed as the text is being transcribed to the page. With the uniform structure of *hudhud* stanzas, this challenge does not apply. Each stanza consists of three verses. The first two begin with a narrated solo line and end with a choral reply. The second
choral reply is capped off with the meaningless syllable ‘eeeyea,’ which serves to mark
the chorus’ entrance into the final line of the stanza. This last line is sung by the chorus
alone, and ends with the sounds ‘nema eehem.’ This sound indicates the completion of
one full stanza, and the beginning of the next. This uniform structure, along with the use
of a constant melody throughout each stanza, makes the hudhud easy to divide into
discrete sections and easy to recite.

    Besides the original rice-harvesting chants, the hudhud have inspired a variety of
other ritual narratives whose structure and themes closely resemble those of the epic
chants. There is the hudhud di kolot, or the ‘hudhud of the haircut,’ the hudhud di nate,
or the ‘funeral hudhud,’ and the less used wedding hudhud. These narratives use the
hudhud form, vocabulary, and performance style, but are sung primarily about members
of the Ifugao community to whom the chants are dedicated. The true hudhud only
references long-dead the hero-ancestors who act as cultural heroes and mythological
figures in Ifugao society (Stanyukovich 2006). Recent years have seen an explosion of
these hudhud-esque narratives and chants. In 2001, UNESCO designated the chants a
Masterpiece of Oral and Intangible Heritage of Humanity. Since then, the recitation of
non-traditional chants has increased in frequency, so the distinction between the true
hudhud and other similar chants is difficult, yet one of extreme importance
(Stanyukovich 2006). Interestingly, it is the performance of the hudhud di nate that
requires the most skillful singer, as this chanter is thought to be knowledgeable in all
forms of hudhud. A soloist who can only perform the heroic epic is considered
subordinate. In Ifugao society, it is assumed that “such a singer might acquire the sacred
knowledge that will enable her to sing hudhud di nate only if the spirits would choose
her. In that case she will be promoted to the highest level of proficiency. If not, she will remain ‘a professional of a lower qualification’” (Stanyukovich 2006).

The traditional *hudhud* serves at least three functions in Ifugao society. The first is that of a labor song, serving to keep all the harvesters at work in unison. The second relates to the belief that the singing of the *hudhud* while harvesting traditional varieties of rice will spur a miraculous growth of the crop. The *hudhud* characters are said to listen to the singing of the *hudhud* in the field and to be pleased by it. This phenomenon only applies to the harvesting of specific strain of rice. If the *hudhud* is chanted during the harvest of more modern, nontraditional varieties of rice, it is done so primarily as a way to pass the time, not to call down the ancestors (Stanyukovich 2006). Though this last interpretation of the function of the *hudhud* in Ifugao society might be a bit of an overstatement, the chants are clearly crucial to both the process of rice harvest and the spiritual worldview of the Ifugao.

The final function of the *hudhud* posited by Stanyukovich relates to gender. In earlier times, the Ifugao practiced headhunting as a way to solve vengeance cases, and the male epics of this and similar cultures tend to revolve around themes of violence and killing. The unusual female epic found in the *hudhud* is thematically different, but complimentary. After scenes of battle in which no one is either killed or wounded, principal *hudhud* characters exchange sisters and celebrate their new unions with marriage, thus effectively ensuring that the next generation will have no enemies. These female epic chants were believed to produce peaceful solutions to long-standing inherited resentment and vengeance.
Although I have yet to encounter literature explaining how the *hudhud* is transmitted from one generation to the next, my guess would be that repeated exposure to the chant throughout seasons of rice harvest, funerals and weddings is very helpful in encouraging young girls to learn the words of the chant. As the part of the chorus is highly predictable and formulaic, it is likely that girls learn this part of the chant fairly early on. As to how a young woman might go about learn the part of the soloist, and what tests of maturity and memory she might have to undergo in order to learn the chants, the existing literature offers no clue. I have not found an explanation of the training and memorization process necessary in learning the *hudhud* in the literature available.

**Memory Strategies**

Throughout history, philosophers, cognitive scientists, and anthropologists have developed numerous theories to explain the memorization of oral traditions. To remember even one of the *hudhud* chants is quite a feat, as an individual tale is often 400 lines long, and is told over the course of two days. To explain how this and other epic poems are memorized, a variety of theories have been employed, some of which are more plausible than others. All, however, have something interesting to bring to the discussion of memory in oral traditions.

One of the first Western theories of memory is outlined by Yates (1966) in his book, *The Art of Memory*. This theory comes from the writings of Greek orators, who believed that humans could make use of two types of memory. The first is a natural memory inherited by each human at birth. This is untrained memory, and humans are
largely unable to control what gets stored and what doesn’t. The orators used a second kind of memory to remember their speeches. This artificial, or trained memory, is auxiliary and assistant to natural memory, and can only be developed through a sustained effort. It is this craft that Yates would maintain is used by the chanters of oral epics and poems.

The discovery of artificial memory is first credited to the ancient poet Simonides of Ceos. According to legend, Simonides was invited to a banquet. Halfway through the feast, word came that two men were at the gate asking for the poet. Simonides left, but found no one waiting for him at the gate. He returned only to find that the roof had caved in while he was gone, killing all of the banquet-goers. Their corpses were so mangled that the relatives who came to claim the remains could not tell who was who. Simonides discovered that by focusing on where everyone had sat around the table during the feast he could identify the remains of every relative. Through this feat of memory, Simonides realized that orderly arrangement is essential for good memory:

> Persons desiring to train this faculty (of memory) must select places and form mental images of the things they wish to remember and store those images in the places, so that the order of the places will preserve the order of the things, and the images of the things will denote the things themselves, and we shall employ the places and images respectively as a wax writing-tablet and the letters written on it. (Yates 1966:12)

In this theory of artificial memory, which was taught for centuries afterwards, memory is composed of two main components. The first is a series of imagined mental places, or loci, in which memories are to be lodged. These places may be visualized as rooms of a house, complete with fully furnished bedrooms, parlors, and courtyards. These rooms are to be imagined with as much detail as possible so that they remain distinct in the mind.
In this way, memorizers create for themselves a home to house their memories. This home remains constant no matter which sequence the orator is attempting to remember.

After a series of *loci* are developed, the orator develops the second component of memory, images. These images could be as simple as a sword which is meant to stand for military operations, or as complex as a person carrying a series of objects, each of which stands to mean something different. These images are developed based on what the orator wishes to remember, and then they are placed in the various rooms already established in the speaker's mind. When the orator wishes to recall these memories, he merely ‘walks’ through the places in his mind, demanding from his memory the images he deposited there and thus retrieving the memory he left.

This model, while it provides an interesting example of classical theory and practice, does not seem applicable to the oral traditions of the Ifugao. First, it is a highly Western construction. All of the evidence Yates provides to support this theory of memory is derived directly from the texts of Western thinkers, from the Greeks through Renaissance and later the Enlightenment. Not only is the theory biased towards Western experience, it is also biased toward literacy, as it clearly owes much to the concept of writing. In several instances, Yates compares mental *loci* to a sheet of paper or reusable wax-tablet onto which the images are ‘written.’ The idea that memories are stored as in a book seems inadequate to explain mental processes of societies without writing. If writing is not a culturally significant activity, people of that culture are unlikely to use the concept of wax-tablets to aid in memorization. Further, this theory of memory merely reinforces literate cultural bias against the nonliterate. If they cannot read and write, how
can such people hope to achieve mastery of a memorization technique structured like a writing system?

A second theory of memory in Greek culture focuses on the social and cultural aspects of memory. In this theory, Havelock (1982) posits that, while humans are inherently able to memorize language, special forms of language such as epics, songs or sayings take a more concerted effort. These ornate language constructions must employ specific structural strategies in order to be remembered. The first of these strategies is acoustic, and can be found in techniques such as alliteration and assonance. The second strategy works on the level of meaning, and is accomplished through use of parallel story lines and plot devices, or seemingly contradictory phrases. The third strategy is structural. Havelock argues that the most successful oral traditions extend a simple, formalized rhythm into a repetitive meter, allowing orators to recall the sequence of a coherent, extended statement with accuracy.

Beyond these structural techniques, Havelock places tremendous importance of the social occasion of epic transmission. Primarily oral societies teach memory the way literate societies teach reading, as this is the most useful skill for accessing cultural history in nonliterate societies. For those learning the art of memory, short pieces such as nursery rhymes serve as the equivalent of learning the alphabet; they prepare the brain for lengthier memorization. And even after the brain is trained in memorization, there must be social incentive to learn these epic poems. Havelock maintains that the learning process must be accompanied by feelings of pleasure. This pleasure can be found in the status bestowed on novices learning their craft. It can also be found in the rhythm of the poems themselves, which he calls “the dancing of the mouth.” There is an instinctive
pleasure in rhythm, which can be further reinforced by musical instruments and dance performed simultaneously with the poem.

This theory of memory comes somewhat closer to the mark than the first, but it is still firmly grounded in Western thought. The acoustic and structural strategies described by Havelock, while appropriate for languages such as Greek or English, do not always apply to the poetics of other languages. In such languages, the distribution of affixes and the catalog of phonemes available might render rhyme a simple thing to produce. Rhyme, then, is not linguistically challenging or impressive, and would be used sparsely or not at all by epic tellers. And depending on how tone and emphasis is distributed throughout a language, the concept of meter becomes more or less important. However, while the structural memory strategies described by Havelock do not apply to every language, he does make an important distinction in emphasizing the social component of epic memorization.

The third theory of memory takes a psychological approach. This theory distinguishes **procedural** and **episodic memory**. The first type of memory records the steps of repeated and habitual action, such as walking or throwing a ball. These processes are stored as general procedural programs, stripped of the specificity of any individual iteration. The second “receives and stores information about temporally dated episodes and temporal-spatial relations among these events.” (Tulving 1972:385). Episodic memory is an example of autobiographical memory, whereby memories are made according to the temporal, spatial, and emotional properties of a specific episode.

Episodic memory further interacts with a third kind of memory, **semantic memory** (Donald 1991, Tulving 1972). This is the memory of language and signs, and enables
humans to make logical deductions, structure a network of concepts and images, invent signs and manipulate symbols. The benefits of this type of memory extend beyond the ability to recall mere referents, and instead involve the storage, retrieval and manipulation of a large number of propositions and ideas about the world. This memory involves the ability to invent signs, manipulate symbols, and attach shared meaning to a series of signifiers used in writing or speech. The benefits of this type of memory extend beyond the ability to recall mere referents, and instead involve the storage, retrieval, and manipulation of a large number of propositions and ideas about the world. Factoids such as the chemical formula for table salt, the names of the days of the week, or the definition of the word ‘psychosomatic’ are all entries in semantic memory. Indeed, Tulving states that all that we deem ‘knowledge’ can be regarded as a series of memory statements whose contents depend on information entered in semantic memory.

Under this theory, all three types of memory are employed in the transmission and memorization of oral traditions. A repetition of concrete details of the tale—the actions, settings, and characters of the story—is conveyed through both abstract narration and a series of culturally significant rites that accompany any tale-telling situation, performed by initiates to the oral tradition at key moments in their cultural development. The details of each specific rite are stored as autobiographical memory entries in the episodic memory. Through extensive ritual and repetition, these are transmuted to procedural memory and tale telling becomes an almost automatic phenomenon. At the same time, initiates are learning to exploit familiar and culturally important signs and symbols, transforming them into a complex and manipulable code through which they can now make complex propositions about their social world (Shore 1996). The interaction of
these three types of memory is what promotes the memorization process, as the oral epic exploits the various layers of human memory.

This theory is compelling, but it too makes heavy use of the language of modern Western psychological tradition. The language used in the literature to describe semantic memory relies heavily on concepts of literacy—semantic memory is a lexicon, a dictionary. Information stored there can be retrieved years later in exactly the form it was originally stored, remaining uncorrupted in the interim, not unlike a book in a library.

And the content of episodic memory is referred to as autobiographical, a concept which is strongly associated with the tradition of literacy and writing. The construction of this model similarly excludes members of nonliterate societies from full participation in the life of the mind. The autobiography of a person without letters would necessarily be inferior to that of someone familiar with writing.

The final theory of memory to be examined in this paper is Rubin’s model of memory in oral traditions mentioned above. This model is similar to the psychological one in that it posits three dimensions of memory. Unlike the psychological model, where the three different types of memory work together to store everything that happens in a human’s life, Rubin propose only one kind of memory which uses three distinct types of cues to recall memories that are already stored in the mind: thematic, imagistic, and poetic/sound cues.

The first category of cue, thematic cues, relies on the repetition of familiar story lines and thematic elements, both within a single story and across the larger canon of a culture’s epics. Increased exposure to the themes of a specific oral tradition makes the recall and recitation of those traditions much easier, as certain themes are consistently
and predictably related to one another. Presence of one theme in a tale gives hints about the appearance of another within the same story, either as a parallel or as an opposing theme. Imagistic cues provide specific and vivid illustrations of the more abstract ideas present in these larger themes, such as honor or vengeance. Through the creation of these specific examples, imagistic cues build an alternative organizational structure for epics that other cues cannot provide. The final type of cue, poetic or sound cues, consists of two major forms of sound pattern. This first pattern concerns the repetition of sounds within an epic. These patterns manifest themselves through alliteration (the presence of the same sound at the beginning of several successive words), assonance (the repetition of a vowel sound in nearby words), and rhyme. The second form of sound cue deals with the timing of sound in rhythm and meter. More than either the thematic or imagistic cues, sound cues promote the broad and rapid recall of events in an oral epic.

Each of these different cues has its own specific constraints as to what it can and cannot help to recall. Accordingly, each type of cue has its own advantages and disadvantages when it comes to storing the text of the tradition. For example, thematic cues are very good at prompting a tale teller to remember the events which come next in a particular narrative sequence, but not so good at providing a chanter with the actual words to use. Conversely, sound cues can help a chanter come up with individual phrases and words rapidly, but are somewhat less helpful in encouraging them to remember the broader sweep of the epic they wish to tell. According to Rubin, these cues must necessarily be used together to help the teller unfold an epic from what has come before and to prompt what is to follow.
Applying Rubin’s Model

In order to test the explanatory power of Rubin’s model, I apply it to the text of the *hudhud* to see if it offers a good descriptive and explanatory account of the structures found therein. Frances Lambrecht, a scholar who lived with the Ifugao for many years, transcribed the full text of two separate chants, and published them along with word-for-word English translations (Lambrecht 1960, 1961). A full analysis of two complete chants is beyond the scope of this paper. Instead, I have chosen a smaller excerpt (approximately 10 stanzas of 3 lines each) to serve as an example of the whole. These stanzas represent a complete thematic event within the context of the story, and despite the small sample size, provide examples of all three types of memory cues within their confines.

The chant examined in this paper is called “Hudhud of Bugan With Whom the Ravens Flew Away, At Gonhadan” (Lambrecht 1961). In each *hudhud*, the first stanza of the chant acts as a pre-chant, announcing to the chorus the name and main plot twists of the epic to follow. From this pre-chant, the chorus learns that the story being told today is that of Bugan, a young girl who is stolen from her mother by ravens and brought into the wilderness. Bugan is a common character in the *hudhud* canon, so as soon as her name is mentioned, the choristers are instantly able to place her and the chant within the larger pantheon of Ifugao culture heroes.

This particular chant involves Bugan’s abduction and subsequent rescue by Indumolnay, another young girl who has gotten lost in the woods. Together, the two girls make their living in the strange new village of Hanaga. Bugan, the younger and more naïve of the two, hides in the mountains during the day while Indumolnay works in the
village harvesting rice in return for food. Indumolnay tries to keep Bugan’s presence a secret from the handsome youths of Hanaga, but her plans are foiled one day when Bugan follows her on her way to work. She is discovered up by the handsome youths and brought to Aliguyun, the owner of the rice terraces that Indumolnay works. Aliguyun is one of the Ifugao’s most popular culture heroes and is the supposed teller of the original *hudhud*. Many a chant revolves entirely around his exploits, marriages, and battles. In other epics such as this one, he is a supporting character. After meeting Bugan, Aliguyun is attracted to her immediately and marries her in an elaborate ceremony. In a distant village, Bugan’s mother hears of this marriage, and of a girl who sounds mysteriously like her daughter, and she travels across the mountains to Hanaga. Mother and daughter are reunited, Indumolnay is married to a handsome youth, and Bugan lives ever after in Aliguyun’s house (Lambrecht 1961).

The *hudhud* excerpt chosen for this analysis describes the wedding festivities of Bugan and Aliguyun and is presented in Table 1.1. As above, the narrator’s text appears in normal font, the chorus’ in italics. This translation, though difficult to read, is an attempt to represent the *hudhud* in as close to its original form as possible. The words are translated in the order they appear in the Ifugao text, and words that appeared reduplicated in Ifugao are here given a sort of English reduplication to maintain the feeling of the chant. For example, in line 19, the phrase ‘beat-and-beat the gongs,’ is an English reduplication of the Ifugao compound word *munabanabada*, a word which is used to intensify the action it describes (Lambrecht 1960).
Lo! they the mates, spirit-invokers and they center the center, center-place of the center at Hanaga and they drink-and-drink the yellowish rice-wine theirs at the center-place of the center eeeeya at Hanaga nema eeehem

When they were-intoxicated they the mates, handsome-boys at Hanaga speech-and-speech of Aliguyun Aliguyun of old eeeeya the son of Amtalaw eeehem

“Well then and then and enough and let-us-recite the ancestors-who-are-dead from Hanaga.”

When they had finished reciting and they performed-the-’puyu’-sacrifice-of their chicken at the center-place of the center eeeeya at Hanaga nema eeehem

Is-very-good (the bile-sac omen of) their ‘puyu’-victim, their chicken at the center center-place of the center at Hanaga and they made-go-down their gongs to their front-yard their stone-walled-yard at the center eeeeya at Hanaga nema eeehem

and they beat-and-beat-the-gongs, dance-and-dance they the mates, handsome-boys at Hanaga, is excellent now the manner-of-dancing-and-dancing of the mates, handsome-boys eeeeya at Hanaga nema eeehem

when they did-sideways-bending as they turned, it-is-like the turning-over of the buliklik-hawk, bulikyayu-hawk over the villages-all

Is-done-and-done-that every-evening at the houseyard, at the houseyard at their lounging-bench eeeeya at Hanaga name eeehem

And-behold as-the-days-go-on grow-and-grows Bugan Bugan of old, the wife of Aliguyun as she lets-time-pass-and-pass by every-becoming-visible on the house-lot, their early morning at the center-place of the center eeeeya at Hanaga nema eeehem

going to swim-and-bathe-together-with the children at the river-bed in the river in their region at Hanaga and-again-and-again make-her-play they the children of the mates at the center-place of the center eeeeya at Hanaga nema eeehem

When then is-pulled one-month and a part at the center center-place of the center at Hanaga and heard-it they the mates from the neighboring of the neighboring eeeeya villages-all nema eeehem

and they go to partake-in-the-holyat of the uyuyay-feast rice-bundle-straw-ed of Bugan and Aliguyun Aliguyun of old, the son of Amtalaw and they go to partake-in-the-sipping-and-sipping, partake-in-the-drinking-and-drinking of the yellowish rice-wine theirs at the center-place of the center eeeeya

at Hanaga nema eeehem

When then had-come-to-stand-and-stand-in-replica-position the sun sun at Nangimbukig and then all-moved-on they the mates, handsome-boys and pretty-girls, nice-girls eeeeya of the villages-all nema eeehem

they sip-and-sip, dance-and-dance they the arriving ones, friends from the neighboring of the neighboring villages-all do-also-that the young-people, handsome-boys and pretty-girls, nice-girls eeeeya at Gonhadan nema eeehem
All *hudhud* contain certain common thematic tropes. Almost every chant includes the description of a battle, feast and a marriage. Chanters employ a unique, slightly archaic vocabulary to describe these events, and this chant-specific vocabulary is also remarkably similar across all *hudhud* (Lambrecht 1960). Likewise, all *hudhud* describe the exploits of a limited set of culture heroes; common characters appear again and again in diverse versions of the chant.

Beyond these broader thematic similarities, thematic parallels can be found within the text of a single chant. In the chant studied in this article, Bugan and Indumolnay are presented as parallel girls. Both became separated from their parents and lost in the wilderness. Both are described throughout the chant as pretty-girls, or young-girls, and the two are often referred to as the ‘sister-pair’ (Lambrecht 1961). These thematic similarities might serve as cues to help the tale-teller recite her chant. Likewise, contradictory themes aid in the memorization process. In this chant, an ugly, mean female villain stands in direct contrast to the sister-heroines, continually trying to thwart their plans. By establishing both complimentary and contradictory themes, the chant narrator builds a stable thematic structure from which she can more easily unfold her tale.

In the excerpt of the chant I analyze here, a series of familiar activities are presented, then repeated. Gongs are beat (lines 16 and 19) as the wedding guests dance (lines 19, 20, 23, and 51) and drink often (lines 2, 5, 43, and 51). These actions are all subthemes of the overarching action of a wedding ceremony. Members of the Ifugao culture, when listening to the description of a marriage, would expect to hear these events described. This association strengthens the chanter’s ability to tell her tale. Once she
establishes the occurrence of a wedding within the chant, it’s relatively easy for her to remember how to describe this theme.

The description of a wedding festival presented in the lines above is enhanced through use of vivid images. Wedding guests do not just drink wine, they drink yellowish rice-wine (line 2). They do not just dance, but do “sidewards-bending as they turned, it-is-like the turning-over of the buliklik-hawk” (line 23). This image describes specifically the position of the body while dancing, then compares it to the flight of a familiar bird of prey, creating a vivid, almost visual image whose precision makes it more likely to be remembered than a more generic, bland description (Rubin 1995). The precision of this image calls to mind the Greek model of memory presented by Yates (1966), where precise images and symbols are remembered precisely because of their unique vividness.

Besides these individual examples of imagistic cues at work within a single chant, the general structure of the hudhud is designed to make use of images. The reduplication that was described earlier is a phenomenon common to the hudhud. Chanters emphasized particular actions by compounding them within a single verb. This adds a sense of urgency to the verb, and of ongoing action, as the affixes used to double verbs use the present tense (Lambrecht 1960). This lends each verb an aspect of immediacy, making each action seem sharper, more precise. Examples of compound forms can be found in lines 2 (‘drink-and-drink,’ mangig-igupdah), 19 (‘beat-and-beat,’ munnabanabada, and ‘dance-and-dance,’ timmanagamday.), and 25 (‘Is-done-and-done,’ Athiathidih). The reduplication, the impact of each action is augmented, making these verbs easier to recall.
Image is returned to again and again in the chorus, as the choristers repeatedly describe the location of all these activities. The image of the ‘center-place’ is mentioned eight times in these 10 stanzas alone. This repetition creates a solid, stable image for chanterers to refer to repeatedly. It cements the image in their mind, ensuring that it will be easy to recall in the chanting process. Repeated reference to the center-place, or other places around the village, might also suggest to the chant narrator what sorts of actions might take place next in such a location by calling up past association and plot twists from different tales.

Due to my lack of knowledge of the Ifugao language, my analysis of sound cues in the hudhud text was fairly limited. However, some sound tricks could be located in the chant. In the case of several reduplicated verbs, most notably the verbs in lines 19, 21, and 25, the affixes used to reduplicate them enhance the assonance of the original word. In line 21, Bugan is said to let time ‘pass-and-pass-by.’ The Ifugao verb for ‘pass’ is *kwa*; with verb reduplication, this verb becomes *kwa-wa-wah*, a sound that is more memorable for its assonant qualities. Further, vowels are often corrupted in the chanting of the hudhud in order to make them sound more like surrounding vowels (Lambrecht 1960). This suggests that assonance is a known and valued sound cue in Ifugao culture. There are also some limited examples of alliteration within this chant excerpt, though it is not prevalent or universal enough to suggest that it is being used consciously. Meter and rhythm seem less important in the chanting of the hudhud than in the oral poetry of other languages. Each line of chant makes use of a different number of syllables than the last, and the length of each line seems dependant on the whim of the narrator.
Results

This analysis of a limited portion of the *hudhud* chant seems to support Rubin’s model of memory in oral traditions. Even in the few lines chosen for study, the chanters of the *hudhud* were seen to employ examples of all three types of memory cues. They return to familiar themes such as wedding festivals, create vivid images through verb reduplication, and add affixes to make sound more assonant and therefore more memorable. With the bulk of the text thus encoded for easy recall, the narrator of the tale uses these overlapping elements to unfold her story with precision and fidelity.

But even though this examination of the *hudhud* seems to hold up the claims of Rubin’s model, the model is firmly based in the assumption of a literate, Western culture. The theory is presented through the terminology of Western psychological research, which constructs the mind in a very specific way. Minds belong to individuals, and the recollection and recitation of oral traditions are creative acts. Paramount to the model of memory is the abilities of a singular mind operating independently from its environment. A theory so clearly produced by Western cultural assumptions of cognition remains an unsatisfactory explanation of what happens in the telling of the Ifugao *hudhud*. The chanters of the *hudhud* do not act in isolation, either from their environment or from one another. A group of women work collectively to recite the tale, and as they chant, they attempt to be conservative, not creative, in their telling. Using Rubin’s model to explain the chant subordinates a unique cultural tradition to the assumptions and vocabulary of a foreign culture. In order to give the *hudhud* a more appropriate analysis, a universal model of memory is needed.
With his development of the theory of distributed cognition, Edwin Hutchins provided such a model. Distributed cognition refers not to one particular type of cognition, but rather to a new approach to the study of all cognition. It assumes that cognition and memory are not just limited to the mind of a single actor. Instead, knowledge is distributed across brains, bodies, and objects, and environments (Hutchins 2006). Seeing a toolbox reminds you of the repairs you meant to make and gives you ideas about how to fix what is broken. A familiar landmark can help you remember a shortcut to take you to your destination.

Culturally, cognition and memory are distributed through time among people in socially organized settings (Hutchins 2006). A group of people working together toward a task, such as the successful recitation of the hudhud chant, is a distributed cognition system. Each woman holds part of the chant in her mind, and can enact that part only in the presence of other chanters. One woman does not a hudhud make, and each plays a crucial role in the recitation of the chant. In this way, cultural knowledge is distributed among all the individuals of the society in a sort of cognitive division of labor. In such cases, “the group performing the cognitive task may have cognitive properties that differ from the cognitive properties of any individual.” (Hutchins 1995:176). Hutchins goes on provide examples of such distribution giving rise to supraindividual cognitive feats: Robert’s (1964) study of memory storage and retrieval in Native American groups, Surowiecki’s (2004) exploration of socially distributed decision making in institutional settings, and Hutchins’ (2000) study of information flow on airline flight decks all demonstrate a group working together to do what one person could not. This communal model of cognition seems much more appropriate for explaining the process of hudhud
recitation. A chorus of women works in unison to accomplish what one woman can’t; together they carry a vital store of complexly organized cultural knowledge into the future.

One prerequisite of distributed cognition is a common commitment to the activity at hand. This commitment, known as joint attention, manifests itself when two or more people simultaneously focus on a single external stimulus with the awareness that the experience is shared (Enfield 2006). Joint attention is used in everyday interactions such as talking on IM, playing tennis, or navigating a boat. Common management of tasks serves to both achieve mutual knowledge and to strengthen social bonds. The stronger the bonds present in the enacting of a complex cultural activity, the more protected that activity is (Enfield 2006). Activities such as the hudhud chant, which hold a healthy portion of Ifugao cultural knowledge and are highly complex in form, press multiple minds and bodies into service for the telling of each tale. Recitation of the hudhud requires the joint attention of many participants and is so protected by its distribution among members of Ifugao society.

By taking cognition and memory out of the individual mind and locating in a cultural environment, distributed cognition solves many of the problems presented by the memory models above. It prevents the possibility of memory models based too heavily in any one cultural framework, as each act of cognition must now be viewed as a result of a unique culturally constituted environment. This environment prescribes particular approaches to communication; the particular gestures, facial expressions, and social relationships common to that environment directly inform the way memory and cognition work in such a society. This model allows the phenomenon of memory of the hudhud
chant to be examined on its own terms, in the context of its culture, as opposed to bending the phenomenon to the assumptions of a different system of thought. It prioritizes the communal nature of the tale telling over the abilities of an individual mind. It allows the setting of the rice terraces, the tools used in harvest and the motions used in wielding them all to contribute to the process of chanting.

Conclusion

The memorization, recitation and transmission of an extensive oral tradition such as the Ifugao hudhud is an incredible cognitive feat, and is made even more remarkable by remembering that the text of these epics chants has remained relatively unchanged for centuries, despite the fact that hundreds of minds have now held and shaped the hudhud over the years. In order to explain this phenomenon, a number of memory models were examined. Many were discarded, as they relied too heavily of Western, literate conception of the mind to appropriately explain the process undergone by Ifugao chanter. The most successful model found was that of Rubin’s (1995) theory of memory in oral traditions. He posits three types of memory cues at work in the memorization of epic tales: thematic, imagistic, and sound/poetic cues. An analysis of the hudhud text showed all three types of cues to be at work in the chanting of the hudhud. In the end, however, this model too seems insufficient to explain the chanting process. It also constructs the cognition as the personal undertaking of an isolated individual. A new model of cognition and memory was needed, and was found in the theory of distributed cognition. Distributed cognition is a cognitive philosophy that locates cognition and memory not just in the mind, but in bodies of self and other, in objects, in the
environment, and in culturally constituted settings. Everything, from the chanting of other women, to motions made while harvesting rice, to familiar landmarks and vistas, can help chanters recall and recite their epics, as knowledge is seen to exist not just in the mind, but is instead distributed among all aspects of and participants in a culture.
Bibliography


