AN APPRENTICESHIP IN MASK MAKING:
SITUATED COGNITION, SITUATED LEARNING, AND TOOL ACQUISITION
IN THE CONTEXT OF CHINESE *DIXI* MASK MAKING

DISSERTATION

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By

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ABSTRACT

This study unmasks Chinese *Dixi* mask makers, who have been masked in

Chinese history for centuries. Instead of writing their history, this study tells their

mental stories. Instead of understanding them through interview, this study assumes an

apprentice's role to *learn* a mask maker's way of thinking and his community's

worldview. This apprenticeship (situated learning) is adopted as an alternative research

method to the individual-centered and lab-environed methodology commonly found in

the science laboratory. Thus, it sheds new light on the understanding of artistic

cognition.

Mask maker's cognition is considered as imaginative cognition that

materializes divine images socially constructed by the mask ritual community. While

divine images belong to the immaterial realm, but mask making is material production,

how do mask makers translate these mental images into concrete masks? Where do

they obtain mask symbols? And, how can this mental representation be taught and

acquired? Answers to these questions might help art educators to bestow students with cognitive tools to foster their imagination and creativity.

The apprenticeship in mask making is further accentuated by the analysis of acquiring mask-making tools. What mask making tools are to the mask ritual community, technology is to modern society. Vygotsky's theory of psychological tools and neo-Vygotskians' situated cognition and situated learning theories are incorporated into the construction of tool acquisition theory, which attempts to develop a psychological approach to technology education.

The electronic version of this dissertation is utilized to demonstrate how technology can be integrated into learning and research. It is also essential to this study's theoretical framework, as tools and media facilitate, and situate, cognition. It is through the electronic version of this dissertation that the *Dixi* mask performance can be globally distributed. Such a global presentation has been the mask performers' desire: to share with global citizens their arts, of which they are proud. On the other hand, senior performers worry about diminishing faith in the *Dixi* mask ritual, which sustains their values and traditions. By presenting their ritual performance herein, I hope this study can make some contribution to their tradition while expressing my appreciation for their participation.

Dedicated to my parents

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INTRODUCTION

Figure 1: *Dixi* performance during Chinese New Year
(Click on the image to see an example of *Dixi* mask ritual performance)

Statement of the Problem

Dixi,[1] sometimes called "Dancing of the Gods" by the people of *Anshun* City in *Guizhou*, China, refers to a particular type of Chinese mask ritual, in which masks are worn and stories are acted out. In its ritual performance, the wearing of masks symbolizes the arrival of the gods, and the performed stories represent the gods in action. As the ritual proceeds and the story unfolds, the crowd swarms in to join the union of heaven and earth. Such a union echoes with the mixed purposes of the ritual performance, which are to thank the gods on the one hand, and to please the gods (as dramas please humans) on the other. Since the gods are thanked and pleased, humans are therefore blessed. The audience is simultaneously entertained.

Figure 2: Performance Scripts
Click on the image to hear
a sample of *Dixi* chanting
(precessed from *Shen*, 1994b)

Besides the performance aspects, the *Dixi* performance script, the lyrics chanted by the masked performers in the mask ritual, is not only culturally significant but also educational. Written in highly literal Chinese language and transcribed by each mask performer, the lengthy *Dixi* script is actually an educational medium that eliminates illiteracy among the local people, disseminates knowledge, and transmits traditions.

The important role that *Dixi* plays in the life of *Anshun* people is further heightened by the fact that in *Anshun*, television is not yet the center of daily entertainment and seasonal rituals are still sincerely observed. *Dixi* is more than just a type of sacred ritual. It truly stands for who the *Anshun* people are and what they believe in, while it sustains their traditions and values.

Although *Dixi* belongs to the Chinese mask ritual family that consists of many different types of mask rituals, *Dixi* differs from all others both in the intricacy of the masks and the type of the performance stories (i.e., the performance script). *Dixi* masks are carved out according to the descriptions of the characters depicted in the performance story. The story is in fact one of the variant versions of a certain Chinese popular classic, such as *The Romance of the Three Kingdoms*,[2] or *The Campaign to the West*.[3] The relation between the performance story and the popular classic indicates that Chinese classics are the resource for the *Dixi* stories, which subsequently become the sources for the *Dixi* mask making. The sequence, from the verbal to the visual,

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from classics to rituals, makes me wonder: why are they connected this way? This question finally draws me into a search for the stories hidden behind the *Dixi* masks, namely, the underlying cognition of *Dixi* mask making.

How do mask makers translate the verbal into the visual? How do they embody performance stories in the masks? How are meanings conveyed through *Dixi* masks? And, what are the meanings conveyed? In order to answer these questions, I situated myself within the mask making learning system (i.e., apprenticeship) and I became an apprentice to a *Dixi* mask maker, Mr. *Yang*.

During my apprenticeship, I conducted three consecutive activities. They are: (a) observing and video-taping some episodes of *Dixi* mask performance, (b) video-taping one of Mr. *Yang*'s mask making process as an example of the general procedure of *Dixi* mask making, and (c) experiencing the mask making process myself.

After the second activity, in which I observed and documented the mask-making process, I thought I perfectly understood what mask making was all about. However, as soon as I raised the mask making tools and began making a mask with my own hands, my freshly learned "understanding" silently slipped away. I was purely stunned. In front of a block of wood for a mask to be made, I could do nothing but sit still. My mind was blank; my thought was frozen. I simply did not know what to do.

Figure 3: A block of poplar wood for a mask to be made

After 30 seconds or so, of not knowing what to do or where to start, I politely asked my master Mr. *Yang* if he could draw me some lines as my guidance in dealing with the intact block of wood that was taunting me. He then laughed and said: "How can you use two dimensional lines to guide three dimensional work? Many *situations* will happen; those lines won't help." His answer made me feel embarrassed, humiliated, and finally delighted.

The mask maker's notion of "situations" challenged such academically imbued concepts as "guidelines" and "lesson plans." In contrast to academia's planned approach to teaching and learning, the mask maker's "situated teaching" seemed *ad hoc*, while planned instructions seemed more reliable. But, how can teaching take place in an *ad hoc* situation, as mask makers have been doing for many centuries? Is there any planning involved, or is it simply impossible to plan at all?

What did the mask maker really mean by "situations"? How do "situations" guide the mask making? Likewise, can artistic cognition be learned or taught?

Figure 4: The mask maker, Mr. *Yang*

Background of the Study

What mask making is to the mask maker, fieldwork is to the anthropologist; it is always a matter of dealing with *ad hoc* "situations." Therefore, Clifford Geertz (1988) calls anthropology an "indisciplined discipline" in that the "matter is *ad hoc* and *ex post* [*facto*]. You see what you have been doing (if you see it at all) after you have been doing it" (1995, p. 98). This applies to my study.

In the following, this chapter will explain how this study became a case of "indisciplined" research, of which the following two theoretical chapters try to make sense. These *ad hoc* "research situations" are seen parallel to what the mask maker meant "situations" in mask making; my apprenticeship in mask making is seen parallel to my learning from this research. In Chapter Five and Six, I will discuss what I learned from my apprenticeship in comparison with what I learned from theories. The correlation between theories and the practical case in this study calls for reflections that shall be thought aloud in Chapter Seven. Recommendations shall be made, but before reaching the end, let's begin with the *ad hoc* story as follows.

The background of this study is the *ad hoc* situations that occurred while conducting this research. As these situations presented me problems to solve, questions to answer, and choices to make, they situated my cognition. Thus, in turn, they became the content of this study to be analyzed. On the other hand, the problems were not mine alone. The questions could not be answered by myself, either. Neither could I make the decisions without consultation. This distributed and collective nature, which characterizes this study in particular, and many other research in general, is also sought

to be understood. Nonetheless, faults and mistakes, if existed, should be solely mine. In the following, I shall describe these *ad hoc* situations, which eventually lead to my *ex post facto* realization discussed in the succeeding chapters.

To make a long story short,[4] I shall begin with my first sight of the Chinese masks that filled me with awe. In 1992, at a bookstore in Shanghai, China, a strange-looking Chinese character on the side of a book caught my eyes. "What a strange character *Nuo,*" I thought. To find out what *Nuo* meant, I requested the book, *Guizhou Nuo Mian Ju Yi Shu* [*Nuo* mask art in *Guizhou*] (*Wang & Gong*, 1989).

Flipping through the book, I was awed by the mask images displayed in the book. Many of the images looked extremely menacing, ferocious, and inhumanely evil. I couldn't help but wonder if my Chinese ancestors worshipped devils. Standing nearby, my parents also noticed these unusual mask images. They thought the book was a symbol script of an evil cult that should be avoided all together according to Confucian doctrines,[5] which my family valued dearly. However, my curiosity got the better of my filial piety; I convinced myself, and my parents as well, that my interest in purchasing the book was "for the sake of art." Such intent did not defy my family's Confucian values. So I bought the book and brought it home with me to Taiwan. Since the book was in my possession, I kept it shelved until three months later when my fear of the menacing images wore down with time. I revisited the book and discovered something new and fascinating.

The author of the book claimed that the *Nuo* mask in Chinese ritual had been used for over three thousand years, and he quoted from Confucius' writing to support

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his claim. Firmly, he stated that these masks were regarded as "gods" to be worshipped by the Chinese people. But, I found his statements hard to believe because the mask's seemingly evil aesthetics, dominated by two pairs of menacing fangs and tusks and two big bulging pupils projecting an unappeasable anger, appeared incompatible with Confucius' benevolent doctrines, not to mention regarding these masks as "gods" to be worshipped by my Chinese ancestors. Moreover, if the use of the masks in Chinese rituals had been over three thousand years, as the author claimed, why haven't my parents or I learned about this fact? This suspicion led me to a close reading of the book.

Then I realized that although there were a great number of the evil-looking masks, some masks appeared rather kind and gentle; some were noble, and some were humble. Quite a few masks were named after ancient social classes, such as landlords and maids, while others were specifically named, as if they were people of fame and importance who everyone should know. All together, these mask images seemed to tell a collective story, but to my disappointment, no further information was provided to explain how these masks related to one another, let alone a collective story that I suspected. So I embarked on my journey of demystifying Chinese mask stories.

From Chinese theology to Chinese folk arts, my initial, exhaustive search found very little information about Chinese masks. Neither did I find the names of the masks listed among the Chinese gods, deities, or immortals. This indicated that the masks, considered as the gods, were actually not Chinese theological figures. More interesting was that, as I found, the literature that did exist mostly discussed performance aspects

of the mask ritual, but the masks, as artifacts, or as props, were scarcely mentioned. In addition, mask makers were completely ignored, as though they never existed. The missing mark of the mask makers became most interesting to me. In spite of the scarcity of literature, my research continued.

By chance, I worked with Dr. M. Bender, who specializes in East Asian folklore and Chinese minority literatures. Dr. Bender introduced me to an ethnographic approach to performance studies. His love for performance studies and oral traditions opened my eyes to an intellectual light shining outside the fine art museum. I began to realize that books were but a storehouse of knowledge, life itself was an inexhaustible resource for art and ideas, and the best knowledge might not be represented in the book, but embedded in people's practices. So I resolved to find the mask stories I suspected in mask maker's practices. To do so, I needed to locate my point of entry to the mask making community in China.

Attempting to connect myself with mask makers through researchers, I found that Professor C. K. Wang at *Tsin Hua* University in Taiwan, who headed a six-year-long Chinese ritual performance project and edited many influential papers on Chinese rituals, to be the most knowledgeable person who I should contact. So, I did. Despite my success in finding his contact information, I was unable to talk to him until six months later when he went back to Taiwan from Australia. I called him. Upon hearing his voice, I was so excited that I stuttered and babbled. Vaguely could I remember if I had told him my research clearly, but I did remember telling him about my research and his response with support and suggestions. However, his suggestions made me

shift my research focus: from the Chinese masks in general, to the *Dixi* masks in particular. In addition, through his auspices, I was able to establish an email connection with the *Dixi* mask expert, F. X. *Shen* in Guizhou, China, the province where *Dixi* mask making was a common practice.

In email, Mr. *Shen* forewarned me that for non-native researchers, such as me, there were rules that should be closely followed, especially the rule number one: obtaining "an official research permission" from the *Guizhou* provincial government. As instructed, I submitted all the required documents, which included a readapted Chinese version of my research proposal and some personal documents. But, in return, I received more requests. The *Guizhou* provincial cultural bureau, which oversaw all scholarly activities within *Guizhou* Province, further requested a letter of recommendation from Professor C. K. Wang to authenticate my scholarly connection. Compliantly, I followed the instruction. So I contacted Professor Wang and pleaded for his further support. As supportive as he was and always, Professor Wang sent his letter of recommendation to the Chinese government without any delay. After double-checking that the letter arrived there soundly, I thought I finally had met all the requirements; the nightmare should be over. But, I was wrong. My case was *tabled*.

One week after Professor Wang's letter sent to China, Mr. *Shen* emailed me and said that due to certain internal political differences aroused by my case within their organization, my case could not be determined until "they" came to an agreement. As to further details, I had no ideas. In desperation, I called Professor Wang for help, but

he had no clues, either. Neither could he do anything about it. At this point, I thought my research was aborted and years of studying and preparation were wasted.

A few more days passed. I was eventually informed that my research was officially approved. But, there were a few requirements: I could only stay in the field for *one month*. No extension could be negotiated. Also, I had to comply with the official lodging code for *non-native* researchers, namely, not to stay overnight in any residential house, but to live in a fully equipped hotel that met their official standards. Moreover, I should work with the local cultural bureau in *Anshun* City while in their territory. The rules were clearly given. No arguments were allowed.

Up to this point, I realized that the emic (local and native) perspective, emphasized by the ethnography research literature, even though a wonderful idea, was actually unrealistic in this instance. At worst, it could be thought of anthropologist's self-indulgence. Similarly, Geertz (1996) argues that Western scholars often base their research methodology on the assumption that the world is an open book to be freely investigated. Thus, he questioned: who gives the right to study other people? In my case, I should ask: who gives the right to stay in the field to conduct research work? To study about others, there was nothing more practical than to understand what one was *allowed* to do.

In the meantime, Professor Wang wrote a letter to the mask maker, Mr. *Yang*, to introduce me and ask him for his assistance and participation in my research. The reason for recommending Mr. *Yang* as the mask master in this study was that, as Professor Wang explained later, Mr. *Yang* could speak Mandarin (the language I know)

so that we could communicate with each other. For most people in *Anshun* City, the local dialect, a language totally different from Mandarin, was the only language in which they could converse. Even though they could understand Mandarin, using it to express themselves was almost impossible, not to mention teaching me mask making in Mandarin. Also, Mr. *Yang* had traveled to many places and was more capable of interacting with people different from himself, whereas other mask makers did not travel far on the one hand, and were very shy and inexpressive on the other. As I did not have the luxury of time, *Yang*'s interpersonal skill could make my fieldwork have an easy start. The last, but not the least, reason was that transportation in *Guizhou* was difficult and therefore expensive. Since I could only stay at certain "permissible" hotels, which were likely to be located in *Anshun* downtown area, *Yang*'s house, which was not far away from downtown, could be the most accessible place for me to commute everyday. This way I could save not only time but also money. All these considered, Professor Wang thought Mr. *Yang* to be the best candidate for my research. Although Mr. *Yang* was chosen by Professor Wang, instead of me, it was more appropriate at this point, as I had neither access to the mask makers' contacts nor adequate knowledge about the community of mask makers. Professor Wang's careful choice rather saved me from making decisions in the dark. I truly benefited from it.

As to the mask maker, contacting him was almost impossible. Living in a rural village, *Xia Yuan*, he had neither telephone nor email. Airmail was the only way that I could reach him, but it would take forever and ever to receive his letter in response. Therefore, as Mr. *Shen* suggested, I communicated with Mr. *Yang* through Mr. *Shen*.

Thereby, I beseeched Mr. *Yang*'s acceptance of my temporary apprenticeship. In reply, through *Shen* again, *Yang* accepted. He further expressed his enthusiasm. Moreover, *Shen* told me that the *Anshun* cultural bureau, unlike the *Guizhou* provincial government, was flexible and friendly. Knowing my research intent, they were already anticipating my arrival. Finally, my application nightmare was really *over*.

The nightmare ended, but challenges began. I was then forced to choose between mask making and mask performance. According to the information given by *Shen*, the best time to observe mask performance was around Chinese New Year, because the most precious ancient masks would be either used for the ritual performance or displayed for annual worship. Thus I could see unusual masks, in addition to mask performance. However, mask performance and mask making were not concurrent events. When the *Anshun* people celebrated Chinese New Year, which lasted for at least half a month, mask makers were unlikely to work. As a result, I would not be able to observe mask making, let alone learning how to do it. In other words, I could spend my precious month on either mask performance, or mask making, but not both in a month.

Mulling over the either-or decision to make, I considered that learning mask making without observing mask performance was no more than going through a factory without seeing its products in the market. Similarly, knowing the process (mask making) without understanding its application (mask performance) was no less than reading an artist's biography without seeing his or her work on display. I should not miss either, but, unfortunately, I could not have both. Finally, I made my choice based

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on their occurring frequency and involvement; mask making, as a profession, was more frequently practiced than mask performance, which took place only once or twice a year. Also, mask performance involved more people and it would be harder to reassemble the mask performers and the audience together. Therefore, I resolved to secure the rare chance so as to choose mask performance, instead of mask making. It was hoped that I could observe a few days of mask making, while observing the mask performance every now and then. Then I was ready to head for the field of study.

Once overseas affairs were all settled, I found difficulties in the United States. As my research proposal was not completed and my research preparation was not finalized, the research opportunity that I laboriously earned was rather a prematurely born baby, whose birth made academicians wince. Now, I had to choose either to raise this research baby with my incomplete research plan, or wait for another year and go with a perfect plan but kill this baby? Looking back at its complicated process, I felt guilty to cut its life short after so many people had labored to give birth to it. In addition, I was still dampened by the application nightmare. I doubted if life would be still so kind to give me another chance in the following years. Then again, I should also consider academic concerns. According to academic convention, a well-developed proposal was expected to guide the fieldwork. A well-plotted research plan was considered a guarantee of fruitful research. But, in such a case as mine, being safe on the proposal was to gamble on the opportunity. When the research opportunity was no longer available, how useful a perfect proposal could be?

Regardless of my conscience, or my doubts, I discussed my research dilemma with Professor D. Krug, my advisor at that time, and asked for his advice. After our serious discussion, precisely, he answered me, "You should go." I thought his response supportive and encouraging. So I ventured on this unconventional road of research: to carry out my fieldwork prior to the completion of the research proposing process and make sense of it thereafter.

As a matter of fact, I did have some preliminary ideas and a rough plan before I went into the field of study. On my arrival, I started to develop a feeling for the life there. I began to realize that most of my preliminary ideas were incorrect, the information I had gathered was misleading, and the plan I had in mind was simply inapplicable. So I threw them away and paid very close attention to the culture that was unfolding before me. At first, I was indeed overwhelmed, because everything was observable and collectable. The small village life was actually a sea of knowledge into which I was drowning. I thus understood what Michael Agar (1986) really meant when he wrote that anthropologists could only tell partial stories and thus added embarrassment to the discipline itself. So would I tell another partial story.

Little by little, I learned more about people there, while they learned more about me. Some people, who could speak Mandarin, actually told me what I should look for and where to find what they thought I was looking for. Thus taught, I discovered new directions, which eventually led me to the answers to my research questions. Unexpectedly, many answers that I had intended to find in the field were later found outside of the field when I came back from China. Nevertheless, it was the

fieldwork that established a point of departure from which my in-depth research commenced.

After the fieldwork was done, I reflected upon my *ad hoc* experiences, recounted situations I had encountered, and tried to make sense of them. While doing so, I recalled a comment made by one of my classmates after our ethnographic methodology class, which stated, "whatever was taught here in the class will be a different story when you are in the field." I agreed with him then, and I agreed with him even more after my fieldwork. Methodology, a scholarly tool for building knowledge, however, in this study, was as unavailing as the mask-making tool held in my hand when I tried to make a mask for the first time (p. 3). Tools can be empowering in some occasions, but useless in others. Then, how do tools work? What do they really serve? Why was the mask making tool useless in my hand, but apparently handy in the mask maker's hand?

As I delved deeper into the above questions, the meaning of events and my ideas about them changed; I found a different focus that I thought was more important for this study than the one previously considered. I began to see research data unlike frozen corpses staying put once being collected; neither was research writing exercising intelligence in a crime lab. Rather, research writing was engaging in a dynamic process in which what had been seen and known was re-conceptualized in terms of what was to see and to know. Along this line, I started wondering if the research convention actually facilitated cognitive development?

It was at this moment that I switched my intellectual apprenticeship to Dr. Efland, my current advisor. He introduced me to Vygotsky's theory, which I found compatible with my newly gained insights. The more I studied about Vygotsky, the more ideas came to my mind. Finally, I shifted my theoretical framework from Geertz's interpretative anthropology to Vygotsky's socio-cultural psychology. The focus of analysis changed from Geertzian cultural system to Vygotskian situated cognition; folklorist's vocabularies were then translated into psychologist's analytical terms. The process of mask making was re-interpreted in terms of situated cognition. As a consequence, the term *situations* took on a different significance, and *tools* emerged with their contextualized meaning. Nevertheless, the cultural aspects of the *Dixi* mask making remained central to this study.

As steadfast as the cultural aspects of the *Dixi* mask making was my obstinate intent that aspired to clarify what I considered as over-romanticized perception of situated learning, especially in the field of Instructional Design and Technology, where virtual-reality gaming was referred to as situated learning[6] and the world created in the computer was equated to the world of humans with diverse cultures. This study's apprenticeship in mask making afforded an example of situated learning, through which cultural aspects of learning could be brought to the fore. Thus, the context of situated learning and the teaching of it could be better understood. For these aforementioned reasons, this study became a study of situated cognition and situated learning in the context of Chinese *Dixi* mask making with an attempt to find its applications to learning and teaching with technology and in the arts.

Specially pointing out a few figures and certain events in the above, I intend to set up a stage where my stories can be told and my experiences can be recounted, thereby explaining how I was situated and why I thought this or that way. As these figures changed my intellectual landscape and the events altered my points of view, they situated my cognition, and thus situated this study. By delineating this situated research story, I attempt to share my view that considers: individual endeavors are not personal affairs; mental development has its social origins, historical dimensions, and physical attributes. Cognition is an interaction between what's in the head and where the head is in, as Michael Cole (1997) puts it.

This situated view of human cognition, from which the theories of situated cognition and situated learning derive, upon which this study builds, was posited by Vygotsky and later developed by his followers, Vygotskians (e.g. A. Leont'ev and A. Luria) and neo-Vygotskians (e.g. J. Bruner, M. Cole, J. Wertsch, and J. Lave). In the following, I shall, in Vygotskian way, discuss Vygotsky's theoretical origins Vygotsky's view of human cognition.

CHAPTER 2

VYGOTSKY'S THEORIES:
FOUNDATION OF THE STUDY

L. S. Vygotsky

Lev Semenovich Vygotsky (1896-1934),[7] a Russian scholar with a degree in literature, has rather an unusual influence on educational psychology, not only in Russia, but also in the West (Oscarsson, 2001). Equally interesting is the fact that most of his works widely discussed in the West today, were done in Russia during the 1920s and 1930s. His theoretical work was banned in 1936, two years after his death at the age of thirty-eight.

The reason for the ban on his theories was in part because of his critique of what he called the "quotation method," which, according to Vygotsky, was to apply Marxism to psychology "by patching together a lot of quotations" (Cole & Scribner, 1978, p. 8). In Vygotsky's view, Marxism was not only a philosophical stance but also a methodological approach through which a philosophical stance is dialectically attained. Therefore, using the "quotation method" to explain all human mental processes as labor activities was, in his view, methodologically inappropriate, on the

one hand, and that over-determined the developmental nature of mind, on the other (Zinchenko, 1985).[8] Such trenchant criticism greatly piqued those quoting psychologists, such as Talankin (1931) and others, who in turn accused Vygotsky of proposing non-Marxist views and not "recognizing how labor activity determines mental processes" (Davydov & Radzikhovskii, 1985, p. 63). This accusation was further supported by Stalin's political agenda and subsequently led to the ban imposed on Vygotsky when he could not defend himself while lying in the graveyard.

However, death could not put an end to Vygotsky's intellectual influence, just as the ban could not stop his ideas from inspiring others. During the period of the ban, Vygotsky's colleague (e.g., Luria and Leont'ev) and his students safeguarded his writings, which consisted of two hundreds and seventy articles, in addition to ten books (Oscarsson, 2001). After the ban was lifted, these Vygotskians began to publish Vygotsky's work, continued his research, and further developed his ideal to build a unified theory of psychology. The combination of these efforts, plus Jerome Bruner's mediation, followed by such neo-Vygotskians as M. Cole and J. Wertsch, made Vygotsky's ideas available for international scholars.

Vygotsky's Posthumous Blossoming in the U.S.

The conception of Vygotsky's posthumous intellectual life in the United States is attributed to the scholarly mediation of Jerome Bruner. In 1954, Bruner attended a classical Russian reception after a conference in psychology in Montreal. At the reception, he heard about Vygotsky for the first time. This first encounter was

interesting to him because he recalled that no such a name as Vygotsky was ever mentioned in the conference, but "Vygotsky" was the talk of the reception being "gossiped" about by almost everyone. This unusual introduction aroused Bruner's curiosity. Somewhat later Bruner became a close friend with Vygotsky's student and co-worker, Alexander Romanovich Luria.[9] Through him Bruner began to take in Vygotsky's views and thoughts (Bruner, 1985).

An important moment came in 1957 when Luria decided to translate Vygotsky's major work, *Thinking and Speech* (1934)*,* from Russian to English. He approached Eugenia Hanfmann for the translation task. Hanfmann, who had studied Vygotsky's work in some depth and believed in the significance of such an endeavor, took on the task. On the other hand, she was aware of the complexity of Vygotsky's works, which went beyond word-for-word translation. So, she invited Gertrude Vakar to collaborate with her. Together, they finished the translation task. In 1962, they published *Thought and Language,* the English version of Vygotsky's Russian original *Myshlenie i rech'* [Thinking and speech] (Hanfmann & Vakar, 1962).

Prior to publishing *Thought and Language*, Hanfmann and Vakar invited Bruner to write an introductory chapter for it. Bruner agreed. So, he began his serious study of Vygotsky. Before long, Bruner, like many Vygotskians, was fascinated by what he was reading. From then on, Vygotsky was always part of Bruner's studies of thinking. Being referred to as "social psychology" at that time, Bruner's adoption of Vygotsky's socio-cultural view of cognition was one of the initiatives that led to the cognitive turn of American psychology (Miller, 2003).

The Neo-Vygotskian Enterprise

Around the time when Bruner introduced Vygotsky's socio-cultural psychology to American psychologists, there were a few intellectual factors that had anticipated American psychologists' welcome of Vygotsky's ideas. Among these factors, the most prominent one was a growing dissatisfaction with behaviorism.

Under the influence of Pavlov, the Russian psychologist who defined psychology as the science of behavior, American psychology aspired to become "an objective science based on scientific laws of behavior" (Miller, 2003, p. 141). Much like "physics as the science of meter reading,"[10] behavioral psychology became a bloodless enterprise. Its tasks were to read and record human involuntary reflexes to external stimuli. In order to obtain involuntary responses, behavioral psychologists had to exclude subjects' mindful behaviors. In addition, they eliminated their own mindfulness as well, as it was regarded as the source of bias that would color researchers' observation and was unfit for scientific endeavors. As a result, the behavioral study of mind had eliminated the mind, or mindfulness, of both subjects and researchers. In the end, the behavioral study of mind had no mind in it at all.

On the other hand, by focusing researcher's energy on producing massive data of physical reflexes, quantitative data substituted qualitative analyses, and the plentitude of data disguised the shallowness of analysis. "Perception became discrimination, memory became learning, language became verbal behavior, [and] intelligence became what intelligence tests *test*" (Miller, 2003, p. 141). Behavioral psychology not only got rid of mind but also evaded all the questions about the

processes of mind. Thus, it failed to fulfill its intellectual responsibilities to reveal the secret of mind and greatly disappointed American psychologists. In the search for an alternative to behaviorism, Vygotsky's socio-cultural psychology was sought out.

At this time, Bruner's adoption of Vygotsky's socio-cultural psychology, known as "social psychology," became attractive to many psychologists who were disappointed with behaviorism. At Harvard University, Bruner secured a grant that funded The Center for Cognitive Studies at Harvard (Miller, 2003, p. 142). This center was the cradle where many neo-Vygotskians were nurtured and the American cognitive turn in psychology was initiated.

On October 20 in 1980, the first international conference solely on Vygotsky's theories was held in Chicago. Ever since then, "a Vygotskian enterprise," as Weissbourd called it, has characterized many studies in the field of humanities, psychology, and education in America (Weissbourd, 1985).

In the field of art education, Efland (2002) is one of the art educators who introduced Vygotsky's sociocultural view of cognition to the study of the arts. His search for a sociocultural view of cognition in art pioneered the analysis of Vygotsky's theories in the light of integrated art education. In so doing, he not only helped educators recognize how learning in the arts contributes to human cognitive development but also elevated the intellectual status of the arts. His introduction of Vygotsky's ideas substantially influences this study. Under his guidance, this study takes on Vygotsky's socio-cultural psychology as the theoretical framework to analyze my apprenticeship in the Chinese *Dixi* mask making.

Vygotsky's Theories and Their Origins

Vygotsky's approach to the study of human cognition emphasizes the understanding of contextual origins and the process of change. To be faithful to his approach, in the following I shall introduce Vygotsky's theories in a Vygotskian way, namely, to discuss Vygotsky's theories along with their origins.

The Unit of Analysis

As James Wertsch (1985) points out, Vygotsky's "intellectual debt to Marx runs deeper than is commonly recognized" (p. 5). The conceptual complex of Marx's capital theory is actually Vygotsky's idea bank for his theories, as well as his methodology. Just as Marx combined idealism and materialism in his theory of historical materialism, Vygotsky combines social science and natural science in his unified theory of socio-cultural science of mind, psychology. In his book *Capital*, Marx identified the commodity as a living single cell that facilitates and reflects the whole operations and organizations of capitalism (Engels, 1886). In his psychological research on cognition, Vygotsky endeavored to discover a "psychological cell" that revealed the general law of the whole mental operations. As Vygotsky wrote in his notebook,

> Within this cell he [Marx] discovers the structure of the entire system and all of its economic institutions. … Anyone who could discover what a "psychological" cell is—the mechanism producing even a single response— would thereby find the key to psychology as a whole. (Vygotsky's unpublished notebooks, quoted in Cole and Scribner, 1978, p. 8)

This one-and-the-whole correlation is akin to the Chinese traditional philosophy of art. In Chinese calligraphy, for example, one stroke reflects the calligrapher as a whole. A calligrapher would try to improve not only one's calligraphy but also many other aspects of oneself in order to advance his or her own art in calligraphy. As my calligraphy teacher in the junior high school used to tell me: "A beautiful stroke results from all other equally beautiful strokes." Each piece of art reflects and contributes to the development of the artist. Likewise, one psychological unit reflects and contributes to the whole psychological development.

What a single stroke is to Chinese calligraphy, a psychological cell is to an individual's psychological development, and commodities are to a capital society. A single unit reflects the organism of the whole, while facilitating the development of the whole organism. So are *Dixi* mask-making masks and the *Dixi* masks artificially constructed cultural units to facilitate the cultural development of mask ritual tradition. Both *Dixi* masks and *Dixi* mask making tools are cultural units that reflect and facilitate the culture of Chinese mask ritual community. They not only materialize the mask maker's conceptualization of the divine images socially constructed and shared by the mask ritual community but also transmit the values that are dear to the mask ritual community. Through the Dixi masks, as the cultural signs, and mask making tools, as the cultural tools, the tradition of *Dixi* mask ritual practices is transmitted from generation to generation. A mask, as well as the mask-making tool, is indeed a living cell that "effectuates the social circulation of matter" (Marx, 1967, sec. 2, para. 2).

Internalization

Each single unit reflects and facilitates the operations of a whole system, it also contains an internal system that has its own structure, its own internal transformations, and its own development (Leont'ev, 1979), just as each individual in society has his/her own organism while contributing certain characteristics to the society. The individual's sharing of social characteristics is facilitated by signs and tools that the culture provides. This process is called *internalization* and these enabling signs and tools are termed *psychological tools* by Vygotsky.

Vygotsky's ideas of internalization and psychological tools are indivisible. Through the agency of psychological tools internalization can take place and that enables individuals to become enculturated. However, for the sake of clarity, I shall first discuss Vygotsky's idea of internalization and discuss his notion of psychological tools in the ensuing section.

According to Vygotsky, mind develops with (and within) society. It partakes of culture and thus becomes a member of it. It is nurtured by culture and thus situated by it. Through such cultural resources as psychological tools, mind internalizes cultural practices and turns them into its own competence. Through the creation of psychological tools, culture collects minds of its members and individual minds are externalized to be cultural resources for the culture's members to make use of them. Through the use of psychological tools, individuals convert cultural resources into their own competence and transform social operations into personal mental operations.

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Mental development thereby builds upon cultural resources; cognition and culture thus create each other.

As psychological tools, such as *Dixi* masks and *Dixi* mask-making tools, are the collective contributions of cultural members, they are social in nature and psychological in effect. The use of them not only facilitates one's mental development but also contributes to the cultural development of the society. Therefore, Vygotsky called them "psychological tools," the instrumental agents that facilitate not only personal development but also the cultural development of society. Unlike Piaget who characterized children's psychological development (e.g., speech) as egocentric processes, Vygotsky considered mental development in general, and children's psychological development in particular, as both social in nature and dynamic in form. The development is social interactions at first, and then turns into an individual's internal mental operations. Through the mediation of signs and tools culture becomes internalized; the internal system interacts with the external system, the individual mental system interacts with the social system, and social interactions are thereby internalized to become personal mental operations. Through the use of signs and tools, two dynamic spheres of *functioning* (not static functions) interact with each other, and external functioning changes into internal functioning. Social operations become personal mental operations. This is Vygotsky's idea of internalization, posited by Marx and later elaborated by A. N. Leont'ev (Wertsch, 1979), but clearly defined by Vygotsky. In Vygotsky's words, internalization is "the internal reconstruction of an external operation" (Vygotsky, 1978, p. 56).

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For example, at the beginning of a child's mental development, a word does not

contain a specific meaning but stands for a relation between the child, the adult who

uses the word, and the object or event to which the word refers. The word represents

his/her social relation, not the commonplace word meaning at the beginning. Not until

later, when the word as a social relation becomes an internal relation between mental

functions in the child, does the true meaning of words arise in the child and he or she

begins to use the word as a way to think. While words give the child the possibility of

accumulating experiences, organizing his/her thoughts, and increasing his/her social

participation, the child simultaneously acquires the system of social interaction and

uses the sign system (language) to interact with others in the same way that others use

it with him/her (Levina, 1979). As such, words first appear as interpersonal

(interpsychological) functions and then become intrapersonal (intrapsychological)

functions. As Vygotsky (1978) stated,

> Every function in the child's cultural development appears twice: first, on the
> social level, and later, on the individual level; first, between people
> (interpsychological) and then inside the child (intrapsychological). This applies
> equally to voluntary attention, to logical memory, and to the formation of
> concepts. (p. 57)

Therefore, Vygotsky (1979b) claimed that mental development has its social

origins, and "humans' psychological nature represents the aggregate of internalized

social relations that have become functions for the individual and forms of his/her

[mental] structure" (p. 164). Mind develops in the culture, and culture develops the

mind. As Blanck puts it, (1990) "humans are internalized culture" (p. 47).[11] In reverse,

culture is a collection of externalized minds.

Culture, as a collection of its members' externalized minds, is "the product of social life and human social activity" (Vygotsky, 1979b, p. 164). It collects members' competence and turns it into the resources for its members to utilize. Members of the culture utilize cultural resources to develop themselves; at the same time, they contribute to the culture and thus further its development. This can be seen in modern computer technology. For example, Marvin Minsky (1986) calls the computer the society of mind; Norbert Wiener (1954), the father of cybernetics, characterized the use of computers as the human use of human beings. To Vygotsky, computers would be "socially formed and culturally transmitted" (John-steiner & Souberman, 1978, p. 126). The individual mental development aided by computers should be called higher mental development.

Since higher mental development is built upon culture and children develop through social interactions, according to Vygotsky (1978), "learning presupposes a specific social nature and a process by which children grow into the intellectual life of those around them" (p. 88). For example, while acquiring sign systems (language), children do not select the meaning of words, but the meaning "is given to him/her in the process of verbal social interaction with adults" (Vygotsky, 1956, pp. 180-181).[12] While either being guided, or imitating others, children are inculcated with values, goals, and the systematic nature of social interaction. As children partake of culture through their participation in social activities, they adopt the cultural values and the social system that operates cultural resources.

Being enabled by the culture, children are also molded by it. Nurtured by the culture, children become members of it. Culture provides both resources and constraints. As Lucid (1977) comments, "human beings not only communicate with signs but are in large measure controlled by them. Sign systems regulate human behavior, beginning with the instruction given children and continuing through all the programs introduced to the individual by society" (p. 20).[13]

Although personal higher mental development has social origins, it also contains a psychological system of its own. This individual system is, like society, constantly developing and ever-redefining itself. There is no disappearance of mental functions, but the integration of the old to become the basis for the development of the new. Mental functions do not disappear, as Piaget claimed that children's "egocentric speech" would disappear. Neither do mental functions suddenly appear, as Stern suggests in his idea of "sudden discovery" of word meaning by children (Blunden, 1997). Nor does mind have a permanent basic structure with slots on and off for mental functions to plug in every now and then, as schema theory pictures it. Rather, Vygotsky (1979b) believed that mental structure resembled Werner's (1948) geological depiction of cultural development: "various genetic layers [of mental functions], which reflect all the stages through which humans have traveled in their psychological development, are preserved in it. … [P]sychological structure is characterized by not one, but several layers deposited on one another" (p. 156).[14] In the developing process, "older, lower centers do not simply fall by the wayside. Rather they work further in the general union as subordinated centers under the direction of higher ones" (p. 155). In a dynamic and

integrated manner, the earlier developed mental functions work together to form a subordinated center for the later mental functions to build upon, and yet they continue developing under the direction of the later mental development. The new developing direction redefines what has been developed. Newly acquired meaning often overwrites formerly acquired ones. The new advances, while the old subordinates. In Vygotsky words:

> [T]he lower centers are retained as subordinated structures in the development of higher ones and that brain development proceeds in accordance with the laws of stratification or construction of new levels on old ones. The old level [the formerly developed] does not die when a new one emerges, but is copied by the new one and dialectically negated by being transformed into it and existing in it. (pp. 155-156)

Within a person, the lower level of mental development becomes the subordinated center for the higher and later development. In the society, "inter-mental" social interactions are internalized to be personal "intro-mental" operations (Wertsch, 1999). Transactions that take place through psychological tools from the lower level to the higher level, and from the inter-mental to the intro-mental will be explained more fully in the following section.

Psychological Tools for Higher Mental Development

What Vygotsky calls psychological tools can be thought of as the auxiliary means humans made for their complex activities. Through psychological tools, external material and cultural resources can be internalized to be personal competence. In reverse, internal cognition can be externalized to facilitate cultural development. Thus, the outer world interacts with the inner world and Vygotsky's ideal—to build a unified

psychological theory that unites introspective psychology and objective behaviorism—can be fulfilled. Such tools are not only functional but also psychological. So, Vygotsky called them "psychological tools."

Vygotsky's theory of psychological tools is partially inspired by Engels's analysis of tool use in human production. Engels (1883) reasoned that humans are different from animals because of the "specialisation of the hand—this implies the tool, and the tool implies specific human activity, the transforming reaction of man on nature, production" (para. 22). This analysis of mutual transformation between humans and nature enabled Vygotsky to perceive mutual creation between human cognition and the tools humans create for themselves. The change of nature is seen by Vygotsky as the change in psychological development; Engels's tools for labor become Vygotsky's tools for mind.

In production, humans utilize natural sources to create tools to facilitate their production. In so doing, they change natural settings and their surroundings, which in turn change themselves. Likewise, in psychological development, humans create psychological tools to facilitate their cognition and in so doing, change their own cognitive environment, which in turn changes their own mental operations as well as their own behavior. As working tools facilitate human production, psychological tools facilitate human cognition.

On the other hand, by appropriate the power embedded in tools, humans immeasurably extend the possibilities of their actions and desires so as to open the door to an unforeseeable future. Then cognition evolves, human history advances. This is

the essence of human labor, pointed out by Marx (1906-1909) in his theory of human

labor, which defines labor as

> … a process going on between man and nature, a process in which man,
> through his own activity, initiates, regulates, and controls the material reactions
> between himself and nature. He confronts nature as one of her own forces,
> setting motion arms and legs, head and hands, the natural forces of his own
> body, in order to appropriate nature's productions in a form adapted to his own
> wants. By thus acting on the external world and changing it, he at the same time
> changes his own nature. He develops the powers that slumber within him, and
> subjects them to his own control. (pp. 197-198)[15]

Modern mobile technology well illustrates this point. Current wireless products,

for example, change not only human working and living conditions but also the natural

settings of our universe. With mobile technology working hand in hand, laptops with

wireless connections change life styles, as well as social operations. Because nature

transmits signals and tiny chips possess with great strength, people now can be

connected whenever and wherever they want. The materiality of these tools establishes

the possibilities, although it owes to the smart making of psychological tools by

humans to turn the object's materiality into human's capacity. As Engels (1883)

commented,

> Man alone has succeeded in impressing his stamp on nature, … And he has
> accomplished this primarily and essentially by means of the hand. … And with
> the rapidly growing knowledge of the laws of nature the means for reacting on
> nature also grew; the hand alone would never have achieved the steam engine if
> the brain of man had not attained a correlative development with it, and parallel
> to it, and partly owing to it. (para. 23)

Tools in use change not only human actions but also social interactions, which

are then internalized so as to change mental operations. They effectuate society's

cultural development, on the one hand, and facilitate individual psychological development, on the other. Psychological tools are as much social as cultural.

Vygotsky's socio-cultural view of psychological tools is also attributed to Marx's theory of commodity. As commodities facilitate capitalism in a capitalistic society, psychological tools facilitate cultural development in society. Therefore, Vygotsky defined psychological tools as "the product of social life and human social activity" (Vygotsky, 1979b, p. 164). Both commodity and psychological tools are purposefully created to facilitate the system from which they were given birth.

Like commodities, psychological tools carry out human intentions, facilitate social operations, and mediate social development. Their creation has already embedded socially constructed operations and socially shared values. Their cognition-embedded and value-loaded nature prescribes users' behavior and demand users' value adoption. Thus, psychological tools quietly imbue values and tacitly enculturate their users. They help mind grow, while they grow into mind. They facilitate cognition, and thus situate it. Dialectically, tools and users shape each other. Interactively, culture and cognition create each other. As a consequence, the use of tools becomes the cultural identifier that differentiates one group from another and identifies membership. For these reasons, A. N. Leont'ev (1979), Vygotsky's coworker, comments that the very act of using the tool is "also a part of the conditions of the processes of social interaction as one of the aspects of social interaction of people as members of a group or society in general" (p. 253). This can be easily seen in people's use of language. For example, among English speakers, British people are differentiated from Americans

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because of their accent and the use of certain expressions, even though the language both groups use has much in common. Knowing the differences, people sometimes tactfully utilize these subtle differences to distinguish themselves from others. In this regard, psychological tools are as much cultural as political.

Leont'ev's comment is further endorsed by Grossen and Pochon's study (1997) on people's use of word processors, such as Microsoft Word *or* WordPerfect. They concluded that word processors "introduce new social distinctions between those who use them and those who do not" (p. 280). However, these social distinctions are aided and abated by the advance of computer technology. Now, they are known as "digital divides," which divide those who have easy access to high-tech tools from those who do not. As psychological tools situate cognition, the use of them allows the tool-embedded power to be appropriated and tool-enabled cognition to take place. The access to the tools is also an access to the possible cognitive development. Then without the access, tool-situated cognition has already been excluded, not to mention the tool-related competence. When a child is born into a poor family, whose neighborhood is also poorly equipped, such as lacking the high-speed Internet network, the child is preconditioned to be behind in technology literacy.

Before public education became commonplace, aristocrats owned the privilege of being literate because they had easy access to the reading materials and they could afford tutoring expenses. By contrast, the low-income labor class who could not afford education in many ways was logically low in literacy as well. However, this legacy lives on today. Reading literacy is now computer literacy. The literary divide is now

the digital divide. While the national technology standards expect high-level performance, which requires the high cost equipment to facilitate the development, the technology standards are turning economic advantage into intellectual advantage. Thereby, they perpetuate the current digital divide.

The above analysis does not suggest that a child born into a poor economic condition is doomed to be intellectually poor for good. The point to be made is that certain cognitive development relies on the very presence of the tools. Even though having the tools does not guarantee the competence in using them, without the tools, tool-situated cognition simply cannot take place. By contrast, a child growing up within a tool-mediated society is better tool-situated and can easily adapt to the social system in which the tools can operate. Social operations have prepared individual mental development. Thus, Marx and Engels cautioned the close tie between material life and mental life.[16] For the same reasons, Vygotsky saw "the proximity between the structure of external activities and mental functions" (Davydov & Radzikhovskii, 1985, p. 63).

By applying a Marxist approach to his psychological theory, Vygotsky united introspective psychology and objective behaviorism, thereby eliminating the dualism separating inner thoughts from the outer world, which constantly plagued psychologists. As Vygotsky (1979b) stated,

> The individual develops into what he/she is through what he/she produces for others. This is the process of the formation of the individual. For the first time in psychology, we are facing the extremely important problem of the relationship of external and internal mental functions. (pp. 161-162)

Unlike Piaget who focused on an individually developed mind, Vygotsky focused on the mind that is facilitated and thus situated by both objects and people. By studying how people fulfill their goals with their conscious actions, in their common (daily) setting, and within their social context, Vygotsky uncovered the cunning side of mind and its hopeless situatedness. Therefore, Greeno (1995), a neo-Vygotskian, declared that *all cognition is situated*, as cognitive development is never a personal affair. Mind is neither independently active, nor is it completely passive. It can develop itself in its own intelligent way, and yet it is situatedly developed in its unconscious way.

Although Marx and Engels's dialectical historical materialism gives rise to Vygotsky's theory as well as his methodology, it is Hegel's conception of human's reasoning that made Vygotsky (1978) realize how various psychological tools effectuate different psychological developments in their own way. Cited by Vygotsky (1978), Hegel wrote that reason

> … is just as cunning as she is powerful. Her cunning consists principally in her mediating activity which, by causing objects to act and react on each other in accordance with their own nature, in this way, without any direct interference in the process, carries out reason' intentions. (Cited in Vygotsky, 1978, p. 54)[17]

In Hegel's idealistic view, humans develop themselves in the realm of pure thought. In this world of thoughts, ideas operate among ideas by manipulating and appropriating other people's ideas. Just as working tools appropriate the material power of nature to fulfill the intended goals and stamp human changes on nature, ideas appropriate other people's ideas to carry out reasoning intentions. They make changes not on nature, but on *the nature of mind*. The power of nature to be appropriated by

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humans is embedded in man-made tools, but the power of reasoning to be appropriated

for facilitating cognitive processes is embedded in "signs," namely, language. By

identifying psychological tools with differences in effectuating psychological

development, Vygotsky (1978) pointed out the distinctions between tools as a means

of labor, involving the mastery of nature, and language as a means of social

intercourse" (p. 53), through which one masters oneself or one's own mind. So he

categorized psychological tools into two categories: "signs" and "tools." In the same

way, he also divided mediated activity, the activity facilitated by psychological tools,

into the same two categories. To illustrate his point, Vygotsky drew the following

figure:
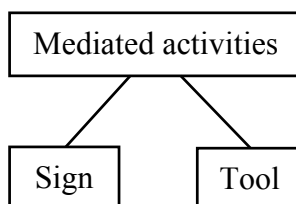
Figure 5: Categories of Mediated Activities

In his words, Vygotsky (1978) explained:

> A most essential difference between sign and tool, and the basis for the real
> divergence of the two lines, is the different ways that they orient human
> behavior. The tool's function is to serve as the conductor of human influence on
> the object of activity [such as nature]; it is externally oriented; it must lead to
> changes in objects. It is a means by which human external activity is aimed at
> mastering, and triumphing over, nature. The sign, on the other hand, changes
> nothing in the object of a psychological operation. It is a means of internal
> activity aimed at mastering oneself; the sign is internally oriented. These
> activities are so different from each other that the nature of the means they use
> cannot be the same in both cases. (p. 55)

The distinctions, Vygotsky made between signs and tools, as well as the

"internal" and "external" orientations of psychological operations, require further

explanation and examination, as they hold the key to a better understanding of what he meant by "signs" and "tools."

Signs versus Tools

According to A. N. Leont'ev (1979), psychological tools are the artificial formation that carries out human intentions to fulfill human goals. Using them is a conscious behavior, which is directed toward a goal. To achieve a goal, action is taken and the relevant psychological tools are employed, if available. The action is an interaction between the subjective and objective conditions. The subjective conditions include human subjective contents (e.g., desires) and the result of personal *internalization* process, in which the world of objects is subjectivized (e.g., materials are used while feelings and thoughts attached to them). Whereas, the objective conditions include physical reality (e.g., living environment) and the result of personal *externalization* process in which the world of humans is objectivized.[18] The process of externalization is similar to Plato's idea that objects are the imitations of ideal forms. Together, the subjective, objective conditions, and their interactions constitute an activity system in its own right.

In the system of human activity, the world of humans and the world of objects are mingled together and shape each other. They interact and embed in each other. The processes of internalization and externalization integrate, and mingle together, the inner thoughts and the outer world. In other words, the world of humans and the world of objects are not separate worlds, but one integrated world; two worlds interact and

shape each other. So do the mental and the material. This is the Russian theory of activity system.

From this Russian activity perspective, human activity is understood in terms of the goal, the means, and the conditions. When the goal is to change the objective conditions (the object of activity), such as the environment, the means (psychological tool) employed to achieve this goal is what Vygotsky called a "tool." Whereas, when the goal is to master human subjective conditions (the object of psychological operation), such as memory, the means employed to achieve this goal is what he called a "sign."

For example, in my study, knives and a hammer used to create the *Dixi* masks are "tools," because the aim of using them is to change woodblocks into masks. The change of the objective condition is supposed to be an external-oriented psychological operation. Then, psychological tools employed as the means (knives and a hammer) to effectuate the change of objective condition are the "tools."

On the other hand, when the masks were placed on the altar as the gods to be worshiped by *Anshun* people, these masks ease the minds that hoped and prayed for a prosperous year to come. They changed nothing in nature, but the nature of mind. The aim of the masks is to influence the mind of humans, that is, their subjective conditions. The psychological operation is internally oriented. The masks employed as the means for easing the mind are "signs" in Vygotsky's theory of psychological tools.

In comparison, tools bring humans into practical contact with the world of objects, and thus humans' subjective conditions, such as desires, or ideal forms, can be

made into objective conditions. Through enabling tools, "the objects of desire are produced, and the desires themselves are therefore also produced" (A. N. Leont'ev, 1979, p. 50). This is evidenced by incessant production of new computers and new cars. On the other hand, "signs" are used to master human subjective conditions. So their objective conditions are subordinate to human subjective conditions. Their materiality is transitory, sometimes unnecessary, and most of time overlooked. Therefore, Vygotsky (1978) stated that "the sign … changes nothing in the object of a psychological operation" (p. 55). This is inevitable when the subjective aim is in focus, the transitory objective state of the "sign" is often overlooked. Chinese ancient sage, Lao Tzu, had made this point clear; he said: when the meaning is gotten, words are forgotten. It is the meaning of the word making the word meaningful, not its spelling.

However, problems occur, when a work of art not only has good aesthetic quality, which transcends the world we live in, but also changes the viewer's mind through its formal elements or subject matter. Then this artwork can be both a sign and a tool at the same time. Similarly, when the masks were worn for the ritual purpose, these ritual masks not only changed the appearances of the mask performers but also symbolized the arrival of the gods so as to ease the minds that hoped and prayed for a good year to come. The goals of using the masks in the ritual performance were to change the performers' appearances, on the one hand, and to influence the mind of both performers and audience, on the other. The use of the masks changed both objective and subjective conditions. The psychological operation is internally oriented, as much as externally oriented. These masks are no less "signs" than "tools." They are both at

the same time. When *Anshun* people prostrated themselves before the masks in the same way they worshiped their ancestors and other gods, are the masks to be considered "signs," or "tools"? This is the alternative question to a more general question: should religious objects that regulate worshipper's behavior and ease their mind be categorized as "signs," or "tools," or both? Under such a condition, Vygotsky's distinction between "signs" and "tools" is somewhat limited.

The use of the *Dixi* masks discloses the problem of Vygotsky's distinctions between "signs" and "tools," especially when a human activity has multiple purposes (goals) and the priority of these purposes can be shifted from time to time, from perspective to perspective, and from case to case. As such, the goal, which determines psychological orientation of the action, is actually a floating point that cannot be determined according to arbitrary rules. Neither can the psychological orientation of behavior be determined easily. Hence, defining the goal of activity *is* a problem itself.

To illustrate the problem of defining the goal of activity, a critical analysis of the Vietnam Veterans Memorial can be illuminating. At first, the purpose of implementing this piece of artwork was, from the committee's perspective, to recognize and commemorate the veterans who lost their lives in the war, on the one hand, and to beautify the environment through art, on the other, as Maya Lin was commissioned to do so. As such, the goal to recognize the veterans was to change human mind. Its psychological orientation was internal oriented. Then Maya Lin's work was a "sign." Alternatively, The goal to beautify the environment was to change

the objective condition of nature. Its psychological operation was externally oriented. According to Vygotsky, Maya Lin's artwork was a "tool."

However, when this work had been finished and the environment was thus changed, the artist's purpose, to invoke thoughts through the viewer's self-reflection upon the shining surface of the artwork, became more prominent and better known to the public. From the viewpoint of the public, the purpose of implementing the work was to influence the human mind. Its psychological operation was internally oriented. The work should be a "sign," rather than a "tool," even though it was a "tool" at the onset.

Putting the above two accounts together, it reveals (a) a goal shift: from changing the environment to changing the mind of the viewer; (b) a perspective shift: from the committee's to the artist's; and (c) a psychological operation shift: from externally oriented to internally oriented. The same artwork changes from a "tool" to a "sign," in spite of the fact that all these purposes coexisted together at the end. This case indicates that the human goal is not self-evident. Neither is it fixed. To define it *is* fundamentally a problem. Thus, distinctions between "signs" and "tools" are always problematic.

Regarding the works of art, Efland considers that Vygotsky's sign-tool distinctions can serve as indicators to distinguish a work of art from a mere artifact (personal communications). An artifact is primarily intended to be a "tool" to beautify the environment, an outward-oriented objective, whereas a work of art serves not only as a tool to beautify our world but also as a sign to influence our mind, change our

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views, or invoke certain feelings in ourselves. A work of art might even toy with an ambiguous state that seems to be somewhere between a sign and a tool, or to be either, or both, or neither. If this is the case, it can be a very intriguing piece of art. Then clear distinctions are only its backdrop to illuminate the ambiguity of the work, an artistic intent to challenge the viewer's commonsense.

Then again, conceptual artists use artwork almost solely as what Vygotsky called "signs" in that physical elements of the work are, like language, transitory, and conceptual artists intend to influence mind, not the eye. Its psychological operation is inward oriented; the conceptual works of art should be psychological "signs."

Considering another example: tool objects used by the museum, they can be either "signs," or "tools," or both. It depends on the purpose they serve and the way in which they are perceived. If they are set on a rack or placed in a case solely for display, they serve to convey information about themselves, their usage, and the world in which they were used, but not to change the environment of the museum. They are "signs," rather than "tools." More precisely, they *are* "signs" now, although they *used to be* "tools." But, if these tool objects are used in a living history reenactment, such as the guns used in the reenacted living history of WW II (WW2 Display Team, 2003),[19] these tool objects can be considered as both "signs" and "tools," because they are actually used as "tools," thereby serving as "signs." In spite of being both, they are more "signs" than "tools," as they are used as "signs" to obtain the audience's understanding of how they used to be used as "tools." To reach the goal, they cannot be

the "signs" without being the "tools" at the first place. They are the "signs" for the "tools" they used to be.

As guns are mentioned, interesting questions arise. It is known that originally explosive materials were unmistakably a "tool" for humans to master the environment, but, unfortunately, they became a killing force that destroyed many lives. The change was on nature, and then became on humans themselves. Should the psychological operation of bombing lives away be considered as the change of nature (objective conditions), or the change of mind (subjective conditions)? In other words, should the dead be considered as part of humans, or environment? Is the demise of humans the change of humans, or the change of nature? Answers to these questions are essential because they determine how to define psychological orientation of their causing actions, which further determine how killing materials should be defined and how the "sign" and the "tool" should be distinguished in this case.

The above examples illustrate that goals are not fixed and that ambiguity exists in defining them. Likewise, purposes are plastic and often overlapping one another. So are context. Everything has its context, in which it can be embedded, and that is further embedded in another even wider context. So, it is difficult to carve out crisp lines to delimit the context. Although contextualists are right about emphasizing the importance of the context, the interpretive problem is to pinpoint *the* context within a seemingly endless web of contexts.

Making the contextualized distinction between "signs" and "tools" even more problematic is the inevitable ambiguity inherent in many sign systems, such as

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language and visual arts. For instance, Wertsch (1998) uses the term "cultural tools," sometimes he simply writes "tools," to refer to Vygotsky's term "psychological tools," which consist of both "signs" and "tools," whereas Cole (1996) uses the term "tools" to refer to Vygotsky's more discriminated meaning of the "tools" of psychological tools, which are differentiated from "signs." Sometimes, Cole (1996) uses Vygotsky's term "psychological tools" and his term "artifacts" interchangeably. Without referring to the context of their writing, these terms can cause a great deal of confusion. Yet, in the world of art, in my view, formalists make works of art their "tools" by focusing on such formal elements of art as lines and shapes, whereas conceptual artists make works of art their "signs," by *eliminating* the physicality of artwork but eliciting concepts or mental pictures out of their viewers. Then again, for formalists, formal elements might be more "signs" than "tools," as their disciplinary training thickens their subjective reading of their art. The background reading becomes part of their cultural identity. Their lingo identifies their own members and at the same time excludes others. Then the distinction between signs and tools may be seen as part of cultural conditions.

Moreover, when "signs" are collectively constructed into a system, such as language, a sign system accumulates subjective conditions from many so as to increase its ambiguity. Making the ambiguity of sign systems even hazier is that human concepts almost always have fuzzy edges, as Wittgenstein (1999) maintained that "many everyday concepts have 'blurred' or 'ragged' boundaries.[20] Drawing a sharp boundary around such concepts would seriously distort them in many cases" (p. 24). When concepts are communicated through language, it is—clouds plus mist—fuzzy

and hazy. On the other hand, thanks to ambiguity, context becomes necessary and meaningful. Thus, writers use metaphors to invite readers' elaboration, and conceptual artists can elicit their conceptual art based on the general public's conceptual vocabularies, out of which conceptual artwork is realized. In fact, ambiguity is the strength of the arts. Being symbolic and implicit, a picture can be worth a thousand words and a poem can tell many stories in a very few words. Ambiguity opens the doors to the imagination and context *enriches* meaning.

What ambiguity is to the "sign" system, materiality is to the "tool." Ambiguity allows writers to say things without saying them; knives and hammers allow mask makers to do things that bare hands cannot do. The ambiguity of signs gives rise to the art of writing, just as concrete curvatures of mask-making knives chip away pieces of wood and thereby materialize the images of the gods on the blocks of wood.

The functionality of the psychological tool is determined by the subjective and objective conditions embedded in the psychological tool and the subjective and objective conditions embedded in the human activity, in which the psychological tool is used. In their concert and their interaction, subjective and objective conditions, together with personal alteration and choices (Wertsch, 1998), as well as the socio-cultural influence, constitute what Dewey (1938) called "a contextual whole," in which humans develop themselves with the help of psychological tools.

Given that psychological tools embed subjective and objective conditions in themselves, however, these embedded conditions are sometimes *evanescent*. Once being mastered by the user, psychological tools evade the user's notice when in use.

Their material beings vanish, as their "functional existence … absorbs, so to speak, their material existence" (<u>Marx</u> & Engels, 1818-1883, vol. 23, p. 140).[21] Their objective conditions are "absorbed" by user's action, while their subjective conditions (e.g., embedded cognition) are "copied" into the user's psychological operations. In this manner, the subjective and objective conditions embedded in psychological tools merge into the subjective and objective conditions embedded in the user's activity. They weave together with the user's actions. They undergo the transition from their external, visible form into some internal and invisible one (Zinchenko, 2001). As Heidegger put it,

> Equipment [the tool] is encountered not as detached objects for theoretical contemplation, but as something which we use in connection with our activities—it has a role (an 'in-order-to'), which defines it. The way of being of such equipment is that it is encountered as available ('ready-to-hand'), and disappears from conscious contemplation when in use. (Spaul, 1997, p. 39)

For experts, tools in use disappear from notice. Their functionality becomes part of the expert's capacity. Their objective conditions are rather fleeting. In this respect, "tools" and "signs" are alike; they both are transitory and being overlooked. Even though "tools" have their distinctive physical merits that effect humans' influence on nature, once being appropriated and mastered by the user, tools become part of the user, as if arms and legs that cannot be identified as a separate part from the person. Thus, tools in use not only transform into the user's subjective conditions but also become part of the user's objective conditions. Just as pianists have more dexterous fingers than normal people do, the mask maker, Mr. *Yang*, although in the opposite shape, has thick, strong fingers that tell his long story about being a wood-worker.

Being trained in visual arts, I see more color scales than my engineer friend, who cannot tell the difference between reddish magenta and pure red. Similarly, Washburn and Howell (1960) point out that "the uniqueness of modern man is seen as the result of a technical-social life which tripled the size of the brain, reduced the face, and modified many structures of the body" (p. 49).[22] These physical adaptations develop through tool-mediated activities indicate that tools grow into not only the mind but also the body.[23]

Although tools in use are evanescent to experts, they are not so to novices. For the minds and hands not yet attuned to the embedded subjective and objective conditions of the tools in use, tools appear difficult more objectively than subjectively, because their physical power, supposed to be appropriated by the user, demands the user's physical coordination. To make use of tools, practices help the user be acquainted with the mechanism of the tools in use so as to be able to utilize them to facilitate human activities. Therefore, tools will not disappear either objectively or subjectively unless the novice's ignorance and physical awkwardness are worn down by persistent learning and practice. When the novice dies in the person, his expertise comes alive.

Despite the fact that, for experts, "the structure of the equipmental whole is invisible during 'absorbed-coping,' the use of tools is revealed at the point of breakdown" (Spaul, 1997, p. 39). A skillful writer, for example, does not always focus on spelling when writing goes well and thoughts are flowing, but when a certain word is critical to the meaning to be perceived and the writer is uncertain about the correct

spelling, being reminded by the spelling signal, the writer might stop and check spelling of the word to make sure that the message is correctly spelled out. In such a waking moment of "breakdown," the user's subjective appropriation of the tool turns into an object of examination. Then what is absorbed becomes alienated, and the subjective condition becomes objectified. No sooner is the breakdown situation resolved, than the objectified condition switches back to the subjectively overlooked condition. Between the subjective and the objective conditions, psychological tools shuttle here and there every now and then. They are not exclusively confined in either subjective or objective conditions. Like "signs" and "tools," the subjective and objective conditions of psychological tools are always shifting and never fixed.

In summary, human purpose is plastic, context is further contextualized, distinction between "signs" and "tools" is not fixed. The subjective and objective conditions of, and between, psychological tools and human activities cannot be precisely defined. Therefore, there is no arbitrary distinction between "signs" and "tools." Neither is there a permanent state of either subjective or objective conditions, not to mention a definite, constant psychological role of the "tools in use." It all depends. It depends on *the contextual whole* of the tool-mediated human activity. In the mask maker's word, it depends on the *situations*.

CHAPTER 3

NEO-VYGOTSKIAN THEORIES

Vygotsky's posthumous blossoming was initially due to Bruner's scholarly

mediation. Under Bruner's influence and guidance, many neo-Vygotskians were born

and American psychological research began taking its cognitive turn. These neo-

Vygotskians not only translated Vygotsky's ideas into Western concepts but also

endeavored to fulfill Vygotsky's ideal: to create a unifying theory in which the inner

thoughts and the outer world are integrated, mind and body are no longer split, and

individuals and society re-recognize each other. Among these neo-Vygotskians,

Michael Cole, James Wertsch, and Jean Lave are the most prominent. In the world of

art education, Arthur Efland (2002) takes the lead.

Michael Cole: Cultural Psychology

Cole had learned Russian before he attended several Russian research institutes

to finish his post-doctoral study in psychology (Cole, 1997). In 1966, he revisited

Russia for cross-cultural psychological research (Cole, 2000). At this time, he worked

closely with Vygotsky's coworker, Alexander Romanovich Luria, who also had greatly

influenced Bruner (refer to p. 18). From Luria, Cole learned a great deal about Vygotsky in particular and about Soviet psychology in general. His understanding of Soviet psychology as a whole provides a conceptual context within which Vygotsky's ideas could be better understood. After a long period of time, loosing some hair on his head and gaining many ideas in his head, as he described, Cole returned to the United States and began his long-term enterprise of introducing Russian psychology to American psychology. His book *Cultural Psychology* is a full account of his many decades of study of Soviet psychology. In his book, Cole carries on Vygotsky's intellectual efforts to integrate the inner thoughts and the outer world by "putting culture in the middle" (Cole, 1996).

Adopting Vygotsky's idea of *pedagogy*, "the study of the education of the child … [as] a deliberate, organized, and prolonged effort to influence the development of an individual" (Vygotsky, 1997, p. 1), Cole likens the school to the greenhouse, and the developmental psychologist (as he identifies himself) to the gardener. While the school is an intellectual greenhouse that nourishes the young to grow under optimal conditions, the developmental psychologist is the gardener who builds that greenhouse and implements the optimal conditions for the young to learn and grow therein. Inevitably, being artificially constructed, the greenhouse situates intellectual development in its artificially optimized way.

Then again, education has its ideal and a sense of social responsibility. It is committed to the development of a better society. For the goal it intends to reach, its activities can be different from profit-oriented social practices. Therefore, educational

gardeners "must be concerned not only with a theory of how to create the conditions for development in vitro (in artificially constructed environments, such as kindergarten) but also with a theory of how to create conditions for the development that will survive when the child moves out of the children's garden and into the world at large in vivo" [in a living body of the world] (p. 144).

The greenhouse warning Cole made echoes Efland's advocacy of designing an art curriculum with consideration of the lifeworld of the child. In this regard, visual culture curriculum, which brings children's study of art closer to the world they live in and the things they are fond of doing, seems to be more promising to sustain the development children obtained in the greenhouse of art.

Cole also adopts Vygotsky's idea of psychological tools. What Vygotsky called psychological tools is similar to what Cole calls artifacts, which consists of signs and tools that the culture provides. For the term, Cole (1996) explains:

> An artifact is an aspect of the material world that has been modified over the history of its incorporation into goal-directed human action. By virtue of the changes wrought in the process of their creation and use, artifacts are simultaneously *ideal* (conceptual) and *material*. They are ideal in that their material form has been shaped by their participation in the interactions of which they were previously a part and which they mediate in the present. (p. 117)

Cole characterizes artifacts in terms of their ideal and material nature. This is similar to A. N. Leont'ev's (1979) analysis of subjective and objective conditions embedded in the production activity. Subjectively, artifacts embed values and ideas, which are preserved and passed on from person to person, and from generation to generation. Objectively, they materialize human ideas and ideals in negotiation with the reality of their materiality and the environmental limits. They are the result of both

material production and human idealization. In turn, they continue mediating these two

spheres subjectively and objectively. As the mediator, artifacts acquire their meaning in

relation to the activity they facilitate. They are mutually and dynamically defined by

mind, activity, and the context. Together, as a whole, artifacts, mind, activity, and the

context define one another, and they become part of each other. As humans create

artifacts, artifacts consist of distributed human cognition. In turn, they contribute to the

development of mind collectively. Distributedly, collectively, and dialectically,

artifacts and mind mutually create each other. Thus, Cole (1996) comments,

> because what we call mind works through artifacts, it cannot be unconditionally
> bounded by the head or even by the body, but must be seen as distributed in the
> artifacts which are woven together and which weave together individual human
> actions in concert with and as a part of the permeable, changing, events of life."

To Cole (1996), culture is "a system of artifacts" (p. 143), through which mind

and society feed, and grow, into each other. Although culture consists of a variety of

artifacts, it is integrated in nature and interactive in form. It mediates between "what is

in the head and what the head is in" (p. 331). Through its mediation, mind and society

develop each other. Culture and cognition create each other.[24]

Furthermore, as Cole (1996) points out, although culture is replete with mental

resources for the mind to grow, the mind shares the responsibility for consuming the

resource. "While culture is a source of tools for action, the individual must still engage

in a good deal of interpretation in figuring out which schemas apply in what

circumstances and how to implement them effectively" (p. 130). In this respect, Cole

and Wertsch are in accord.

James Wertsch: Cultural Tools

James Wertsch acknowledges his intellectual debts to Cole, because Cole introduced him to "some of the most important ideas and people in Soviet psychology" (Wertsch, 1979, p. xi). However, unlike Cole who places more emphasis on educational psychology, Wertsch emphasizes cultural tools. What Wertsch means by cultural tools is similar to what Cole means by artifacts, both of which are built upon Vygotsky's idea of psychological tools. While Cole endeavors to put culture in the middle of the inner thought and the outer world to solve problems in psychology, Wertsch (1998) seeks a way to "live in the middle" (Holquist, 1994) of individualized research methodology and over-generalized sociological reductionism to solve problems in social science.

Wertsch (1998) observes that "specialization and isolation are basic facts of modern institutional life" (p. 4). This results in the fragmentation within and between disciplines so as to "restrict the horizons of modern academic discourse" (p. 11). Such fragmentation is reinforced by differing theoretical assumptions about the essence of human nature. In an "either-or" manner (Dewey, 1963), methodological individualism "assumes that cultural, institutional, and historical settings can be explained by appealing to properties of individuals, and social reductionism assumes that individuals can be understood only by appealing to social fact" (p. 179). In consequence, interactions between individuals and society are categorized, or mis-categorized, as either individual properties or social facts. Cultural tools are considered as neither individual, nor social, so as to be ignored altogether. Such analyses are "incapable of

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providing useful interpretations of problems in the 'real world' of modern society" (p. 5), which involve many dimensions and complex interrelationships. Therefore, Wertsch proposes to utilize Vygotsky's idea of the unit of analysis (p. 23 in this study) to study mediated action, where complex human actions can be better perceived and to which multiple cultural tools for analysis can be applied.

In Wertsch's view, which is similar to Vygotsky's, almost all human actions are mediated by cultural tools, signs and tools that the culture provides. However, taking Vygotsky's theory a step further, Wertsch differentiates what is actually taking place when cultural tools mediate human activities. Upon Vygotsky's cultural development theory, Wertsch builds up his theories of individual appropriation and consumption of cultural tools. With a critical view, Wertsch (1998) examines interactions and tensions between cultural forces and individual preferences. He then asserts, "cultural tools do not mechanistically determine an agent's action" (p. 183), because the agent (the user of the tool) can resist, or alter, the nature of the tools' mediation. Resistance of the agent can be as forceful as the molding force of cultural tools and thereby disables the psychological function of the tools. On the other hand, because people have different levels of comprehension and their interpretations of cultural tools tend to change from time to time, and from place to place. Subsequently, the mediation effect of cultural tools varies from person to person, from time to time, and from place to place. Even though people appropriate and consume cultural tools, in each person's mediated act, there exists "an irreducible tension between the agent [mind] and mediational means [tools]" (p. 25).

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Cultural tools abound in the intellectual world. However, conflicts exist and tensions between them are inevitable. Among all available cultural tools for research, researchers face the abundance of tools and the difficulty in choosing them. Therefore, Wertsch (1998) advises to seek a way to live in the middle of various disciplines because "no one perspective in isolation is likely to provide an adequate account of human action" (p. 16). While each discipline provides some useful tools to solve certain problems, researchers may utilize them together in a way that brings the power of multiple perspectives into productive contact, so that research analyses can provide new insights into the complexities of human action. In this regard, Efland's (2002) suggestion of using overlapping sets can be most applicable to the coordination of multiple cultural tools.

Like Wertsch who calls for living in the middle of multiple disciplines, Efland (2002) calls for positioning art education in the middle of other disciplines by implementing the integrated art curriculum. He reasons that the integrated curriculum, which breaks down the departmentalized divisions of knowledge, can help learners make connections of what they learn in school to what they do in their life-world, which has no divisions of knowledge. If the study of art is integrated with other subjects of study, rather than for its own sake, the interpretation of a work of art can be enriched by drawing on knowledge from multiple disciplines. Thus, "studies of artwork can lie at the core of an integrated conception of general education" (p. 104). It might be helpful to think that knocking down the walls of the art-world actually expands its

territory. Without the walls, voices can go afar and be heard by more people, not just the members confined within the walls built by itself.

As a matter of fact, contemporary studies in art, or in other disciplines, often require knowledge from multiple domains. For example, modern computer animation requires digital animators to be knowledgeable about not only programming and art but also theatrical design, so that animators can implement appropriate lighting effects, which are equivalent to light and shades in painting. Nowadays, modern software design strives to enhance its applicability by integrating various tools and multiple virtual environments into one single packet. Adobe Creative Suite, for example, integrates painting, photography, illustration, Web design, and desktop publication in one single suite. Macromedia Director allows one single user to play many designing roles in his or her self-directed films made with Director. This integrated nature of software development is much loved by the industry as it permits the reduction of work force. The integrated use of new technology also redefines the divisions of labor and creates new cultural jobs (Greffe, 2004). However, such development seems hardly noticed by curriculum designers in most schools. As a result, what is taught in school becomes further and further away from what is needed in society. Eventually, the general public would question the usefulness of formal education in art.

Another byproduct brought about by the fragmentation of modernity that Wertsch also questions is the concept of an individual's copyright. In the wake of Vygotsky's notion of the social origins of mental functions, which declares that personal mental functions are at first social interactions and then, being appropriated,

become internal operations among mental functions, Wertsch (1998) asks: to what extent does an individual own a copyright? He then refers to Northrop Frye's remarks on creativity and maintains that "In the copyright age, we have such a strong tendency to focus on the unique contribution of the individual that we overlook what Frye saw as the fundamental shaping force of conventions employed as a kind of tool in the creative act" (p. 18).[25] In alignment with Cole's view of mutual creation of culture and cognition, Wertsch thinks that individual creativity is embedded in the culture and owes much to cultural conventions.

Wertsch's comments on the copyright issue will certainly win a standing ovation from postmodern artists and musicians, who "will always be interested in sampling from existing cultural icons and artifacts precisely because of how they express and symbolize something potently recognizable about the culture from which both they and this new work spring" (Negativland, 1998, parp. 9). Similarly, Windows, which honors "compatibility" in software design, would probably agree with Wertsch in this respect. So, Richard Spinello (2003) posted an interesting question by asking: is "compatibility in any way a form of theft" (p. 72)?

The concept of an individual's copyright is especially ironic in the case of mask making, because mask making was not exclusively taught by mask makers. Neither did mask makers carry on the mask making tradition exclusively. To explain this, I shall refer to my mask-making master's answer to my question, when I saw him possess more than thirty knives of various sizes and curves and asked: "How does one know how many knives are needed when one just starts his or her mask making business?"

He smiled (as if he was laughing at my "silly" question). Then he said, "It's very simple. Just walk in a smithy. Any blacksmith will tell you what you should have."

The mask maker's answer implies that blacksmiths in that area also played an important role in educating mask makers. As tools embed knowledge and skills, to make use of them, the user needs to acquire the knowledge and master the skills embedded in the tools. Therefore, when blacksmiths made tools for the prospective mask makers, they also made embedded knowledge and skills available to them. In order to interest them, blacksmiths needed to establish the necessary understanding about the tools, so that these clients would place appropriate orders and be satisfied with the tools when they possessed them. As such, blacksmiths not only transmitted knowledge and skills embedded in the mask-making tools but also transmitted the tradition of mask ritual. The continuation of the mask ritual practice was, on the other hand, an assurance of blacksmith's continuing profession. By making tools for new mask makers and meanwhile educating them, blacksmiths initiated new members and set up their professional lives to serve the mask making community. This exemplifies how a social network sustains a tradition, while its supportive forces often escape from notice.

Besides blacksmithing, carpentry also contributed to the transmission of the mask making tradition. Many mask makers, including my master, also engaged in other types of woodwork, such as making furniture for daily use. Mask making tools were at the same time carpentry tools. They are mask-making carpenters, so to speak. This is evidenced by my master's knives. As he told me, some of his knives were made by

blacksmiths and some were inherited from his father, who was his carpentry master but who was now retired. In effect, what the mask maker inherited was not only his father's knives but also his father's carpentry knowledge and skills. As mask making and carpentry were so closely tied together, it was difficult to differentiate these two professions in that area. It is fair to say that mask making is a social activity, which has its social connections and historical extensions. In the mesh of its historical and social network, all parts of that tradition interact with, and contribute to, one another. Eventually, they become part of one another. So it is questionable if any part could be identified as purely individual effort and to be copyrighted. In this regard, Brown and Duguid (2000) comment, "Shared knowledge differs significantly from a collective pool of discrete parts. In this pool of knowledge, where one person's knowledge ends and another's begins is not always clear" (p. 106). Not only is knowledge integrated, but also the designation of social contributions are indivisible.

Brown, Collins, and Duguid:
Situated Cognition and Cognitive Apprenticeship

In Russian, Vygotsky, Alexev N. Leont'ev, and Alexander Luria were known as the "*troika*." In America, among contemporary neo-Vygotskians, John Seely Brown, Allan Collins, and Paul Duguid are what I call the American *Troika*. Although Brown, Collins, and Duguid are not like Vygotsky's *troika* who closely worked together during Vygotsky's lifetime, they wrote a paper together that made a great impact on American

educational psychology, just as Vygotsky's *troika* made a great impact on Russian

educational psychology.

In their seminal paper, *Situated Cognition and the Culture of Learning*, Brown

et al. (1989) draw on quite a few neo-Vygotskians' notions of situated cognition, such

as Jean Lave's *"legitimate peripheral participation"* in apprentice learning and Brian

Cantwell Smith's argument of situatedness in artificial intelligence. In so doing, they

almost sum up the ideas held in common by most neo-Vygotskians.[26] Probably,

because of the title of that paper, in which they primarily build upon Vygotsky's

sociocultural theories, Vygotsky's socio-cultural view of cognition becomes known as

"situated cognition."

From Vygotsky's transactional perspective, Brown et al. contend that in the

past, education defeats its own goal of providing useable, robust knowledge because of

its inadequate epistemology that ignores the situated nature of cognition. Mistakenly, it

assumes a separation between knowing and doing and treats knowledge as a "self-

sufficient substance, theoretically independent of the *situations* in which it is learned

and used" (p. 32, emphasis added). Rather, they consider that knowledge emerges from

the context and the process of learning through using it. What is learned is inseparable

from how it is learned and used. The learning activity and situations are integral to

cognition and learning. "Situations might be said to co-produce knowledge through

activity. *Learning and cognition ... are fundamentally situated*" (p. 32, emphasis

added). So, they proclaim:

> knowledge, which comes coded by and connected to the activity and
> environment in which it is developed, is spread across its component parts,

some of which are in the mind and some in the world much as the final picture on a jigsaw is spread across its component pieces. (pp. 36-37)

This in-extractable jigsaw picture of knowledge well reflects Vygotsky's view of mediated activity. As Vygotsky saw the analogue between the working tools and psychological tools, Brown et al. see the analogue between psychological tools and conceptual knowledge. Brown et al. compare concepts to sets of tools, as they found them both value-loaded and process-situated. To acquire them, one has to adopt not only their embedded values but also the ways in which they are used and produced. They facilitate mental growth, as well as cultural development. Thus, Brown et al. (1989) propose a tool-like approach to teaching when they suggest,

> it may be more useful to consider conceptual knowledge as, in some ways, similar to a set of tools. Tools share several significant features with knowledge: They can only be fully understood through use, and using them entails both changing the user's view of the world and adopting the belief system of the culture in which they are used. (p. 33)

Brown et al. further suggest that instead of teaching tools per se, teachers may teach students the strategic use of tools, so that the knowledge of tools is situatedly acquired through the practical use of them. By making the use of tools explicit but the knowledge of tools implicit, knowing is obtained through doing and knowledge is situatedly acquired in the context of using it. As well implicitly, values and beliefs are instilled through the use of tools. Such learning is indeed a process of enculturation.

In the case of mastering computer technology, creating one's digital portfolio may be one way of learning technology through using it, instead of learning how each tool works and then demonstrating how one can use each tool in a creative way, a common practice that I have observed. In another case, a teacher had students conduct

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ethnographic research on how classroom teachers dealt with technology issues in their own classrooms. For that assignment, students were required to interview practicing teachers while utilizing multimedia facilities to record the interview. Finally, the research findings and the interview data were integrated and presented in the multimedia electronic papers, in the PDF format. Thus, multimedia technology was gradually acquired for the purpose of producing the multimedia research paper. It might be worth of pondering over: "what should be made explicit in teaching and what should be left implicit" (Brown et al., 1989, p. 40).

On the other hand, tools embed cognition and thus tax learning, so do concepts. Tools can only be fully understood through use, so it should be with conceptual knowledge. What tools are to apprentices in the community of practice, concepts are to students in schools. Through tools apprentices learn their trade and become members of the community; through concepts students master knowledge building and become members of the intellectual community. Conceptual knowledge as a cognitive tool enables students to become members of the intellectual community, just as mask-making tools gradually ushered me into the mask making community. If knowledge is tools and students are apprentices, then teachers are cognitive masters and learning in school is what Brown et al. call a cognitive apprenticeship.

By introducing the notion of cognitive apprenticeship, Brown et al. propose to consider learning as cognitive apprenticeship and students as cognitive apprentices. Then schooling will be a process of enculturation, in which students acquire knowledge and develop their competence and values through a series of authentic participation.

Such learning involves not only explicit knowledge acquisition but also a corpus of implicit knowledge that is embedded in the physical and the social context, which gives rise to the meaning of learning and the use of knowledge. This framework, as they suggest, "might hold the key to a dramatic improvement in learning and a completely new perspective on education" (p. 41).

<div align="center">Eric Bredo: Pragmatism and Situated Cognition</div>

Although Bredo is more a pragmatist than a neo-Vygotskian, his comparison between pragmatism and neo-Vygotskian situated cognitivism provides a complementary picture that illuminates the uniqueness of American neo-Vygotskians. It is common that when discussing situated cognition, neo-Vygotskians will discuss both Vygotsky's and Dewey's ideas together (e.g., Bruner, 1996; Cole, 1996; Wertsch, 1998). Dewey's definition of "situation" is similar to Vygotsky's notion of mediated activity. Dewey (1938) defined the term situation as follows:

> What is designated by the word 'situation' is not a single object or event or set of objects and events, for we never experience nor form judgements about objects and events in isolation, but only in connection with a contextual whole. This latter is what is called a 'situation.' (p. 66)[27]

Dewey's "contextual whole" of the situation where learning takes place is similar to Vygotsky's activity system where cognition takes place. Although Dewey's and Vygotsky's theories derive from different social theories —one from America and one from Russia, their ideas are rather compatible with each other—no Cold War between them. While Dewey emphasized formal education, Vygotsky emphasized

everyday cognition. Both recognized that interaction takes place in the process of learning and transactions occur between knowing and doing.

Bredo (1994) reasons that the recent advocacy of Vygotskian sociocultural view of cognition is a reaction to the dominant symbol-processing view of cognition which is described as follows: Human cognition is equated to a process of computation, and the world is a collection of concrete objects that can be represented by the symbols that humans create. These symbols are likened to words, through which humans become intelligent and into which humans encode their intelligence (McCarthy, 1968). Between words, grammars connect them together to express meaning. Between symbols, rules connect them together to convey information. Together symbols and rules spell out human intelligence, just as books spell out human wisdom. As such, learning is acquiring symbols and rules, reasoning is searching for rules, and cognition is manipulating symbols according to rules or to create more rules. The place that stores and processes symbols is "the biological CPU," the brain. Ultimately, "the human is a symbol system," boldly declared Allen Newell (1990).[28] Even bolder is Marvin Minsky's term for the human: the "meat machine."[29]

Then again, the symbol processing theory itself was also a reaction to its theoretical predecessor, as Bruner (1990) recalled that the symbol-processing theory was intended "to bring 'mind' back into the human sciences after a long winter of behaviorism" (p. 1).[30] Around the time when behaviorism was the dominant approach to the study of mind, Norbert Wiener (1948) introduced his cybernetic theory, in which he compared the human brain to the computer, the human neural system to the

information process, and human learning process to the computational feedback loop. This concrete analogy well matched behaviorist objective style. Then, the machine performance was mapped onto human intelligence. The computational process that primitive computers could do at that time—mainly crutching numbers—was equated to the thinking process of learners. So, learning was a series of passive reactions, and cognition was a garbage-in-garbage-out process. Children as learners were seen as blank slab susceptive of any information given. Rather, Bruner (1960, 1973) argued that: learning goes beyond information given; it actively constructs knowledge, instead of passively conceiving the information given. Soon Bruner's constructivist theory, together with Vygotsky's sociocultural psychological theory, becomes a strong intellectual rival against the symbol-processing theory of cognition.

Although the symbol processing theory did justice to reveal some active and creative quality of cognition, this "computer metaphor has been greatly oversold," commented Bredo (1994, p. 23). Bredo argues that symbol-processing theory rather perpetuates the long-lasting dualism, which presumes a separation between language and reality, mind and body, and individual and society. In this view, mind is conceived to be inside the head. Symbols represent the external world. Thinking is a centralized process taking place solely in the head. Outside the head, the world is a self-evident reality that can be represented by symbols. As such, learning is partaking of symbols, and thinking is manipulating these symbols in the head. In this picture, the learner is separate from what is to be learned, and the knower from the known. After all, the

symbol-processing theory becomes the symbols and rules themselves that dictates how cognition should be depicted.

To remedy the dualism enhanced by the symbol-processing view of cognition, Bredo (1994) draws on Brown, Collins, and Duguid's (1989) notion of conceptual knowledge as a set of enculturating tools and suggests,

> Conceiving of knowledge as a tool thus helps break down the dualism between knower and known. It makes clear that knowledge is the result of a transaction-the result of a process of inquiry, rather than a passive reflection of a separately given world. Given this approach, there is no question of a privileged representation of things as they really are [e.g., expert system], only a variety of descriptions useful for different purposes in differing situations. (p. 30)

Bredo was suggesting that knowledge is not the combination of symbols and rules, like physical symbol system defined by Newell and Simon (1976). Neither is knowledge the standard text, like artificially engineered expert knowledge that holds absolute authority, although respectable. Rather, knowledge is a product of a particular line of inquiry, and it should be viewed in the context of the inquiry (Dewey & Bentley, 1949).[31] It results from the learner's active participation and his or her constant re-construction. What has been acquired by the learner may be redefined and reconstructed by what is later acquired. Knowledge can be differently conceived when the learning situation and the purpose of learning alters. Thus, knowledge and tools are alike; they are functional, but not definite in meaning. It is the knower, the user of knowledge or tools, who assigns the meaning to what is in use. As Bredo's puts it, meanings depend on "different purposes in differing situations" (p. 30).

Although Bredo (1994) agrees with situated view of cognition, he precautions that a rigid, over-simplified situated approach "may become a new dogma, a new 'the

way the world is.' Such an assertion would be self-contradictory, because if all meaningful and relevant cognition is situated, situated cognition theory must be as well" (p. 34; also Bredo, 1993). Here, Bredo was implying that situated cognition theory came about as a reaction to symbol-processing cognition theory. It becomes appeal because of the "exaggerated belief in the computer metaphor." Its promotion was intended to soften the rigid symbol-processing approach to cognition and education by bringing everyday cognition and social practice back to ourselves and to education. This premise is, on the other hand, its own situating condition. Without the symbol-processing model, situated cognition approach loses its own footing of meaning. Without thinking in the head but acting totally in a situated way means that one is doing without thinking. This way of schooling would be "coordination without deliberation"[32] (Clancey, 1992) and "practice without reflection" (Bredo, 1994, p. 33). Then education has no meaning in society.

In Bredo's view, the tension between the symbol-processing view and the situated view parallels the tension between intellectual theory and social practice at Dewey's time. He sees the tension persistent as an indication of prolonged educational "issues of the desirable relationship between the 'scientific' and 'everyday' or formal and informal approaches to cognition and education" (p. 24). Offering his suggestions, Bredo proposes Dewey's (1916) transactional view to "place theory within practice," "place reason in experience," and "make mind immanent rather than transcendent" (p. 24). He would rather see a happy marriage of the symbol-processing and situated views, instead of a complete divorce from each other, to bring about more promising

intellectual offspring. In this respect, Bredo, Wertsch, and Efland are alike. While

Bredo (1994) advocates coordination of contesting perspectives, and Wertsch (1998)

advocates living in the middle of competing disciplinary perspectives, Efland (2002)

advocates integrating multiple perspectives to integrate art and life.

William Clancey: Perception, Conception, and Action

To me, William Clancey is the most interesting person among all neo-

Vygotskians. He was at first an artificial intelligence (AI) researcher and then gave up

AI altogether, as he realized that AI was leading to a dead end. His notion of situated

cognition provides a strong argument against the symbol-processing view of cognition.

AI research, in its essence, is an embodiment of the symbol processing view of

cognition. It puts philosophical beliefs into scientific practice with the hope that great

mind can be understood and made into the tools for other minds to be even greater.

However, since its birth, AI research has not given much satisfaction to those who

entered the field with great expectations. In his report to the British Science Research

Council, Sir James Lighthill (1972) summarized: "Most workers in AI research and in

related fields confess to a pronounced feeling of disappointment in what has been

achieved in the last 25 years" (p. 17). Likewise, Hubert Dreyfus was at first pondering

over *What Computers Can't Do* (1972) and then firmly reasserted *What Computers

Still Can't Do* (1992) after twenty years. With a similar degree of disappointment,

Clancey (1997) explains why AI research has not been successful:

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Focusing on professional expertise has supported the idea that "knowledge equals stored models" and hence has produced a dichotomy between physical and intellectual skills. That is, the distinction between physical skills and *knowledge* is based on an assumption, which was instilled in many professionals in school, that "real knowledge" consists of scientific facts and theories. (p. 6)

Clancey's argument echoes Brown, Collins, and Duguid's comments on the bias, which presumes a separation between knowledge and practice, knowing and doing, and research and teaching. This argument is also resonant with Bredo's (1994) contention against the dualism embedded in the symbol-processing view of cognition. Gregory Bateson (1972) amusingly describes this dualism as the ghost and the machine: the ghost "symbols" lives in the machine "computer," but they are mutually invisible and inconceivable to each other. So are symbols and the machine, invisible and inconceivable to each other. Likewise, mind is a stranger to the body. Knowing is a stranger to doing. And, the known is a stranger to the knower. Ultimately, the body, as Dreyfus (1992) puts it, is something "getting in the way of intelligence and reason, rather than being in any way indispensable for it" (p. 235).

In Clancey's (1997) view, the body is not just as indispensable but as fundamental. He argues that the body is a necessary fleshy ground for all psychological development. It forms the foundations for perception and conception through its physical interaction with the world. How one *perceives* one's local constraints gives rise to how one acts in *the* situation. Thus, action is "constructed on the spot … to fit the local constraints. In this way, behavior is reflective and continuously adjusted" (p. 25).

Similarly, in reasoning, as we create names for things, shuffle around sentences in a paragraph, and interpret what our statements mean, every step is controlled not by rotely applying grammar descriptions and previously stored plans, but by

adaptively recoordinating previous ways of seeing, talking, and moving. All human action is at least partially improvisatory by direct *coupling* of perceiving, conceiving, and moving- a coordination mechanism unmediated by *descriptions* of associations, laws, or procedures. (p. 2)

Much in alignment with Vygotsky's concept of mediated activity, Clancey's notion of situated cognition is an immediate system of perception, conception and action. To make his point loud and clear, he (1997) states, "what people *perceive*, how they *conceive of their activity*, and what they *physically do* develop together" (p. 1), and "the processes of looking, perceiving, understanding and describing are arising together and shaping each other" (p. 3). By emphasizing the local feedback loop, Clancey is arguing against the notion put forth by Newell and Simon (1976), who asserts general problem solving is cognition put in action in a universal manner. Rather, Clancey (1997) argues that "the context in which problem solving occurs— what constitutes the *situation* for the agent—is arising in activity itself" (p. 215). Thus, any situation where the problem occurs depends on how the *bodied* person behaves, perceives, and then decides how to solve the problem at that point in time and place. In other words, a situation does not objectively exist in the world external to the person. Neither does the problem. So a problem cannot be solved in an external and universal way like a computational program. Physical action cannot be separated from mental development. Neither can bodily environment be excluded from the cognitive environment.

Although I agree with Clancey's emphasis on the situated action of the "bodied" person, it can also be argued that the human body has habitual ways of behaving. This is especially true for artists, whose body is purposefully trained to act in its second nature.

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For example, the pianist's fingers move with high agility, and the arms of traditional animators move like the wind so that fluid lines naturally flow out of the tip of the pencil in their hand. These general characteristics of behavior stand for the trade of profession. This universal behavioral quality suggests the possibility of behavioral resemblance from situation to situation. Nonetheless, Clancey's emphasis on the embodiment of situated cognition adds one more voice to the choir of some contemporary thinkers' notion of embodied intelligence (e.g., Efland, 2002; Lakoff & Johnson, 1999; Wilson, 2002), which situates mind back in the living body.

In alignment with Clancey, Efland (2002) also recognizes the essentiality of embodied cognition. He points out that many higher-level concepts, such as a sense of balance in a work of art, are grounded on basic-level physical experiences, such as walking, which requires physical balance. The meaning of balance is first bodily acquired and then verbally acquired. It was the physically achieved sense of balance gives rise to the understanding of the sign "balance," as the word's meaning. Such conceptual mapping, as Efland emphasizes, enables humans to think metaphorically and imaginatively. This is the way of thinking that makes art thrive.

Jean Lave: Legitimate Peripheral Participation (Situated Learning)

Jean Lave champions the discussion of situated learning. Her famous term "legitimate peripheral participation" (LPP) has highlighted the social aspects of Vygotsky's sociocultural psychology with the brightest color. By furthering Vygotsky's pedagogical and psychological ideas, Lave has transcended the notion of

apprenticeship and gives "just plain folks" a new intellectual status. Thanks to her

efforts, the unschooled mind becomes a mirror for educators to examine their making

of the schooled mind.

Lave's idea of LPP can be thought of as an extension of Vygotsky's idea of the

ZPD, that is,

> "*the zone of proximal development. It is the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers*" (Vygotsky, 1978, p. 86, Emphasis in the original).

The zone is the developmental difference between what the child develops

alone and what the child develops with others, either under guidance or by imitating

more capable social members. If the cognitive level of the child is on the first floor and

the cognitive level of his or her more capable social member is on the second floor and

above, by imitating how that social member solves problems within the higher-level

context, the child learns in the proximity of higher-level thinking. Thereby, the

cognitive level of the child can be scaffolded to a higher level.

By putting forth the notion of the ZPD, which includes the concepts of

guidance and imitations, Vygotsky (1978) was arguing against "an unshakable tenet of

classical psychology" that believed:

> only the independent activity of children, not their imitative activity, indicates their level of mental development. This view is expressed in all current testing systems. In evaluating mental development, consideration is given to only those solutions to test problems which the child reaches without the assistance of other, without demonstrations, and without leading questions. Imitation and learning are thought of as purely mechanical processes. (p. 88)

The above fixed belief is not uncommon in the studies of art. Because of this belief, many art students almost obsessively oppose imitations, and at worst disdain it. Rather, Vygotsky asserted: "a person can imitate only that which is within her developmental level. … Using imitation, children are capable of doing much more in collective activity or under the guidance of adults" (p. 88). Children can imitate a variety of actions that go well beyond the limits of their own capabilities. Their imitative acts actually give them access to higher level of intelligence. In so doing, children's zone of proximal development can be opened and the development of solitary problem solvers can be scaffolded.

Vygotsky's notion of ZPD has invoked a re-conceptualization of learners and a reconsideration of educational responsibilities (Efland, 2002). This conceptual invocation is especially meaningful in the field of art education. Since the romanticism of Lowenfeld's (1947) idealization of children's self-development in art, children in art classes generally received "no interference," and therefore no scaffolding, from their teacher. They were left alone to venture into the jungle of art. Aided and abetted by the selective mixture of behaviorism and constructivism, teachers became objective bystanders and children became lone knowledge constructors. If children don't construct knowledge (and often they don't know how), they would be in danger of becoming intellectual barbarians. As such, education lost its learners and self-defeated the meaning of its own existence. Then came in the idea of situated learning to save children from being learning orphans.

Instead of children's ZPD, adult learners' ZPD is Lave's interest of research.

She spent much of her time studying how adults learn through imitation and guidance,

that is, apprenticeship. Together with Wenger, Lave (1991) coins the term, "legitimate

peripheral participation" (LPP), to stress that learning is situated in the social matrix,

on the one hand, and "to rescue the idea of *apprenticeship*" (p. 29), on the other. As

they explain,

> In 1988, notions about apprenticeship were flying around the halls of the Institute for Research on Learning, acting as a token of solidarity and as a focus for discussions on the nature of learning. We and our colleagues had begun to talk about learners as apprentices, about teachers and computers as masters, and about cognitive apprenticeship, apprenticeship learning, and even life as apprenticeship. It was evident that no one was certain what the term meant. Furthermore, it was understood to be a synonym for *situated learning*, about which we were equally uncertain. Resort to one did not clarify the other. Apprenticeship had become yet another panacea for a broad spectrum of learning-research problems, and it was in danger of becoming meaningless. (p. 29).

With the term LPP to replace the overwrought terms apprenticeship and

situated learning, Lave and Wenger (1991) make it clear that the idea of "legitimate

peripheral participation is not itself an educational form, much less a pedagogical

strategy or a teaching technique. It is an analytical viewpoint on learning, a way of

understanding learning" (p. 40). Precisely, they try to understand learners at workplace

in different cultural settings other than American schools, such as tailors in Liberia,

midwives in Mexico, and nondrinking A. A. members. In so doing, they accentuated

the "forms of production and the reproduction of the communities of practice" (p. 58).

To Lave, the notion of situated learning connotes more "learning *in situ*," or

"learning by doing," (Lave & Wenger, 1991, p. 31), than "being situated," or being

bounded. It concerns with how everyday cognition develops within the social context

and at its usual place. She emphasizes that learning is learning-to-be, not just learn-about. Learning implies becoming a different person with respect to the possibilities enabled by the relations with the learning community. It is a journey moving from the social peripheral to the professional center, from outsider to insider, form non-participant to active practitioner. Learners not only learn *from* masters but also learn *to be* masters themselves. They change not only their participation but also their identity.

Lave and Wenger (1991) further emphasize that the development of the learner's social identity also affects how his or her learning takes shape, because the identity under development shapes the perception of what to be known and the way knowledge is assimilated. While developing a social identity, one "learns to be" with full personal involvement, not just to "learn about" with an onlooker's point of view. With their full participation in the socially situated activity, all learners are somewhat like apprentices and learning is somehow like an apprenticeship.

Similarly, A. N. Leont'ev (1979) states, "the human individual's activity is a system in the system of social relations. It does not exist without these relations" (p. 47). Because of these relations, "society produces the activity of the individuals it forms" (p. 48). In other words, the individual development is built upon the interaction between the individual and the society. The relationship between the individual and the society colors one's worldview and directs one's cognitive development. It determines what to pay attention to, what to think about, what to learn about, how to learn to be, and finally what one becomes to be. With and within the society, one develops a sense of place in the school, in the society, and in the culture.

To Jean Lave (1998), learning is "legitimate peripheral participation." To Barbara Rogoff (1990), learning is "guided participation." To Brown, Collins, and Duguid (1989), learning is a "cognitive apprenticeship." But to me, in this study, learning shall be called *a process of enculturation*.

Situated learning takes on an additional implication in this study. It refers to not only apprenticeship but also a situated way of understanding. In my view, all ethnographers are "legitimate peripheral participants." They move from the periphery to the central core of the culture under study. They are always being "legitimized" by the subject as well as the subject's community. Only after winning the trust of the subject and the community can crucial information be gathered. An "emic" approach in anthropology is essentially "learning to be." It can be thought of as an apprenticeship. In the following, I shall elaborate how I tried to learn to be an expert in mask making (i.e., my apprenticeship) and what it meant in this study.

Figure 6: My mask-making master and me

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CHAPTER 4

PURPOSE, METHODOLOGY, AND SIGNIFICANCE
OF THE STUDY

Purpose of the Study

The purpose of this study went through a series of changes. At first, it was

because the ferocious appearance of the Chinese masks, referred to as the gods, scared

me. Being fearful and yet curious, I asked many questions, but no answers were found.

Neither did anyone I talked to know about these masks. Wondering about this

unfamiliarity to the majority of Chinese, I turned this mystery into the research. The

purpose at its onset was to unmask Chinese masks so that Chinese culture could be

better recognized with a masked cultural face, namely Chinese ritual masks.

As the research unfolded, problems emerged. The difficulty in locating sources

and finding relevant information confirmed that this research was really needed.

Furthermore, I found no records of Chinese mask makers. Apparently, Chinese history

had forsaken them. In my attempt to write a historical page for mask makers in Chinese

history, I switched the target from scary masks to their creators, Chinese mask makers.

The purpose of the study became to unmask Chinese mask makers, so that Chinese

culture could be better recognized with such uncovered culture faces as Chinese masks makers and their works.

Later on, in Taiwan, I found a series of ethnographic reports on the Chinese masked ritual performance. From these reports, I learned that Chinese mask makers learned their trade through apprenticeship. At that time, in the US, apprenticeship, referred to as situated learning, was vigorously discussed among education researchers. Much praise had been given to this view of teaching, but the lacking of counter-perspectives indicated that the conception might be over-romanticized. To better understand how apprenticeship really works, my apprenticeship to a Chinese mask-maker gave me a perfect chance to not only learn about Chinese masks and their creators but also examine how apprenticeship works in China. The purpose of this study then became to unmask Chinese ritual masks and the makers of these masks by the mask maker's apprentice. In so doing, the mask-making apprenticeship that transmitted the tradition of this unrecorded cultural practice could be unmasked as well.

Bravely, and naively, I succeeded in conducting the fieldwork. From getting into the mainland of China, to being there in *Anshun, Guizhou*, and finally coming back here in the US, this research journey led me to cross many borders between different cultures, politics, disciplines, and viewpoints. After crossing borders, differences in view and value became apparent. Among all the things at odds, the battle between scientific stringency and humanistic romanticism was the most severe one, especially when this happened in the human sciences. It actually caused this research to be tabled

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a second time. This intellectual crisis anticipated me to welcome Dr. Efland's timely introduction to Vygotsky's sociocultural view of cognition (situated cognition). In this theory, I found the clearest expression that not only explained my *ad hoc* research experiences but also gave me analytical tools with which I could elucidate the mask maker's cognition in mask making. Indeed, this project took its cognitive turn with the adoption of Vygotsky's sociocultural approach to cognition.

In addition to Vygotsky's sociocultural view of cognition, Efland's notion of imaginative cognition (Efland, 2002) also gave me a viewpoint to perceive how "just plain folk's" mind develops within the framework of the cultural tradition. Then the mask maker's cognition was conceived as an imaginative cognition that materialized the divine images collectively constructed by the mask ritual community. However, divine images belonged to the immaterial realm, whereas mask making was concrete material production. How did mask makers translate the mental ideal into the solid mask material? Where did the mask symbols come from? And, how could this mental representation be taught and acquired? With these questions in mind, the research focus shifted, again. This time the emphasis was put on cognition. The purpose of the study then became: to help art educators find ways to facilitate students' creative process and foster their imagination by providing a cognitive analysis of the Chinese mask making and its apprenticeship as a source of inspiration. In addition, by telling the Chinese mask maker's mental stories, this study also introduced the isolated Chinese mask ritual community to the world, thereby fostering cross-cultural understanding.

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Throughout the whole journey, the most unforgetable moment was when "my mind was blank; my thought was frozen" (p. 3) and I did not know what to do with the tools in my hand. I began to realize that even though I read a lot about Chinese masks, observed mask performance, and recorded the mask-making process, I still could not make a mask by myself. This feeling of not knowing what to do reminded me of the fear for the white canvas that I used to have when I started learning how to paint. This fear was in part because of being uncertain about the tool use, or the lack of the mental images that were embedded in the tool use. However, this blank state of mind happens rather often nowadays, as when I need to learn how to use a piece of new software. When the new software is so different from other programs that I have already mastered, I usually do not know what to do when I open the software for the first time. Interestingly, I also found similar "blank" expressions on my students' faces when I taught them how to do scripting (programming) for the first time. These similar responses revealed a parallel between my apprenticeship in mask making and my students' learning to use technology in their teaching and learning in the arts. This parallel indicates that the uncertainty about tool use is a common obstacle for a new tool user, or a skill learner. To help learners overcome this obstacle, I revised the purpose of this research, again. This time I added stress on learning the use of technology, which was also referred to as skill acquisition. Then this study's purpose became to develop a psychological approach to skill acquisition by first analyzing the cognitive activities and development in the teaching and learning of Chinese *Dixi* mask

making and then applying the analysis to the teaching and learning of the use of technology in American arts education.

By telling the story of this study's changing purpose, I hope to have demonstrated that human purposes are not static. It tends to change because cognition develops, and thus one perceives the purpose of one's actions in a different light.

In spite of the evolution of the purpose of this study, the information about the mask maker's cultural practices remains central to this study. By telling the mask maker's mental story as well as his community's worldview, I hope this study not only facilitates cross-cultural understanding but also recognizes mask makers' contributions to Chinese culture in their colorful and silent way.

Figure 7: The mask maker, Mr. *Yang*

Methodology of the study

Figure 8: Apprentice learning in mask making
(Me, Mr. *Yang*, and Mrs. *Yang*)

As Vygotsky applied Marxism to both his theory and methodology, I applied situated learning (apprenticeship) to both theory and methodology in this study. As methodology, situated learning is a way of understanding, which attempts to understand the mask maker's cognition taking place in his professional and social environment. By engaging mask maker's communication of his knowing in his most familiar surroundings, my understanding was obtained *in situ*. On the other hand, situated learning is "an analytical viewpoint on learning, a way of understanding learning" (Lave & Wenger, 1991, p. 40), which attempts to understand how apprenticeship works in Chinese *Dixi* mask making. Hence, I apprenticed myself to the mask maker so that I could understand through experience how an apprentice acquires knowledge and skills of Chinese *Dixi* mask making.

As theory, situated learning argues that traditionally, "learning researchers have studied learning as if it were a process contained in the mind of the learner and have ignored the lived-in world" (Lave, 1993, p. 7). Likewise, some anthropologists have

studied their subject in isolation as if knowledge is only contained in the subject and the research answer can be surely found in the field of the study. They interview the subject with prescribed questions under a controlled, isolated condition. This decontextualized setting is akin to an experimental laboratory where the mouse is put in a cage in isolation for controlled observation. By stripping off the activity context, the interviewer has separated the interviewee from the activity and interviewee's thinking from his or her doing. Such a method is rather inadequate for the research on human cognition. As Greeno (1995) asserts, and many neo-Vygotskians promote (e.g., Brown, Collins, & Duguid, 1989; Clancey, 1997; Cole, 1996; Kirshner & Whitson, 1997; Lave & Wenger, 1991; Rogoff, 1990; Salomon, 1993; Suchman, 1987; Wertsch, 1985): *all human cognition is situated*. To better situate my understanding, I avoided the interview method but situated myself in the learning system that I intended to understand.

I also avoided the interview method because I believe in what Wittgenstein had commented that "many everyday concepts have 'blurred' or 'ragged' boundaries. Drawing a sharp boundary around such concepts would seriously distort them in many cases" (Brenner, 1999, p. 24). This was especially true for the mask maker. Mask making was his daily living and usual activity. It would be unnatural for someone to articulate what one does everyday. Therefore, I considered the interview method would distort the cognitive nature of mask making.

Besides theoretical reason, my own experience of being interviewed, including an interview by a professional journalist, has taught me that no matter how much

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information the interviewer pulls out from the interviewee, whatever is said is usually not fully understood. This is understandable since the interviewer is not an expert on the subject matter, and therefore has the reason to interview an expert and thus has limits on interpreting the information gathered. Worse is when the interviewer has slight but differently grounded knowledge of the subject matter which can sometimes make communication difficult. Information then tends to be misinterpreted.

One example of the problems that arise with the interview methodology involves a doctoral student who interviewed me for his dissertation on technology. Some of his questions were, from my point of view, conceptually inadequate. In order to give him answers he needed, I corrected some of his questions and then answered the questions that I corrected. Otherwise, I couldn't answer those questions at all. However, this posed many problems for him. His questionnaire had been used on other interviewees, and, to my surprise, they did not have any problems with those questions. So, my revision of his interview questions, which he perceived as a substantial change, might well cause another long process of proposal approval for him. This would have been a daunting challenge. However, such a problem is not uncommon to many graduate students. When it happens, many graduate students would prefer to figure out some ways to negotiate data rather than question the problematic nature of methodology. For these reasons, I chose a non-interviewing approach.

Playing both roles as an apprentice and a researcher, my in-field research is my apprenticeship, while my research data is a combination of my learning experience and what I learned from the local area. As such, my research analysis is inevitably

introspective and personalized. As Geertz (1988) points out, anthropology is always *personal specific*; its work always reveals the author's signature. The result of this study is inevitably my personal narrative.

For the following reasons, the field research of this study was conducted prior to the completion of the research proposal: (a) the first was time constraints. The possibility to conduct this study occurred only once a year when the mask ritual would be performed for half a month and precious masks could be possibly seen during the Chinese New Year celebration. This was the time chosen for the field research of this study; (b) the second involved the problems of the application process. This cross-cultural fieldwork in *Guizhou*, China involved a complicated and difficult political process. The Chinese government supervised all scholarly activities in *Guizhou* province. I finally received the officially approved research permission that allowed me to be an apprentice to the mask maker, Mr. *Yang*. This hard-earned approval from the Chinese government was not only too precious to give up but also too scary and unpredictable to ever try again; (c) the third includes creative supports. Unlike other teachers who told me to follow established research methods and procedure, regardless of my predicaments and my questioning about how those methods were established at the first place, rather, my current adviser saw this case a chance to try an unconventional research approach to see how research will turn out in a retrospective way. Without his creative supports, I would not have enough courage to take this methodological challenge. Now, I am most thankful for this.

In my reflection, recounting this research process, I started out as a romantic folklorist aspiring to write a historical episode of Chinese masks and mask makers. Without choice, I left for the field in a hurry and planned my research along the way. According to my preliminary research plan and with my wildest guess, I collected data as much as I could. Unexpectedly, the most significant answers pertinent to the research questions were actually found after returning from the fieldwork in China. Data do not *only* exist in the field. Nevertheless, the fieldwork established the point of departure from which my in-depth understanding developed.

Type of Mask: Dixi Masks

The *Dixi* mask is the most elaborate and colorful type of ritual masks among all types of Chinese ritual masks. For this reason, Professor Wang recommended it as an object of study (p. 8, in this study) and I took his recommendation and made the *Dixi* mask-making process the skill to be acquired in this study.

Dixi, 地戲 pronounced as D-C (no "k" sound), literarily means the ground drama. Victor Mair (1994) translated it into "earth opera." Local people in *Anshun* City, where *Dixi* was found, call it "Dancing of the gods." However, the term "ground drama" seems to reflect the format of the ritual performance. By referring it to the term "ground drama, " *Dixi* is differentiated from all other types of Chinese ritual performances that are either performed on a stage or in front of an altar. Rather, *Dixi* is performed at ground level, and usually at the center of the village's public space. Thanks to the convention of the village structure that reserves an open space in the

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village for public events. While the performers pray and thank the gods through their performance, people from the village, or neighboring villages, gather around the performance ground to watch the ritual performance either at the ground level, or from a higher level surrounding the performance space, as the following image and Figure 1 (p. 1) show.

Figure 9: *Dixi* performance and its audience

The design of the *Dixi* mask is divided into two parts: the top half as the headgear and the bottom half as the face. The headgear is usually delicate and full of patterns. Within delicate patterns, there is usually a symbol craved out along the central line of the headgear to indicate which god the mask represents. For example, in this study, the mask that represents the powerful female general Pearflower has a flower carved at the center of the headgear (See Figure 9). According to the Chinese literary tradition, pearflower is a symbol for a kind but ill-fated woman, which well describes the characteristics of Pearflower in this study. However, the performance script usually brings to a happy ending and restores justice

Figure 10: Pearflower

and harmony back to the human world. Therefore, at the end of the story, Pearflower is fairly rewarded. By contrast, as the antagonist, *Su Bao-tong* is the leader of the rebelling troop, against whom Pearflower's husband was fighting, and therefore Pearflower was involved in the battle to assist and save her beloved husband. The mask that represents *Su Bao-tong*, the Dragon Star descended from heaven, has a dragon, or

dragons, on the top of the headgear to indicate the dragon star the mask represents (See Figure 10). Further accentuating what the mask represents, the mask maker carved the nose of the mask into the head of a dragon. As the mask maker told me that according to their mask-making tradition, the dragon was usually used as a symbol for an antagonist, a powerful

Figure 11: *Su Bao-tong*

leader of the renegades. Such a symbolic use of dragon is quite different from the Chinese common use of dragon as a symbol for the forthcoming of positive events, but according to the *Dixi* tradition, the dragon symbol implies a big, bad, and ugly guy.

The bottom half of the mask is the face of a divine being, which is depicted in the performance script (the lyrics). While the mask maker was carving out an eyebrow on a mask, he told me that among *Dixi* mask makers, there is a popular, well-rhymed Chinese phrase that summarizes the principles for carving eyebrows. The meaning of that phrase can be translated as follows: the eyebrows of a young, male general look like swords. The eyebrows of a female general look like threads, and the eyebrows of a rebel look like fire. In reverse, from the shape of the eyebrows, people watching the performance can roughly tell which god the mask represents.

The visual language for mask representation is the special knowledge mask makers need to possess in order to make a mask. However, this task is made easy due to the highly visualized literary style of the *Dixi* performance script (See Chapter 7 for details). Often, in the script, whenever a character is introduced, descriptions of the character are provided. Thus, the performance script is indispensable to mask makers. Masks and scripts are indivisible in *Dixi* mask making.

Figure 12: The goblin

While Art and literature become integrated in *Dixi*, the *Dixi* community's general beliefs diversify the variety of masks. Most people of the mask ritual community believe that all beings, including humans and non-humans, have the potential to be a god. There are gods transcended from servants and there are gods take shape of animals. It is one's virtues and deeds that determine one's suitable status.

Therefore, there are varieties of beings that become varieties of the gods they worship. For example, the antagonists of the episode The Blazing Battle Formation (See Chapter 5) was a goblin (See Figure 11), who lived in the heaven as a crane to chauffer the immortal South-pole Elderly (the god of longevity). However, this crane was not an

Figure 13: The South-pole Elderly rides on the goblin as a crane. (processed from Ye Chi, 1987).

ordinary bird. He was originally a powerful Taoist priest who "turned into a feathered" upon his death (Eberhard, 1986).[33] Thus, the goblin could transform from a human

into a crane, and vice versa. Likewise, humans and animals are not arbitrarily different beings. When the life cycle circulates among all kinds of beings, one who is a human being in this lifetime can be a tree, or a chicken, in the previous one. The form of appearance does not correspond to the real being. The god's appearance on earth may be just an illusion.

Figure 14: The Goblin mask

It has been the local convention that the goblin mask is often depicted with a chicken face to indicate it is a fowl. By depicting a character in a general way, mask performers can use one mask for a few similar characters. For example, in the episode discussed herein, the mask represents the crane goblin. In another episode, the same mask can be used to represent the chicken goblin. Without precision, the use of masks gains great flexibility.

The *Dixi* performance script, the lyrics chanted by performers in the mask ritual, is usually an alternative version of a long and well-known Chinese ancient historical fiction, such as *The Romance of the Three Kingdoms*. For the mask maker's community, *Xia-yuan* Village, the original fiction is *The Campaign to the West*. This type of Chinese classics emphasizes the virtue of loyalty and the importance of military skills, which indeed were what the mask-making community treasured most. However, the alteration to classical fiction is often made by combining the fiction with the stories of the stars. The mask-making community worships stars. They believe that the stars in the sky are the gods in heaven. The whole celestial body in the sky corresponds to the

human world on earth. Some stars gods are governors and some are commoners. Therefore, some stars are brighter and others are duller. Among the stars, there is a heavenly government, which corresponds to the imperial Chinese government on earth. The star gods are like human beings who have passion, anger, and all sorts of feelings. Therefore, they make mistakes, too. When a star god makes a mistake, the heavenly emperor, or a judge, will send the sinner down to the earth to redeem himself or herself. Again, just like the human world, a big mistake usually involves a lot of people. For a serious mistake in the starry world, a group of star gods would be sent down to the earth to redeem themselves. Being humans on earth, the star gods will not remember who they were. They carry on the same personality, but they are doomed to go through all sorts of human sufferings, especially being trampled by battles. Not until they all learn their lessons, the battle will not end. Simultaneously, earthly human beings suffer, too. Eventually, these star gods will wake up from their foolishness. A heavenly high-ranking figure will appear to reveal the whole story. Thereafter, all the star gods will be restored back to their celestial positions. Harmony is thus restored back in the world of humans and of the gods.

More specifically, the story portrayed in the performance script performed by the mask maker's community (See Chapter 5) is about Pearflower, the Jade-Girl star, and *Xue Ding-shan*, the Golden Boy star who is also an incarnation of the White Tiger star. Jade Girl and Golden Boy, somewhat like Adam and Eve, started developing earthly thoughts. They both became absent-minded and made mistakes. One day, accidentally, Jade Girl ran into the ugly Dragon star (*Yang Fan,* on earth). Jade Girl

couldn't help but laugh at his awkward appearance. Trying not to be rude, she smiled.

This moderated scorn was rather perceived quite differently by both celestial lads; the

ugly Dragon star took it as a hint and started to fall in love with her, and Golden Boy

took it as flirtation so as to accuse her of being promiscuous. Feeling unfairly judged,

Jade Girl argued with Golden Boy. Thus, this perfect couple became a fighting couple.

The heavenly emperor heard what happened between them and determined to teach

them a lesson. Without giving any notice, Jade Girl, Golden Boy, and ugly Dragon star

were sent down to the earth and born as human beings. Accompanying their descent,

many other gods, including the crane goblin, were destined to descend in order to

fulfill their destiny. Therefore, for the most part of the whole story, Pearflower (Jade

Girl) fought for her beloved husband (Golden Boy), but never received due

appreciation from him.

Generally speaking, the *Dixi* mask is only one particular type of Chinese ritual

masks, belonged to the ritual mask family, which is called the *Nuo* ritual masks. Not all

the *Nuo* rituals use masks in their ritual performance. Some use masks, but others have

the ritualists' faces painted instead. Nevertheless, they all originated from the same

Chinese ancient masked ritual practice, which can be traced back to the *Chou* dynasty

(or the *Zhou* dynasty, 1121-255 B.C.).

According to the ancient historical record *The Rites of Chou* (*Huang-Fu*, 1989),

which documented various rituals commonly practiced in the *Chou* dynasty, the *Nuo*

ritual is one of the three most important rituals held at the court. The purpose for

holding it was mainly, but not exclusively, to extirpate evil spirits, especially plague-

causing spirits. As time changed, the ritual format evolved. In the *Han* dynasty, the

Nuo ritual was quite a phenomenon. It was held between the "two heads of red," which

meant that the ritual began at the sunset and ended at the sunrise in the following day.

Led by the imperial priest, the *Nuo* ritual team consisted of the twelve masked adults

and one hundred and twenty young boys. The twelve adults wore ferocious masks to

personify the twelve powerful celestial monsters, who were fond of eating evil spirits.

Each monster had a special taste, so each one would devour a special kind of evil spirit.

Among the twelve, there was the most ferocious one who would walk at the end of the

monster team to make sure no evil spirits evaded from their chase. After the sunset and

the initial *Nuo* ritual ceremony, these twelve celestial monsters carried torches to chase

away all evil spirits that troubled the city. While they were searching and chasing away

evil spirits, the accompanying one hundred and twenty young boys would sing aloud to

tell evil spirits how powerful these monsters were and how ruthlessly they would

devour them. Kindly, they would suggest evil spirits take flight to spare their lives.

Otherwise, they were doomed to die. "*Nuo,*" the frightening noise the boys made to

scare evil spirits away,[34] gave the ritual its name. Evil spirits were believed that when

they fled they would run toward rivers (maybe, to take an easy ride by letting the river

carry them away). So, the *Nuo* ritual ended at the riverbank. At the end, the twelve

monsters would toss away their torches into the river. Along with the torches were all

evil spirits (Huang-Fu, 1989).

However, the definition of *Nuo,* written as 儺 , is still under scholarly debate.

Some Chinese scholars consider that the word *Nuo* refers to the sound uttered when the

ritual was performed. Others rather think that the use of the word was because of the ancient worship of birds (Lin, 1994). The latter interpretation was based on the author's philological inference, but it sounds less convincing.

There is another interesting story that explains how the *Nuo* ritual changed into *Dixi*. The story occurred in the Northern *Qi* dynasty (A.D. 550-577). *Lanling* King (*Gao, Chang-gong*) was a good-looking prince who was also a great general full of military skills. However, his "beautiful" face tended to make people distrust his military competence. This also discouraged his soldiers when they went out to fight. Upon a critical battle coming, the prince would lead the battle. Creatively, he put on one of the ferocious ritual masks before went out on the battlefield. The mask did work magic, like the way they chased away all evil spirits. The prince's troop won the battle in an unparalleled manner. Thereafter, the mask ritual became a part of military ceremony and the handsome prince's use of the mask became a popular drama performed everywhere. Thus born were the Chinese opera (Beijing opera), as popular entertainment, and *Dixi*, as the martial *Nuo*, a military ritual (*Huang-Fu*, 1989; *Shen*, 1989).

Nowadays, in China, *Nuo* rituals are categorized into two kinds. One is the Altar *Nuo* ritual, which is the original *Nuo* ritual for chasing away evil spirits. The other is *Dixi*, which is the martial *Nuo* ritual transmitted among the military groups. However, in *Guizhou*, there is a special kind of mask ritual *Zuo-Tai-Ji*, or "the drama of becoming humans." This ritual is practiced only among *Yi* people, one of the major minority groups in *Guizhou*. Little was known as to how and when this mask ritual was

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started. Most local researchers (Gu, Pan, Duo & Kuong, 1993) considered it derived from Chinese *Nuo* rituals, but adopted into *Yi* people's creation epics. *Zuo-Tai-Ji* masks consist of five masks, which represent the *Yi* people's five ancestors: the grandfather, the grandmother, the father, the mother, and the son. The ritual performance is to re-enact their ancestor's creation stories. Due to the difficulty of transportation to reach the area where this ritual was practiced, this study had to limit its research on this topic, although it still interests me and I might consider a further study of it in the future.

Location of the Study
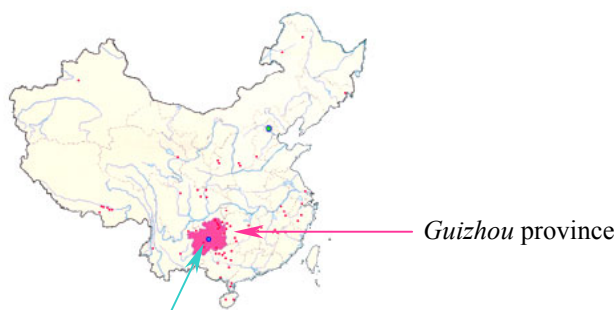
Figure 15: The map of *Anshun* City in *Guizhou*, China[35]

Anshun City, "The City of Stones," had nothing but mountains of rocks.

Figure 16: Rocky mountains

Because of this geographic condition, it was very difficult to build roads to connect widely separated villages. Public transportation there was very limited. Taking a taxi to rural areas was like taking an airplane in the US—affordable for some, but it was not for everyone. The communication system was also limited. It was not uncommon to find a few villages sharing one public telephone. For commoners,

long-distance telephone calls could only be made in the main post office at downtown.

E-mail was unknown to most village people. Some officials had cell-phones, but they

could not use them in most rural areas because the mountainous terrain had reduced the

possibility of receiving signals. Electricity was very, very expensive. Therefore, most

houses were insufficiently lighted. Most of the time, people

relied on sunlight to work. When working, they usually either

kept their front door wide-open or worked outside of their house.

Due to expensive electricity, televisions were a luxury to people

living in the village. Once a village person asked me if I had a

Figure 17:
Yang, Z. H.,
Yang's brother

color television. I plainly replied: yes. As it implied, Color

television was a rare thing there. Scattered over the rocky ground were fields of rape

plants. When the weather was nice, and ironically I was about to leave the field, bright

sunlight made yellow blossoms of rape plants as saturated as Van Gogh's paintings.

The sight was breathtaking.

Figure 18: A beautiful sight at *Xia Yuan* Village
(By the mask maker's house)

On the other hand, the rich resource of stones brought to the city fortune and

fame. Stone mining was one of the major businesses there. Stone sculptures were

another artifact that gave the city an artistic reputation, besides *Dixi* masks. For easy

transportation, most stone sculpture companies were located in the downtown area,

especially nearby big hotels. As most people work under sunlight, big-sized stone

Figure 19: A stone
sculpture (*Guan-gong*)

sculptures could be seen here and there in the downtown

area. It was also common to see shops and restaurants have

big stone sculptures guard their storefronts. These stone

sculptures gave the city a unique, artistic appearance.

Because of the mountains, people in the rural area

were somewhat isolated. The world outside was hard for them to reach. Therefore,

many traditions handed down from their ancestors two or three hundred years ago were

still in practice.
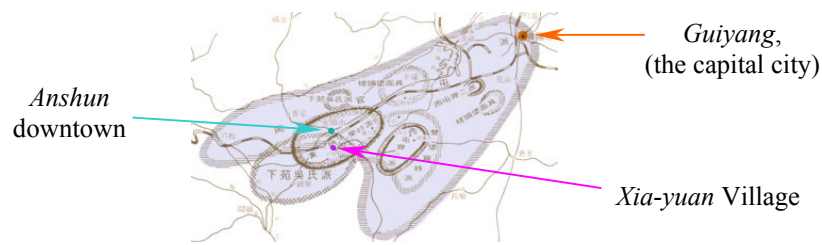
Figure 20: *Xia-yuan* Village in *Anshun* City
The tinted area indicates the major area of *Dixi* mask making (*Shen*, 1994b).

Not too long ago, before good roads and automobiles were available to the

Guizhou province, *Anshun* City was an important military and economic location that

controlled the routes of travel between *Guizhou* province, *Yunan* province, the province

at the southwest. Travelers between these two provinces usually stopped at *Anshun* for

a rest or for a night. This is the reason that in the Ming dynasty (1368-1644), the

emperor *Chu, Yuan-zhang* commanded the governor *Wu Fu* rebuild the city of *Anshun*

into a military base (*Shen*, 1989). When I was visiting *Zhan Yia Tun* (The Fortress

Village of *Zhan* Family), I did observe that many houses had built-in gun holes on their walls next to the street. They called these gun holes "cat eyes." They were built in tapered cone shape with small opening at the outer side of the wall but much wider opening at the inside of the wall. Shaped in this way, these holes gave gun fighters more flexibility to move their guns against the wall.

Figure 21: Gun holes (Cat eyes)
View from outside   View from inside

The reason that the emperor *Chu* sent the governor *Wu Fu* to fortify *Anshun* city was because that area had been known for discriminating the Chinese *Han* people. Before the Ming Dynasty, it was under the ruling of *Liang* King, one of Gangis Khan's grandsons (Yuan dynasty). *Liang* united other non-Chinese minority groups to oppose to the Chinese *Han* people. All non-Han groups were classified at higher social classes than that of the *Han* people. If there was a fight between Mongolians and Chinese, Chinese were not allowed to fight back. There was no serious penalty for any Mongols who killed *Han* people (Chou, 1993). After the Chinese government overthrew the Mongolian government in the Northern China, the emperor *Chu* sent his ambassadors three times to propose *Liang* to be subjugated to the Chinese government and to equalize social classes there. *Liang* rejected all proposals. Out of the three ambassadors, he killed two of them to claim his rejection. Later, in 1381, the emperor

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determined not to put up with him. He appointed the governor *Fu Yuo-de* as the general

to lead the army of three hundred thousand soldiers to conquer *Liang*. *Fu*'s military

assistant, *Mu Ying*, offered a clever tactic which completely destroyed *Liang*'s army.

Liang determined NOT to surrender. So he fled away together with his family. They

came to the Lake *Tian* and all jumped into it. Thus, they freed themselves from the

Chinese ruling, and from life, for good (*Shen*, 1989).

Although the Chinese government took over that area, *Liang*'s determinism was

rather infectious. Other non-Chinese groups would obstinately fought against the

Chinese army. Rebelling and conquering became a tango between the Chinese army

and the armies of non-Chinese ethnic groups. The emperor wanted to stabilize his

regime for a long term. He ordered *Wu Fu* to fortify *Anshun* City. In addition, he

commanded the general *Fu* campaign to *Guizhou* for the second time. This time, *Fu* led

not only soldiers but also these soldiers' families. They migrated. After arriving in

Guizhou, these soldiers were stationed in the countryside and encouraged to engage in

farming so that they did not need to rely on the central government's supplies. By

mingling soldiers together with country people, who were mostly non-Chinese, the

Chinese government gained better control over that area. However, being away from

their homeland, these soldiers became nostalgic. So, they practiced the *Dixi* ritual to

remind themselves of who they were and what they used to do. On the other hand, they

were soldiers after all; they were obligated to remain loyal to the central Chinese

government and ready themselves for battles. This is why *Dixi* emphasizes loyalty and

military skills. This history also explains why *Dixi* was found in the countryside, rather than the downtown area, and why most *Dixi* performers were also farmers.

Figure 22: *Tun-bao* women

An unplanned result of this military migration was the offspring of inter-racial marriage. According to *Shen* (1989), most members of the *Dixi* community are the descendents of the interracial marriage. The *Dixi* culture is probably a mixture of cultures. These people were often referred to as the "*Tun-bao*" people, or the "people of stations and forts." Because of geographical difficulties, they were isolated from the world outside and their culture remained close to what it was. Some Chinese researchers call them "living fossils" (Wang, H.F, 1989; Shen, 1989).

Away from *Anshun* downtown, about ten minutes to drive, was *Xia-yuan* Village where the mask maker Mr. *Yang* and his family lived. *Yang*'s house was newly built. White tiles covered the house front made his house stand out from all other stone-

Figure 23: The main street at *Xia-yuan* Village

houses in the village. In front of the house was a big open space where *Yang* and his family usually worked. It was also for his guests, clients, and tourists to park their cars, or buses. Thanks to the well-paved road that went through the village and led to *Guizhou*'s famous resort *Huang Guo Shu* Falls (Yellow Fruit Tree Falls), tour buses, loaded with national and international tourists, would stop at *Yang*'s house to shop for

souvenirs or watch *Dixi* performance when it was occurring. As *Yang* told me, he had

business cooperation with tour-guides. Therefore, some buses stopped. On the other

hand, he also acted as a broker for other mask makers in his village. So whenever a bus

stopped, other mask makers would bring in their masks for sale. For these tourists,

glancing *Dixi* performance on the bus added authenticity to the commercial *Dixi* masks

they bought. However, for mask makers, commercial masks were clearly distinguished

from the masks made for the ritual purposes. The sacred mask would be always kept

sacred.

Figure 24: Mr. *Yang*, their son, and Mrs. *Yang*,
Working in the front of his house

Regardless of my nationality, which is Taiwan-born Chinese, I was, however,

regarded as a Western scholar by the Chinese *Guizhou* government. As such, the

related regulations and concerns applied. According to the regulations the Chinese

government sent me along with the official approval for my research proposal, I was

not supposed to lodge in any house in the village but check into one of the officially

approved hotels, where bath and shower were built in and water and heat was supplied.

After living in *Anshun* for a week or so, I began to realize why the government

imposed these regulations on me. Being under developed, most houses in the village

did not have shower at all. They used pitted toilets. It was very common that the whole

village lived on one well as their water supply. In addition, burglary and robbery were not uncommon and rapists tended to attack foreign females. To ensure my safety and health, the officials considered the hotel environment best for me. They really meant well, and I was glad that I also listened well.

As I stayed in a hotel about a fifteen-minute drive away from the mask maker's house in *Xia-yuan* Village, I had to commute to *Yang*'s house everyday. Very kindly, the chairperson of *Anshun*'s Cultural Bureau, Mr. *Shuai*, lent me his official chauffeur Mr. *Li*, but himself took a taxi to go to work when I occupied his chauffeur.

Participants of the Study

Figure 25: Mr. Yang at work

Mask maker, Mr. *Yang*, was my master who taught me *Dixi* mask making and many stories hidden behind Chinese masks. His front yard was his studio. His new house was his office, and the old one his storage. His living room was his business room, where he planned to establish his own mask gallery. As an apprenticeship, which was a process of enculturation, my study also involved his family, his relatives, his community, his clients, and even his competitors, other mask makers. When the mask maker had clients, I helped him. When there were no clients or others, I occupied him for my research. In any apprenticeship, where two worlds intertwined, a great deal of negotiation was required. Once I was invited to observe

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another *Dixi* ritual held in another village, a person from that village asked me if the masks their mask makers made were better than those made by Mr. *Yang*. I smiled.

Mrs. *Yang* was like many other local people who could speak only local dialect but very little Mandarin. Often she worked quietly close to me to make sure I did not hurt myself—using sorts of cutting and chopping tools to making masks was dangerous. She told me (translated by the mask maker): when she just started making masks, she was afraid of

Figure 26: Mrs. Yang

the parts that she had to use axe to scoop out the back of the woodblock. After trying it myself, I understood what she meant. From her, I learned what apprenticeship was like at the beginning.

Professor *Wang,* in Taiwan, was an important figure who made this fieldwork possible. His good reputation in the mask culture community paved my way to a hearty welcome by most of the local people. Prior to my flight to *Guizhou*, China[36], I visited him in person in order to better prepare myself for the fieldwork. Kindly, he shared his research experiences with me and gave me crucial advices as to how to attune myself to the local customs and certain intricate issues of which I should be aware. Since our

Figure 27: Mr. *Shen*

first contact, he has always been helpful and supportive.

The *Dixi* mask expert Mr. *Shen*, 沈福馨, helped to initiate my research application process and finally obtained the approval from the Chinese government. Mrs. *Shen*'s homemade dumplings were delicious. On the day I left *Guizhou*, she got up

at five o'clock in the morning to make dumplings for me. I was certainly spoiled. Mr.

Shuai, the chairperson of the local cultural bureau, was also an important researcher. He sometimes directed my attention to the subtle but important aspects that outsiders tended to overlook. Besides his generosity in assigning his chauffeur to me (p. 102), he also invited me to dinner with his family on the Chinese New Year

Figure 28: The chairperson of the Cultural Bureau of *Anshun*: Mr. *Shuai* (wearing sunglasses) working during the Chinese New Year

Eve. The dinner of the Chinese New Year Eve is similar to dinner of Christmas Eve when all family members are supposed to gather together to enjoy the family union. I had not had Chinese New Year dinner for many years, ever since I left my family to study in America. The dinner with *Shuai*'s family was my first Chinese New Year dinner in many years. My heartfelt appreciation was beyond description. Both Mr. *Shen* and Mr. *Shuai* had given me guidance and assistance that helped me complete my fieldwork.

Figure 29: Mr. *Li* (on the right)

Mr. *Li,* 李援朝, an official chauffeur, was an unexpected but important informant. Due to geographic difficulties, limited public transportation, and *Guizhou*'s political structure, the official chauffeur held a high social status.

Therefore, it was quite an honor to me to have Mr. Li drive me back and forth between *Anshun* downtown and Xia-yuan Village everyday. Having chauffeured many

researchers, Mr. *Li* was also knowledgeable about local aspects of arts and crafts. One time we went shopping, I got an extremely good deal because of his skills in bargaining. He also directed my attention to what might otherwise have been ignored. From him, I learned more general information about the life in *Anshun*.

The mask performance group of *Xia-yuan* Village, to which the mask maker belonged, taught me the meaning and significance of the *Dixi* mask performance. Working with them on mask performance recording, I realized the beauty of folk performance. At the time, February 1999, I conducted my research. Televisions started to appear in the household. Some senior mask performers began to worry about the loss of this performance tradition.

Figure 30: The *Dixi* performers in the *Blazing Battle Formation*

Significance of the Study

Why do *Anshun* people in China worship such ferocious gods? Why do they appreciate inhuman beauty? What stories do their menacing ritual masks tell? To find the answers, I engaged myself anthropologically at the beginning and approached my data psychologically thereafter. However, this research journey, with much fumbling and tumbling along the way, is more significant than the answers initially sought. It made me realize that the process of research can be as significant as the answers to the research questions; the unplanned can be as important as the planned; the scientific approach is a style, not intelligence itself, and one that gives no warranty. By presenting this research journey, I hope this study demonstrates that learning is a growing process, which is dynamic, rather than static; the reality of research is as *situated* as the one this study is investigating.

This study also serves as a cross-cultural communication to introduce Chinese *Anshun* people's way of making sense of the world through the mediation of artifacts, namely *Dixi* masks. As Chanda and Daniel (2000) point out, masks are always imbued with cultural meanings; they can serve as an educational tool to "re-Cognize" our understanding of works of art, on the one hand, and engage us in historical inquiry, on the other. This study proves that their suggestions are not only possible, but plausible. Through this research on *Dixi* masks, I come to a better understanding of Chinese art, Chinese literature, Chinese history, and even Chinese religion. Many stories that were never told before now are given some interpretations of mine. These interpretations are meant to share, rather than to dictate.

By unmasking mask makers, this study adds a hitherto-undocumented historical page of Chinese mask makers to Chinese history so that mask makers' contribution to the Chinese tradition over the centuries can be recognized. Furthermore, by taking a cognitive approach to mask maker's views and thoughts, this study presents the mentality of non-academic artists, who are sometimes referred to as *craftsmen*. Should the notion of *craftsmanship* be better understood hereby, this study serves its purpose.

Many good reasons contribute to the lack of historical records about Chinese mask makers. By explaining these reasons, this study demonstrates the complexity and interconnectivity of a culture. It suggests that building upon traditions, artistic creativity always has room for expression, which is rather derived from and nurtured by the society. Without a pronounced status, as the fused role of mask makers, artists play a significant role that facilitates the development of the culture. Art in the service of a culture lands itself in people's life. Then art education can be conceptualized as a fusion of art, education, and cultural life.

In the past, many practices and theories in art education were based upon the individual-centered and laboratory-environed psychology. Such a view devalues the setting and the process of learning and thinking. It also precludes the dynamic character of human cognition. Mental skills are separated from and emphasized over manual skills. Thinking and doing are treated as if each exists in its own right. Hence, meaning is considered static and prescriptable. Significance is viewed as a stationed *lighthouse*, which cannot be changed, otherwise people get lost in their research journey and fail to reach their *lighted* goal. Planning eventually rules over doing, and the student's

understanding is subject to teacher's lesson plan. This leads to the danger of a teacher-centered curriculum. The static, prescribed teaching goals rule over emerging possibilities emerged from learning process, while it also disables situated cognition that takes place in the process. Advocating consideration of situated cognition, this study proposes what Fenwick (2006) calls "poorer pedagogies," which is poor in control, but rich in hope and scaffolding.

This study takes an apprentice's perspective and presents a cognitive model of a situated learner in Chinese mask making, which provides for educators an alternative view to consider the nature of learning. However, as Lave (1998) has stated, it "is not itself an educational form, much less a pedagogical strategy or a teaching technique. It is an analytical viewpoint on learning, a way of understanding learning" (p. 40). The better we understand about the nature of learning, the more effective our teaching can be hoped for.

After all, the primary research questions did find their answers, but unexpectedly the answers were found outside the fieldwork, rather than in the field. This passage of knowing challenges the faith in the research tradition, questions research procedure, and calls for a reconsideration of the nature of research methodology. Therefore, this study receives a new light of significance after the fieldwork is done. Instead of focusing on the primary research questions, it also examines the process and the setting of the research, which reveals cognitive activities as well as the relation between cognition and culture. In so doing, "the interaction taking place in the situation," as Dewey puts it, can be better understood; the dynamic

nature of cognition can be perceived. Recognizing the dynamic nature of thinking and learning, as well as interconnected nature of perception, conception, and actions, can be beneficial for art teachers to recognize the mutual development of the disciplines of art, so that mind and body works together to enrich the study of art.

It is hoped that this study demonstrates that human cognition is not isolated but rather facilitated, and situated, by material and cultural tools. The concept of tools is not only applied to art media and art making tools but also to modern "intelligent tools," computers. With a better understanding of the nature of tools and human cognitive development facilitated by tools, education in general, and art education in particular, can perceive tools in an active light, so that students' tools acquisition can be dynamically achieved. With the advance of computational technology and the proliferation of "smart tools," namely, artificial intelligence, the analysis of hidden values embedded cognition in the design of tools is especially important if we are to use technology to enrich human existence.

Figure 31: Mr. *Yang* and his tools

CHAPTER 5

BLAZING BATTLE FORMATION:
A SAMPLE OF THE *DIXI* RITUAL PERFORMANCE

The Cultural Background

Figure 32: A snapshot of the BBF performance

The Blazing Battle Formation (BBF), or the Blazing Battle Array [烈焰陣], is but one episode of *Xia-yuan* Village's *Dixi* performance story. The complete set of performance scripts that depicts the whole story consists of a few books, and each book consists of several episodes. Each episode takes more than two hours to perform.

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Sometimes, a performance will end early, due to the weather or too small a number in the audience. At other times, the performance stretches because the audience seems to be interested in watching. The decision is made among the performers at the site. There are no rules in this regard. However, unlike the flexible manner of performance, *Dixi* as ritual is held only twice a year. One time is during the Chinese New Year, from the first auspicious day after the Day of the Chinese Lunar New Year to the Day of the Chinese Lantern Festival (January 15th of the Chinese lunar calendar). Sometimes, this can last until the end of lunar January. Another time is on the Chinese Ghost Festival (July 15th of the Chinese lunar calendar). Because the whole story is very, very long and the performance seasons are only limited to twice a year, it will take a few years to perform the whole story. However, *Dixi* performers are unlikely to perform ritual stories according to the order of the performance script, because few remember where the story ended half a year ago. Instead, performers usually gather together at the beginning of each performance season to decide where they would start for the season. Improvisation and imprecision are of the essence in their performing arts.

Also imprecise is the way they produce their performance script, which is usually hand-copied with ink and brush. Each performer transcribes and safeguards their own copy of the script. The script is as valuable as the sacred masks, because the abilities to chant and to recite *Dixi* stories are highly valued by the members of the *Dixi* community. To cultivate these abilities, the performance script is indispensable. *Shen* (1989) has noted that some people are willing to pay a high price to hire someone to transcribe the *Dixi* performance script. *Shen* (1989) also notes that *Jiou-xi* Village

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(situated in between the capital city *Guiyang* and *Anshun* City) has published printed copies of the *Dixi* performance script and sells them as leisure reading materials. However, I did not find any printed booklets of *Dixi* performance script in the *Anshun* area.

Another way to obtain a copy of the performance script is to have a mask maker create a set of *Dixi* masks for the village. When a village wants to establish their own *Dixi* ritual performance, the village will raise the public funds for it and invite a mask maker over to reside in the village to create a set of *Dixi* masks right in the village. The number of the set of masks varies. It depends on the funds and the repertoire where the new performance team chooses to start. The mask maker will be provided with food and lodging. While the mask maker stays at the village, the possible *Dixi* performers can borrow his performance script to transcribe it. As many mask makers are also mask performers, the patron village will also learn *Dixi* performance from the mask maker (*Gao,* 1985). This indicates that mask makers are not only mask makers but also mask performers and *Dixi* arts educators. In this respect, mask makers play an important role in the cultural transmission of these practices.

The mask maker Mr. *Yang* told me an interesting story that explains how his family got started with mask making, and thus his village *Xia-yuan* village began to have its own *Dixi* ritual performance. It happened in the *Ching* dynasty, when his ancestor, a scholarly official who was very fond of *Dixi*, went to *Wu-guan* Village to watch their *Dixi* performance. Unexpectedly, he was insulted by others for seeking something his own village did not have (or could not do). He was outraged. As soon as

he returned to *Xia-yuan* Village, he hired the blacksmith to make tools for him. From there, he started establishing *Xia-yuan* Village's *Dixi* ritual practice. Ever since then, *Xia-yuan* Village's *Dixi* continues playing year after year. Now *Xia-yuan Dixi* becomes an attraction to people from neighboring villages.

To the *Dixi* community, the ability to chant and to recite the performance story is a sign of intelligence and therefore highly valued. Chanting is a common activity for both men and women. When there is a gathering, for ritual purposes or for other events, people gather and chant. They take turns to chant one after another. They chant according to the specific occasion. In addition, they praise the gods and pray for others. They pay attention to what others are chanting and how well they chant. The women care about how well others chant as much as the men do. In an unstated manner, chanting is a form of literary competition.

Figure 33: Women chant for the Pillar of the Gods

When I first arrived at *Xia-yuan* Village, the mask maker Mr. *Yang* just finished his making of the Pillar of the Gods for a neighboring village. On an auspicious day, a truck carrying many representative women accompanied by two men arrived from the patron village. They came to receive their gods. This reception was a rite of passage, through which, the life of the pillar is transferred from the hand of the mask maker to the hands of the patron village. Women from *Xia-yuan* village, including Mrs. *Yang*, joined the patron village's female group in

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this ritual. They first walked into a circle with burning incense in hand. Circling around the pillar, they chanted and prayed. In their chant, as *Yang*'s brother told me later, they thanked the mask maker and praised his wonderful work. Also they praised the gods on the pillar, and prayed for both villages, their own family, and their friends. After women's chanting, the mask maker's father (a well-respected senior mask maker) killed a chicken and gave the pillar a drop of the chicken's blood to imbue the life in it. Thus, the pillar was consecrated.

Besides chanting, puzzles are also popular there. *Dixi* performance stories are one of the popular subject matters for constructing puzzles. Therefore, knowledgeable *Dixi* performers are highly respected. The *Dixi* performance team must be prepared for solving puzzles when they are invited by another village to perform the *Dixi* ritual for that village. In such a case, puzzles (usually three puzzles) will be set up at the entrance of the village to "welcome" the heaven-sent troop.

In one's own village, on the first auspicious day after the Day of Chinese New Year, the *Dixi* ritual season begins. It starts with the ceremony of "Opening the Chest." The chest is where all the masks are stored. In the chest, the masks are carefully placed into two groups in accord with the troop to whom they belong. Once the chest is closed, it remains closed until another ritual to open it for good reasons. To begin the *Dixi* ritual and thus initiate a good start of the year, the chest is carried out from either the temple of the village or the house of its guardian. The mask guardian is usually a senior member of the *Dixi* performance team. In the case of *Xia-yuan* Village, the mask guardian was Mr. *Yang*'s father. With burning incense, the village sends their sacred

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invitation heavenward. Thus, the gods descend down to the earth, and into the masks. The masks become alive. The chest can then be opened.

After the chest is opened, many things that humans receive from nature are to be thanked with prayers and burning incense. In the meantime, mask performers get themselves ready for their ritual performance. The things to be thanked include the temple (or the shrine) of the village, the well on which the whole village depends, the bridge that controls the traffic of the whole village, and other things that affect the operation of the village. All these things are nature's blessing, not human creations. Therefore, humans should be thankful.

Figure 34: Drum and Cymbal players

After proper respect is paid to the masks and nature and mask performers are all properly dressed and masked, at the edge of the performance site, a drum and a cymbal begin to announce: "*Dixi* is now playing." When the crowd becomes the audience embracing the performance ground, the *Dixi* ritual starts. The first scene is the "Descent of Four Generals," two generals from the Chinese imperial troop (good guys) and the other two from the rebelling troop (bad guys), depicted in the performance story. None of these four generals can be the leader of either troop. These four generals are loyal companions of their leaders. They arrive first to protect

their leader by consecrating the ground, cleaning the way, and chasing away all evil

spirits. They dance and chant, thereby chasing away the bad and ushering in the good.

Figure 35: Open the Gate of Wealth

On this auspicious day, the *Dixi* ritual gets started. Many families reinitiate

their new start by having the *Dixi* performance team "Open the Gate of Wealth" for

them. The performers will be notified beforehand and a moderate gratuity will be

presented afterwards. After the four generals finish their consecrating rite, the whole

team will go together to open the gate (the front door) of the inviting families to let the

Figure 36: Two boys lead the team
to open the Gate of Wealth

wealth in. These families hang a mask by their

front door to signal the *Dixi* performers. The

family needs to keep the door loosely shut for

the performers to open it. The godly team

arrives at the door. Slowly they open the gate

with the blessing chant. Gradually walking

through the gate and into the house, they chant

some more to praise their ancestors and pray

for the family. The most interesting part of this rite is the lead of the two angelical

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boys—a trace of the ancient *Nuo* ritual format with one hundred and twenty boys (p.

94), and yet a resemblance of two celestial children by the side of the heavenly

emperor. These two little boys (about ten years old) lead the *Dixi* performance team to bring wealth to the family. These two boys have their own chant, just like all adult performers, but they tend to act more passively as they are waiting for the cues sent from the senior

Figure 37: The Mask signal by the door (after opening the gate)

performers around them. Wearing the masks over their forehead on the top of their tiny

body, they do look like two celestial boys walking on the earth. It is a lovely sight to

behold.

After bringing wealth to all the families that request it, the *Dixi* performance

team returns to the performance ground. From here on, they begin performing the

gods' stories. This is the part precisely referred to as the "Dancing of the gods." The

ensuing section of this chapter, Blazing Battle Formation, is one exemplary episode of

this part of performance. This godly dance will be performed day after day until the

end of the ritual performance season, which is usually on the Day of the Chinese

Lantern Festival, but, according to *Shen* (1989), at other places, *Dixi* ritual season ends

on the last day of January of the Chinese lunar calendar.

At the end of the ritual season, performed by two senior performance members,

the Earth God and the Monk come out to "sweep the ground." As *Dixi* stories are all

about battle and fights, many heads are chopped off and many lives fall short. This

results in many dangling souls and beheaded ghosts. Before all the gods return to

heaven, the Earth God and the Monk come out to console and transcend these souls

and ghosts, thereby sweeping off all the bad things from the earth. Harmony can then

be restored back in the world of humans. The Earth God and the Monk thank all the

gods and pray for the village and for many good years to come.

Figure 38: The Earth God and the Monk "sweep the ground"
Mrs. *Yang* is worshipping the mask gods (See Figure 39).

To signal "the end" of all performances firecrackers go off—the cracking loud

noise is intended to scare away all evil spirits. A chick is sacrificed with its blood

spread over the performance ground to consecrate the battlefield. When firecrackers

finish their frightening work, the Earth God mask and the Monk mask have been taken

off and placed together with all other masks on the shrine to be worshipped.[37] Then all

performers prostrate themselves at the masks one after another. Observing this, many

children then mimic performers to prostrate at the masks. They might think it is just for

fun, but the impact of imitating cultural behaviors can go much deeper and further in

life than one can realize. It was this moment that I realized what it really means *the masks are the gods*. I was stunned.

The following translated performance script is an exemplary episode of a *Xia-yuan Dixi* performance story. It is intended to give a glimpse of what *Dixi* performance is like. It is not intended to represent the whole of the *Dixi* ritual performance. As my visit in *Xia-yuan* Village was for research purposes, I made my intention clear to *Xia-yuan Dixi* performers and let them know that I attempt to present their cultural practice to the world. In response, the performers were not merely willing to participate in my study but were rather enthusiastic about sharing their arts with people around the globe. Hence, they specially selected the episode *Blazing Battle Formation* for me to video-tape and for the world to watch. They did their best and wanted to share what they cherish most.[38] As television started appearing there, some senior performers began to worry about the loss of this tradition. I hope this study not only presents their arts and life but also eases their mind by facilitating the transmission of their tradition and sharing their worldview.

Figure 39: The Mask Gods: *Xia-yuan*'s treasure

The Background Story

The story of this episode is about the battle between the Chinese imperial army and a powerful crane goblin, who lays down the Blazing Battle Formation in order to barbecue Pearflower's husband *Xue Ding-shan* to death, because *Xue* killed his favorite disciple. Now, the goblin wanted to revenge. Chapter Four has provided some background information about the goblin. To avoid repetition, in the following, I shall limit the background story to the minimum.

It should be noted that the script I translated into English and presented in the following section is based on Mr. *Yang*'s father's hand-written performance script. It was a great honor that he lent his treasure to me for several days. However, the text I transcribed from his might appear differently in other performance scripts, but such differences should be expected in the folk literature. Nevertheless, the exemplary episode gives a glimpse of the *Dixi* ritual performance. To give a sense of the performance, chanting parts are presented in a poetical format. Non-chanting parts are noted with "[speaking]" at the beginning of each section, but what "speaking" means in *Dixi* is rhymed talking aloud. It is not ordinary talk.

Chinese researchers (*Gao*, 1985; *Shen*, 1989) remark that *Dixi* performance lyrics are all written in the third person's voice, but this conclusion might be an overly simple assertion because the Chinese language is not like English with its gender-, voice-, and tense-specific constructions. Chinese words are not voice-specific. For example, words in the first person's voice appear the same when they are in the third person's voice. Therefore, on many occasions, Chinese text can be interpreted in the

first person's voice or in the third person's voice. Without gender specification, often the reader cannot tell if the person is male or female, unless the content of the text reveals this information.

The title of this episode indicates the task in hand—the battle against blazing fire. This battle formation has already established its reputation in another much-older and better-known novel, *the Investiture of the Gods*, in which the army of the "bad gods" laid out ten deadly battle formations to defeat the Chinese imperial army assisted by the "good gods." According to *Xia-yuan* Village performers, the blazing battle formation is the ninth of these ten battle formations. The number of the formation indicates its deadly power. The bigger, the more deadly.[39]

This is a battle formation laid out by a goblin, who has transformed from a crane by means of his excellent Taoistic skills. He, or it, was mad at *Xue Ding-shan* because *Xue* killed his disciple. For the purpose of revenge, he laid out this blazing battle formation to challenge *Xue Ding-shan*. In the first contest, *Xue* and the goblin were engaged in a brutal weapon fight. Goblin attempted to kill *Xue* with his sword, but he his swordsmanship was very limited. So he tricked *Xue* to step into the Blazing Battle Formation so that he could terminate *Xue*'s life with fire. But, *Xue*, a disciple of a powerful god, was rather unharmed in the sea of fire because he was protected by a special piece of garment given by his master. *Xue*'s master had forseen what might happen to him and bade him always put that garment on, which he did. Although *Xue* was unharmed, he could not put up with the heat so he passed out in the sea of blaze. Not seeing *Xue* return, his father, the commander in chief, was very fretful. Seeing the

furious fire, no one knew what to do. At this moment, a senior member of *Xue*'s army, the major comedian of this novel, *Cheng Yiao-jin* volunteered to visit Pearflower and ask her for help.

Beautiful Pearflower, the rejected bride of *Xue Ding-shan*, was good at not only military strategies but also Taoistic skills. Owing to her ill fate seeded in heaven, she was rejected by her testy groom *Xue Ding-shan* on their wedding night. Being disappointed with what love brings to her, Pearflower resolved to become a nun living in nature to rid of her earthly desires. Like a wounded deer, she left her supposed new home and came to visit her master. As all Taoist masters are prescient of human fate, Pearflower's master told her what happened in heaven between Golden Boy and Jade Girl and that was the story between her fault-finding husband and herself. Her master advised her: "Be patient. Everything will be justified at the end." Before departure, her master gave her a magic coin, through which she could beseech help. Taking her master's advice and treasure, Pearflower thanked the master and turned to her mother. Still feeling hurt, she stayed with her mother.

As time went by, Pearflower gradually recovered from her wounded heart. Suddenly she heard someone was pounding hard at her door. She opened the door. There was the senior general *Cheng Yiao-jin* coming from her husband's army. Politely, she invited him in and exchanged a few words with him. Without much delay, *Cheng* told her about the formidable battle formation and how her husband became trapped in the sea of fire. However, Pearflower refused to get involved, but witty *Cheng* knew how to move her. She eventually conceded. Together with *Cheng,* she left

her mother and came to see her in-laws. *Xue*'s parents were happy to see her and apologized for what their son did to her. They suggested maybe by saving his life again (this was the fourth time), he could wake up from his insanity. Finally, Pearflower agreed to give him another chance.

In the army, there were two male generals and three female generals. Each one of them used a special weapon, which entailed a special power. According to their strength, Pearflower assigned them a suitable mission. The male General *Qin,* who wore a magical hat that enabled him to fly in the sky, was assigned to guard the sky in case the goblin would try to fly away. The male General *Doù* (*Doù Yi-hu*) could dive deep into the ground. So he was assigned to watch the paths in the earth. One of the three female generals, *Xue* (*Xue Jin-lian*), was *Xue*'s sister, Pearflower's sister-in-law. She was good at sword fight and assigned to guard at the earth level. So were assigned the other two female generals, General Fairy and General *Chen*, *Xue*'s first and second wives, respectively. Pearflower was *Xue*'s third wife. So, she honored Fairy and *Chen* by addressing them older sisters. They were older in seniority, not in age. One used a hammer and the other used a sword. Fairy was pretty, but *Chen* was ugly. Again, in *Dixi*, fair appearance gave no warranty to gain a better life.

From her father-in-law, Pearflower took over the Seal of the Commander, the emblem of authority. She came to the campground to prepare for encountering the goblin. With her tactics planned in mind, she began to summon the troop. To know what would happen, read on …

Figure 40: *Tun-bao* people (*Zhan* Village)

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Figure 41: Pearflower called the troop in.

Pearflower called the troop in.

       Her summon began with General *Qin*

"With the power that you have,

       I'm sure you'll be sound and safe,

Your Drilling-into-Heaven hat

       Is your way to the heavenly path.

Still a spell is placed on you

       To keep all harms away from you.

This is Five-thunder Charm.

       Let me write it in your palm.

It helps you guard the Heaven Pass.

       Still be careful nonetheless.

"Yes, Sir." he said and flew to the North

       With the hat, the spell, and his youth.

Then summoned was the General *Doù*.

The same charm's for you. Then you can go.

Take it with to guard the Nether Pass.

Still be careful nevertheless.

In case the Goblin shows his face,

Do this and that. Don't let him pass.

Doù says "Yes!" and dives down in a jiffy.

Powered by the charm, he's way too ready.

Pearflower continues her summon.

Ready are the troops of men and women.

She then summons her sister-in-law Fairy,

Tells her the tactic that she can deploy.

"Here is for you the Green-dragon Banner

Guard the East in such a devised manner.

I know you can guard the Eastern Pass.

Still be careful nevertheless."

Soon away was Fairy's squad.

More to go was Pearflower's plot.

Pearflower then summons the Lady *Xue*,

"Please listen to what you can do.

Here is for you the Red-phoenix Banner.

Guard the South in such a devised manner.

No problems for you to guard the Southern Pass.

Still be careful nevertheless."

Without delay *Xue* led away her squad,

Pearflower further fortifies every spot.

Pearflower then says "My sister, *Chen*,

Come and let me tell you about our plan

A sure thing for you to guard the Western Pass,

Still be careful nevertheless."

Here is for you the White-tiger Banner.

Guard the West in such a devised manner.

Away are *Chen* and her squad.

Still more to go is Pearflower's plot.

The last summoned is General *Luo*,

The summon has not much to go

"Here is for you the Snake-turtle Banner.

Guard the North in such a devised manner.

I know you can guard the Northern Pass,

Still be careful nevertheless."

Following the order, *Luo* and his soldiers

Fill up the North here and there.

Much is ready for the battle of flame.

Down off the platform, on the horse she went.

She holds up high the Apricot-yellow Banner

And leads the troop in a graceful manner.

Straight to the field, into the center,

They brave the blaze with no fear.

Watching over the killing flame

She agrees that it deserves its name.

[speaking]

"I think the blaze too furious to fight,

Now I remember my master prepared me with a coin.

Through the coin I can receive help, she said. Why don't I use it

To fight against the flame.

Here I cite the magical words

Dear gods, please listen to my prayer. The coin is one but passed on to many.

On my knees, I plead one to descend

Your earthly disciple relies on your blessing.

Descend quickly. Please do not tarry."

As the last word soars up to the heaven,

An auspicious cloud drifts down from the sky.

Standing atop is a solemn-looking sage.

A Taoist hat is worn on his head.

A *Da-er* sword is held in his hand.

A pair of sandals are fitted on his feet.

Upon seeing, all are on their knees.

 "Pay my respect. Your Grand Sage, may I be told of your name?"

The sage says:

I come from *Pong-lai* Mountain. *Xie Ying-deng* is my name.

Come here to help you to deform the blazing formation.

To the sage, Pearflower expressed,

  "For your descent, we are truly blessed.

Your Grand Sage, please quench the fire

  No flame in the field that is all I desire.

Not even a moment does the Sage tarry

  Reaching to his back for the special weaponry

The first he opens is the crystal gourd

  Outpoured bright light makes everyone appalled.

It becomes dragons of four flying in the air

  Waiving paws and claws, they want to devour.

The auspicious cloud ascends the Sage

  Up in the air, he checks the blazing stage

Suddenly down pours rain, shower, and mire.

       So it snuffs out all the furious fire.

Pearflower is glad and urges the troops in

       The gate is dripping. Still they charged in.

Unhappy to see this, Goblin accepts their dare

       Taking one step forward, he begins to swear

"Dare you. Curse you, the immature girl.

       How dare you quench my fire and all.

My sword awaits you to slash your face

       Pearflower parries and is unharmed with grace.

At the battle's gate, this dual fight pitches.

       The fight was so frightful that everyone flinches.

Watching over their fight,

       The Sage comes from the sky

He yells, "Freeze, You son of a fowl!

       Don't you dare to flee, or run, or growl.

Let my blade ends this life of yours

       Be sure the next one is at the right course

Goblin figures no good to stay!

       "Long live fowls knowing run away.

All of a sudden, his wings stretched out

       Toward the East he flies and tries to get out.

But crashed into the Green-dragon Banner

He's rather trapped by the spell-devised manner

Seeing him appear Fairy's anger arose

The steel knife of hers comes down for his nose

So Goblin hurries to parry

In fact, he is trying to scurry

"Oh, what a blight

In my way of flight."

Back and forth, to and fro,

They battle for some more.

Goblin just can't beat her.

He thus begins to quiver.

"I ain't fall for the fight.

Longevity's my delight."

Finally, he breaks free.

Westward he tries to flee,

But crashes into the White-tiger Banner,

Trapped still by the spell-devised manner.

Seeing him appear, *Chen*'s fury arose.

Flying hammer comes down to flatten his nose.

It scares Goblin so

In fear of this foe.

His sword meets her hammer.

He hates to vie this slammer.

"Another grumpy blight,

Harass me at this site."

Back and forth, to and fro,

They battle for some more.

Goblin calculates in mind

That fighting won't be wise

Again, he breaks free

Northward he tries to flee.

Crashed into the Turtle-snake Banner,

Trapped by the spell-devised manner,

Goblin tries to get himself free.

This and that way, what a dancing spree!

Seeing Goblin appear, *Luo*'s anger arose.

His Plum-flower spear is also fond of his nose.

Goblin is scared so.

He hates this grumpy foe.

But he has got to parry,

Raising his sword in a hurry.

For a few runs, to and fro,

Goblin wants fighting no more.

Up and down goblin's in frenzy.

       Hopping and jumping, he's like crazy.

Happy enough was he still alive

       All he could ask for was to survive

With a false swoop, he forges defeat.

       Toward the South, he wants a safe seat.

Rather, he crashed into the Red-phoenix Banner,

       Trapped by another spell-devised manner.

Right and left, hit and smash,

       Goblin is trapped like bones in flesh.

Seeing him untamed, *Xue* begins to berate

       "Damned fowl witch, accept your fate.

Forsake your feathered mortal

       To save your profaned sorrow.

Do it yourself to save my breath,

       Unless you want to be laid down in the earth.

Goblin's trembling inside.

       His soul is out of its hide.

Nothing on his mind carries

       He just blankly parries

With hands up he fights

       With head down he sighs

"Don't I look for troubles?

  Haven't I learned to be humble?

Now my peace is erased.

  Simple harmony is effaced.

Who else deserves this blame?

  Except myself and the flame.

Leave me alone, you killing race.

  I just want a safe place.

Think and think

  It's hard to think.

Out of wits;

  No more tricks."

Suddenly he grins for his scheme.

  He breaks free with a false swing.

The earth is truly handy

  Making his vanishing trick dandy.

But in the earth *Qin* appears

  Out of nowhere, like hell's bells.

Seeing the goblin *Qin* begins to yell

  "I've been waiting, you son of a fowl!"

Left hand lets off the Five-thunder Charm so loud

  Right hand swings his club in a merciless route

Frightened Goblin is totally freaked out

       The soulless fellow has nothing more to split out

Stretching his wings out,

       He's flying to the cloud

But *Qin* tailgates him tight,

       Catches him and asks more fight.

Qin's Wolf-teeth club is about to whack,

       But the Sage stops him from his back.

[speaking]

The sage speaks and walks into the scene.

He says "*Qin*, my little grand-nephew, do not be rude.

He is the South-pole Elderly's mount.

You'd better leave him unharmed."

At the Sage, *Qin* growls:

"You, an uncouth Taoist.

I've never seen you before.

How dare you down-rank me and put yourself above me!"

Raising his club, he's charging toward the Sage.

The Sage blocks the blow with his shining sword.

Timely appear Pearflower and three female generals. [*Dou*, *Xue*, and *Chen*]

She speaks aloud, "Tarry, General *Qin*, do not lose your manner.

This is a god from heaven,

The Sage, *Xie, Ying-deng*."

Then *Qin* explains:

"Oh, my dear Commander! He treated me unfairly.

Calling me his 'LITTLE GRAND-NEPHEW,' he's superimposing over me.

For this reason and all, I was thus to growl."

To *Qin*, the Sage explains:

"Your grandpa, *Qin*-qiong, and I

Have a pack of pledge.

As we are like brothers, and you are his grandson,

Shouldn't I call you my grand-nephew?

Qin then says,

"Now, it finally makes sense.

How can I know this in advance

That you're my grandpa's life-pledged friend

Here, I call you GRAND-UNCLE;

Sorry, that I've been rude.

Please pardon me, your grand-nephew.

Down on my knees, I'm sincere and true."

At the Sage, *Qin* gives a bow.

"Please, Grand-uncle, questions be allowed.

I'm wondering what this beast is?

Could you please reveal what it really is?

Holding *Qin* up, Sage kindly states,

"No problem, grand-nephew, Watch it mutate."

The Sage murmurs a few passage,

"Reveal yourself, you beastly savage."

Out of a sudden, Goblin falls with a roar

Now it's a crane perched on the floor.

Sage turns to Pearflower,

"Listen up, you pretty flower.

Your husband is besieged there

But the dragons have put off the fire.

Hurry in the field to save your lord.

I'll take this beast to see its lord."

Then the Sage mounts on the Crane.

To the heaven, they ride on misty purple rain.

Into the sky, the troop says good-bye.

They pray to the gods please soon stop by.

Thanks are said. All cheer in elation.

They march in the Blazing Battle Formation.

Figure 42: March in the
Blazing Battle Formation

梨花當時傳下令

開言叫聲秦將軍

你有鑽天帽一頂

伸手過來書符靈

書上五雷符一道

把守天門要小心

秦漢領令辭別去

梨花又叫寶將軍

賜你五雷符一道

下管地府要小心

倘若妖仙來到此

如此如此莫放行

一虎領令辭別去

梨花發令又點兵

便叫仙童寶姐姐

你可前來聽令行

與你青龍旗一面
帶兵把守東陣門
仙童領令帶兵去
梨花臺上又點兵
便叫姑娘薛小姐
你今前來聽令行
與你朱雀旗一首
把守南方要小心
金蓮領令帶兵去
又點金定姓陳人
與你白虎旗一面
把守西方要小心
金定得令帶兵去
梨花又叫羅將軍
賜你玄武旗一面
把守北方要小心
羅章領令帶兵去
北門排定馬和人

梨花傳令多停當

下臺帶兵上馬行

手執杏黄旗一首

殺進中軍陣圖門

觀見陣中通紅了

烈焰騰騰怕殺人

〔說〕

梨花觀見陣中烈火厲害，

想起師父賜我金錢，

何不禱告請得仙人到此，

好進陣中。

口中念動真言，

金錢一個諸仙傳，

叩請仙家降臨凡，

弟子千求千感應，

速速臨凡莫遲延，

梨花祝禱罷，

只見一朵祥雲冉冉,

雲端來了一位大仙,

頭戴飄飄一字道巾,

手執大娥寶劍,

腳穿麻鞋,

梨花一見,

連忙下禮,

口稱大仙何名?

真人曰:

吾乃蓬萊山謝應登是也,

前來助你破陣。

〖唱〗

梨花當時將言說

承蒙大仙下凡塵

請入陣中滅烈火

奴家好進陣圖門

大仙當時忙不住

背上取下寶和珍

揭開水晶葫蘆蓋

飛出祥光好驚人

變成四條蛟龍樣

張牙舞爪要進陣

真人足下祥雲起

騰在雲端看火焚

等時傾刻噴青雨

消滅烈火影無形

梨花催動能行馬

殺進烈焰陣圖門

妖仙一見破了法

提前跳下將臺門

大罵丫頭好大膽

破我法術了不成

舉起寶劍當頭打

梨花刀架不沾身

二人陣前來大戰

殺得天昏地不明

看看戰上數十合

雲端墜下謝應登

大叫孽畜不要走

吃吾一劍早超生

妖仙一見事不好

且做逃災躲難人

現出雙翅只一閃

飛向東方去逃生

撞着青龍旗罩住

靈符罩住不能行

仙童一見心大怒

舉起鋼刀劈面門

妖仙急忙把劍架

二人東方大戰爭

看看戰上數十合

殺得道人膽顫驚

無心戀戰想逃走

飛向西方去逃生

卻被白虎旗罩住

金定一見怒生嗔

便把飛錘來舉起

嚇得妖仙戰兢兢

連忙把劍來架住

二人西方大戰爭

將才戰上數十合

道人心中自思綸

料想難得殺出去

飛向北方去逃生

又被玄武旗罩住

左舞右飛難脫身

羅章一見心大怒

梅花槍起不容情

嚇得妖仙慌張了

無奈只得把劍迎

未曾戰上數十合

腳慌手亂難擋迎

招架之功還勉强

回手之力無半分

虛晃一劍往下敗

飛向南方去逃生

又被朱雀旗罩住

左沖右撞難脱身

金蓮一見高聲罵

大罵無知野道人

好好皈依來受死

免得姑娘費精神

道人嚇得魂不在

心忙意亂把劍迎

手中招架心内想

悔闕走入是非門

毀得清閑不會在

自己招災惹禍根

四方八面都圍住

叫我逃往那邊存

妖仙心亂無主意

忽然一計心了心

虛砍一劍往下敗

借起土遁去逃生

一虎一見大喝道

等候多時那里行

左手一放五雷響

右手舉棍不容情

道人嚇得魂不在

飛向天空去逃生

秦漢一見心大怒

舉起棍棒不容情

嚇得道人魂不在

跌下雲端滾在塵

秦漢跟着落在地

一把抓住野道人

舉起狼牙棒要打

後面來了一真人

〚說〛

真人走來大叫,

秦漢小侄孫,

休得無禮!

他是南極老人的坐騎,

不可傷他的性命。

秦漢大喝道:

你這野道,

我與你一面不相交,

你倒會吃我的相因,

舉起狼牙棒,

劈面打來,

真人把劍架住,

梨花一同三員女將趕來

大叫秦將軍,

休得無禮,

此乃天上大仙

謝應登是也。

秦漢道:

元帥呀！他討我的便宜

叫我做小侄孫,

故此惱起怒來。

真人道:

你祖秦瓊,

與我生死八拜之交,

不叫你小侄孫,

叫做甚麼?

秦漢道:

原來如此,

這我那里曉得,

是我先祖的盟友,

口稱盟祖,

小孫冒犯仙顏,

望乞恕罪,

連忙倒身下拜。

〖唱〗

秦漢跪下忙叩首

盟祖在上聽原因

不知妖道何物變

使他現形看假真

大仙扯起無難事

你們前來看分明

口中念動真言咒

孽畜還不現原形

妖仙無奈湊地滾

變支仙鶴大飛禽

真人當時開言道

叫聲梨花你且聽

你夫困在陣中里

吾也受去四海老龍神

快進陣中救夫主

吾帶它去還主人

說罷上了仙鶴背

足生紫霧上天庭

眾將望空來拜謝

异日有請降來臨

拜謝已畢上了馬

殺進烈焰陣圖門

Figure 43: Open the Gate of Wealth at *Xia-yuan* Village

Here are the gods. Here are our people.

    Here are we at the gate of wealth.

The gate of wealth was the tree named *Suo-luo*.

    Only in *Ching-lin* forest can it grow.[40]

It won't grow in a flat banal place.

    On *Kun-lun* Mountain it grows with grace.[41]

Chang is afraid to stare at it.

    Li wouldn't dare to walk near it.

But *Lu Ban* Master has no fear.

    Carrying his axe, he walks near.

With two strokes or maybe three,

    Easily, he chops down the *Suo-luo* tree.

First he makes it into boards.

    Then he makes it into doors.

Doors are two. The two makes a gate.[42]

Fortune doubles; wealth propagates.

Gold comes in one door.

Silver comes in the other.

General *Qin* left-side guards.

General Tiger right-side guards. [43]

With power and strength,

They safeguard your wealth.

Should evil come near,

Their swords will not spare.

My left hand opens one door

With a pose of golden rooster.[44]

My right hand pushes the other

With a pose of phoenix gesture.[45]

My two hands push two doors

Roll in all the gold and silver.

My left foot steps in the door

Bring you boys that are adorable

My right foot follows into the door

Bring you girls that are admirable

Here I've opened your Gate of Wealth

Forever coming are fortune and health.

Figure 44: The gate of wealth is now opened.

[Step in through the Gate]

One table has legs of four.

Atop the table are jewels and pearls.

The Gate of Wealth has already opened.

Much more will come to your offspring.

One table has corners of four.

Jewels and pearls amounts on the table's center.

The Gate of Wealth is now open.

Fortune is yours for many generations.

[Young boys chant]

Children grow taller and taller.

Fortune doors open wider and wider.

Children study more and more.

High ranks come nearer and nearer.

Children grow year after year.

Future becomes brighter and brighter.

Children study harder and harder.

Great scholars they'll be. They'll be.

[The Leader chant]

Candles in pair bright this house.

They dance. You thrive, as the wind blows.

May your grown-ups be high-ranking officials.

May your youngsters be promising officers.

Upon our blessing does fortune arrive.

We've done our duty and return with pride.

[Young boys chant]

We said our words and bid adieu.

Your wishes come true in hundreds of ways.

Your wishes come true in thousands of ways.

We two little boys take the lead

My Lord and generals, please follow me.

Figure 45: Opening the gate of wealth for a newly built temple at *Zhan* Village.

開財門 [Open the Gate of Wealth]

本方神，本方人

就在本方開財門

財門本是梭羅樹

生在深山老慶林

平原大地它不長

昆侖山上長成林

張郎過路不敢看

李郎過路不敢行

只有魯班師傅神通大

手提板斧上山林

三斧兩斧砍倒地

改成板子造成門

造成招財門兩扇

一扇金來一扇銀

左邊站立秦叔寶

右邊站立虎將軍

二位將軍來把守

把守財門要小心

若有壞人來到此

三劍兩鞭打上山

左手把門金鷄架

右手推門鳳凰身

兩手推開門兩扇

斗大黃金滾進門

左腳進門生貴子

右腳進門生貴人

自從今日開過後

恭喜主人萬萬春

〖入門〗

一張桌子四只角

珍珠瑪瑙擺上桌

自從今日參過後

子孫發達中登科

一張桌子四個方

珍珠瑪瑙擺中央

自從今日參過後

子子孫孫保安康

〖小童〗

童子年年長

龍門日日開

家有讀書子

高官自然來

童子年年長

龍門日日升

家有讀書子

高官自然成

〖元帥〗

堂上一對燭

風吹花祿祿

大的做高官

小的做都督

說罷堂前見吉祥

回宮轉殿氣昂昂

〖小童〗

說罷堂前去

百般也順利

萬般也順利

二位小童帶路走

後面元帥隨後跟

The Performance Script and Mask Making

The script tells performers what to perform. Meanwhile, it tells mask makers what to make. Mask makers make not only masks but also props that enable the gods to demonstrate their power on earth. Among all sorts of props, the weapon and the mount that each god utilizes hold special importance. Weapons entail military skills that *Tunbao* people greatly value (refer to p. 100). Mounts are the animals that the gods use as their personal transportation on the earth. This reflects the importance of transportability in such a geographically difficult area as *Anshun*. Therefore, the facility of one's transportation adds to one's power. On the other hand, animals are seen almost equally to humans in *Dixi*. The mount also holds a special power, which is contributed to its master. Hence, knowing wood and tools is not enough for mask makers. They also need to be fairly familiar with the performance script so that they can correctly produce the props and other facilities to make performance possible and yet economical.

For example, to represent the wild fire of the Blazing Battle Formation, a big red flag was used to indicate waves of blaze by waiving it over the performance ground. Another example is that when the goblin was defeated and the Sage transformed him into its animal form as a crane, an eagle kite was worn on the performer's back to indicate the goblin's different form of being, instead of changing the mask. It requires good cooperation between performers and the mask makers to make mask performance possible. Knowing how to make masks is not sufficient enough to be a qualified mask maker.

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Furthermore, the script has indicated what colors that mask makers should use when making props. For example, the apricot banner that Pearflower holds should be yellow and the *Snake-turtle* banner should be black. The four directions encompass the center have their correspondent colors that were defined in Chinese ancient Taoist text, *I-Ching*, The Book of Changes. The east is associated with green, the west white, the south red, the north black, and the center of the universe (China) is yellow. Correct use of colors indicates to be in harmony with the force of the universe. This is common knowledge known to many Chinese folks. The mask makers who conduct divine representation should also be familiar with such hidden pre-requisitions.

Although the performance script provides prescriptions for performance and mask making, however, mask makers are responsible for interpreting the grand narrative and help mask performers to translation the script into their practical uses so that the ritual performance pleases not only the gods but also the performers and the audience.

Through the script of "Open the Gate of Wealth," I came to realize why most Chinese houses a have two-sided front door while other doors are one-pieced doors, and how carpenter's knowledge was highly valued in the mask community. On one occasion, when opening the gate of wealth, mask performers were first required to resolve three puzzles, one of which was to estimate how much wood is needed to make up the door they were about to open. The value of carpentry expertise might have been forgotten by the world that is full of plastic and steels.

CHAPTER 6

THE MAKING OF THE *DIXI* MASK

Figure 46: Mask-making tools and a mask in progress

Anshun People's Passion for *Dixi* Masks

The vernacular term for the Dixi mask is "face," *lian-zi*. *Dixi* masks are not props for performers. Rather, they are created, treated, and worshipped as the gods themselves. They are considered to be the communal properties of the village. The more one village owns, the more prosperous the village is. As a sign of wealth and health of the village, *Dixi* masks are well protected. They are stored in the chest, which is guarded by someone trusted by the whole village. Only those who earned great respect from others will possibly become mask guardians. At the *Xia-yuan* Village, it was Mr. *Yang*'s father, a knowledgeable mask performer and mask maker who had been mask guardian for years. Mr. *Yang* told me the story about how his father risked his life for two of his favorite masks during the Chinese Cultural Revolution.

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"It was very dangerous to keep any ritual objects during the Chinese Cultural Revolution, because masks are ritual objects. Anything related to religion was considered as not only being superstitious but also supporting the bourgeois class. Arty-crafty objects were regarded as luxury, signs of corruption that impeded the progress of the nation. Whoever violating was to be beheaded. Soldiers went from door to door to search and identify luxurious items. They destroyed those items or burned them into ashes. However, my father loved *Dixi* masks deeply. He gambled his own life to save theirs. By hiding some of his favorite masks under his own clothes in the dresser but turned in other masks, he was able to save some masks while many other masks were burnt into ashes. Nowadays, the ban has been lifted. Those surviving masks are invaluable." Mr. *Yang* also showed me two wooden doors that were delicately carved with beautiful Chinese traditional patterns. They also escaped from being ashes because they were entirely covered up with mud. So the searching soldiers did not see and burn them. These stories revealed not only his father's passion for masks but also a strong tradition of craftsmanship in *Yang*'s family.

Shen (1989) also described other cases that *Anshun* people were willing to risk their own lives for saving masks during the Chinese Cultural Revolution. Some villages hid their masks in caves and in tree holes. There was a village that stole back their masks from the confiscating army before soldiers had the chance of destroying them. Some groups robbed back their masks from the soldiers. One mask maker literarily refused to turn in his favorite mask and was jailed for a year. These stories reveal how much *Anshun* people are passionate about their *Dixi* masks.

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Although the Chinese Cultural Revolution was ended in 1978 and the ban had been lifted, fear did not cease with the political movement. When I visited *Anshun* in 1999 I still observed some families would rather close all the curtains in the house to keep from being seen when they burned incense to worship ancestors in the New Year family ritual. They told me it would be safer to do it this way—who knows which direction the wind will blow tomorrow. I realize that it certainly takes a much longer time to recover psychological damage than to reconstruct the physical system.

When I visited *Shen*, before Mr. *Shuai* picked me up from *Guiyang* and escorted me to *Anshun*, *Shen* told me that when he published his *Dixi* research for the first time in 1984, he made it very clear that his discussion about *Dixi* was in terms of "a form of art," no more no less—an indication that it had nothing to do with religion. Even so, deep in his heart, he was afraid that certain officers might categorize the topic as ritual, rather than art. Although one-decade-long the Chinese Cultural Revolution ended in 1978, yet its negative impact lived on in 1999.

Figure 47: Three generations of
Dixi performers (*Zhan* Village)

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Figure 48: Some performers wear flags and feathers, and others do not.

In general, *Dixi* masks are divided into two parts: the headgear and the face.

Those masks representing military generals, of both good and bad celestial armies,

have additional two ear wings attached to either side of the mask's face. Tied to each

ear wing is a long feather (See Figure 47). These feathers

enhance the performer's movements. When performers dance

on the ground, these feathers dance in the wind. It was a

beautiful sight to see. Ear wings symbolized the significance

of a character. Most minor and clown characters did not have

ear wings. Neither did they have long feathers on the ear wing.

Nor did they carry flags on the back.

Figure 49: A *Dixi* mask without ear wings

In terms of the color scheme, the army of "good gods" is usually dressed in

white, and the army of the bad in blue. Although this principle is not strictly followed

due to the cost of the robe, but the major young general of the Chinese imperial army is always dressed in white, and often has a symbol of a tiger on the mask. This symbolic tradition is well-established in the famous novel, *The Romance of the Three Kingdoms*, in which the most undefeatable and handsome young general was *Lu Bu* who is as strong as a tiger and who dresses in white. Many novels written thereafter build on this tradition. Therefore, symbolism is consistent among them. The tiger and the white dress become the symbols for the young, handsome male general.

Figure 50: The tiger symbol and the white dress
(The image is processed from *Shen*, 1994b)

General Steps of *Dixi* Mask Making

1. *Prepare the raw material*

The most commonly used material for *Dixi* mask making is poplar wood (*bai yang*). Although clove wood (*ding xiang*) is also used for making masks and some prefer it to poplar wood because of its better resistance (*Shen*, 1984), clove wood is more demanding both in money and energy. By contract, soft poplar is much easier to work with. It is a big saving in both money and strength. "Poplar is not good for anything except mask making. As mask making tends to be finished in a short period of time, the woodwork has already been properly handled before the poplar wood dries out and split," said Mr. *Yang*. Thus, the useless poplar finds its sacred value in mask

making. Put it in another way, due to the splitting tendency of poplar wood, mask making is an intensive work that must be finished in a short period of time.

The poplar wood *Yang* used was prepared and delivered by the lumber factory. It came in as wooden poles of about two-meter long, but in three different diameters. These three diameter sizes corresponded to the three sizes of masks that were frequently made. He regularly ordered poplar poles in balk and stored them in his old, empty house, which was not far away from his new house. In the new house, he worked with his wife and nineteen-year-old son cooperatively in mass production. His fifteen-year-old daughter attending a boarding school had not had enough exposure to mask making. His wife and son, as *Yang* described, both were able to make generic masks, which were of a few fixed formats and made mainly for tourists. *Yang* commented that "it is more efficient to work together and cooperatively. For example, I carve out masks' features. Then my wife sands them down and my son applies color foundations." Thus, before poplar wood dries out and split, they altogether had secured the mask from splitting.

Most of the time, *Yang*'s son made small and medium sized masks that were very popular among tourists because of their portability. This popularity created a demand for a massive production. Consequently, it became their regular production. To encourage his son to be independent, as he told me, *Yang* sometimes purposefully let his son work through the complete process by himself. On the other hand, I observed that *Yang* quietly prepared woodblocks for his son to get an easy start—the mentor turns himself into his apprentice's assistant.

To do the preparation for making masks, *Yang* first fetched a few wood poles from the old house to the new house. He then put them on a wooden stand, called "wooden horse" (See Figure 50), and sawed them into appropriate little sections. His ruler had a few special

Figure 51: A wooden horse

marks to indicate a number of measurements he often needed. These marks had made this part of work fairly easy. They also marked the tradition of Dixi mask making. For making medium sized masks, each pole was sawed into six sections. Each section was further divided into two equal half-circular halves. Either half, put on a wood stand for carving, is a woodblock for a mask to be made (See Figure 2).

2. Draw Guidelines

After fastening the poplar woodblock to the carving stand, three marks were made for drawing three guidelines across the block. First, the "nose line" was drawn straight through the center of the woodblock. It was the reference line for checking the visual balance between what was carved on the left and what was carved on the right. Along this vertical nose line, the mask maker moved left and right and to and fro. When one piece was chipped away on the left, a piece on the right was immediately followed and chipped away, and vice versa. In a sense, *Dixi* mask making demanded a balance not only in mask's feature but also in mask-maker's movement.

Next, the middle line was drawn. Intersecting the "nose line," this horizontal line stretched over the middle of the woodblock and divided the block into the top half

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for the headgear and the bottom half for the face. This middle line stood for the bottom of the headgear and the top of the rim that surrounded the face.

Then, at the middle of the bottom half, which was a quarter from the bottom of the block, the "eye-level line" was drawn. This horizontal line segment was about six millimeters in length. It equally divided the face into the upper and the lower parts. It stood for the eye level and its two ends for the two pupil positions. Against the central "nose line," the pupil positions were judge. Against the "nose line," the carving on the left and on the right was constantly checked.

Generally speaking, the woodblock is divided into two equal halves: a half for the face and the other half for the headgear. However, at the bottom edge of the headgear, there was a rim of a small width that surrounded the face. To give room to this rim, the middle line was drawn slightly above the center point. This made the half of the face slightly bigger than the actual half of the woodblock. To make the top of the headgear pointed, a big portion of the wood on the top would be chipped away. Thus, the headgear looked shorter than it actually was. This tradition of mask proportions has shaped audience's expectations, which mask makers follow faithfully. Although the currently made ritual performance masks are a little larger than those of the last generation in the *Ming* Dynasty (1368-1644 A.D.), the proportions of the mask had hardly changed.

Each mask depicted a divine character, even though it was a "bad god" in the performance story. The bad were destined to carry out their divine missions to

counteract with the good. Therefore, they should not be disrespected. A fine balance and equally proportioned features embody divinity.

3. *Choose a character*

To choose a character was to call for a mental image as guidance to turn the blank surface into a mask god that has life and personalities. This was the most interesting step that distinguishes an expert from a novice. For example, *Yang* specially made that mask, *Yang Zen* (See Figure 51) upon his client's request. *Yang Zen* was the character depicted in the novel *The Investiture of the Gods*, in which *Yang Zen* was first de-pupiled and then cruelly prosecuted by the wayward emperor for his righteous advice that the emperor did not want to hear. After his death, a heavenly sage gave his life back and restored his vision by placing two eyes on the two little hands growing out of his eye sockets. When the mask maker told me about *Yang Zen*'s story to explain the symbols used on that mask, he noted that because he

Figure 52: *Yang Zen, Shuai*'s collection

read a lot of novels when he was a teenager and that helped him to be able to make masks upon special requests. These mental images were what I was lacking of when I tried to make a mask for the first time (p. 3). Indeed, my mind was blank; it was literarily blank and culturally barren. In my mind, there were no characters from which I could choose for mask making.

A mask was carved out of an intact wood block. There was nothing else but three lines drawn on the block to guide the maker. Lines were drawn to ensure

conformity to tradition, but they did not provide a concrete visual form for carving. It was the mental image called upon in the maker's mind that provided a foundation for abstract reasoning while negotiating with the tools and the wood that tends to split. It was at this moment that I realized how meaningful the *unobservable* could be.

After returning from the fieldwork, I read many Chinese classical novels of this genre. I then realized that these novels were somehow related one another. One built upon the other; their character depictions developed from what had been established by other novels. This related character depiction might be called "copyright impingement" according to Disney's measurement. However, this cross-referencing style was rather the literary tradition of this type of Chinese novels. By referencing the descriptions established in other novels, the complicated characters could be economically depicted but densely encoded. Thus, the performance story was somewhat a summary of Chinese classical novels.

I made observations of the-master-to-be, *Yang*, Jr. for about a week. He made a great number of masks, which looked somewhat alike. Among his works, some were carved with slight differences, while others were colored differently. They were basically of the same type of feature, which was a ferocious type of masks that tourists bought most often. Making the masks for tourists was what *Yang* called, the "basic carving." He commented that it usually took two years to develop the skill of basic carving. Apparently, my one-month long apprenticeship in mask making was naively too short and too ambitious.

4. Carve out rough features

Figure 53:
Roughly carved

Locally, people in *Anshun* categorized mask-making styles into two schools: the Eastern school and the Western school, demarcated by *Anshun* downtown. Masks of the Eastern school had a square chin and a wide nose, whereas the masks of the Western school had a sharper face (egg-shaped chin) with delicate facial features. *Yang*, as well as other mask makers at *Xia-yuan* Village, belonged to the Western school, so his masks had an egg-shaped face with delicate features.

At this step, *Yang* used a big knife hammered into the woodblock to materialize the basic rough features of the face and headgear. Then he flipped over the woodblock and put it over a sack to hollow the back of the woodblock with an axe. Thus, the chunky woodblock turned into a curved semi-

Figure 54: Hollowing the
back of the woodblock

circular plane. As poplar wood tended to split, if the rough cut went too fast and too rough, a big chunk of the wood would came off. So, even though it was rough carving, it still demanded good control over every action. "At this step, it usually took me an hour to finish, but three hours for my wife to finish the carving," said Mr. *Yang*.

5. Refine features

After rough carving, big knives were replaced by small knives. To refine the feature of a mask was to carve out their personality. *Yang* cited a few phrases that most

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Figure 55: Finely carved

mask makers knew by heart. For example, "the eyebrows of a young male general look like swords. The eyebrows of a rebelling general look like flame. The eyebrows of a female general curve like threads." While male general masks were decorated with dragon symbols, which were locally called "grass-hopper dragons," female general masks were decorated with phoenixes. Not only in *Dixi* mask making but also in many other uses of Chinese symbols, the dragon refers to the male, and the phoenix refers to the female. This symbol use is often applied to wedding presents. A dragon and a phoenix together make a perfect couple.

The shape of the mouth also indicated personality. For good gods, their masks had a smiling mouth, with two tiny holes at either corner of the mouth. For bad gods, their masks had a pair of fangs, or a pair of tusks, or both. The way of arranging fangs and tusks indicated the degree of ferocity. "The heaven covers the earth," which meant the top fangs covered the bottom lip, was more ferocious than "the earth covers the heaven," which meant the bottom tusks covered the top lip. It was my observation that "the heaven covers the earth" was applied to the rebels or goblins, whereas "the earth covers the heaven" was applied to those good gods with dramatic personalities.

Figure 56: The mask is worn over the forehead

The shape of the mouth and nose had a lot to do with the performance style. Some performance teams had their masks worn over the forehead very high so that the

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mask would not cover their mouths so as to stifle their voices. Differently, *Xia-yuan* performers had their mask worn over the forehead low. The mask covered the top half of their faces. So when they performed, they peeked through the mouth and nostrils. Therefore, *Xia-yuan*'s *Dixi* masks tended to have a bigger mouth and bigger nostrils to facilitate their performance.

6. Sand it down and Polish

To sand down the mask was to further refine features as well as to polish the surface with the sandpaper. After polishing, fine details of dragon or phoenix, such as scales, would be carved out with care. Because the timber of poplar wood was soft and tended to split, carving the details had to go along with the grain of the wood, otherwise it would not retain the details and would break off.

7. Apply color foundations

Figure 57: Yang's son is applying color foundations

There were two types of color pigment available in *Anshun*: oil-based and water-based pigments. Oil-based pigments were more saturated than the water-based, but they took a long time to dry up and they were expensive. Using modern pigments not only saved money but also saved time because these pigments dried up faster and low in price. In thirty minutes, the paint was already dry enough for the next step.

The basic color scheme for *Dixi* mask making was consistent with the color scheme used in the Chinese Opera, unless when the character was otherwise defined by the performance script. However, its literary tradition had already established the specification of the character's colors and features. Even though the performance script did not specify the color and features of the character, most mask makers would refer to other stories to find similar characters as reference. In other words, the plethora of Chinese classic literature was their resource for visual interpretations.

8. *Carve ear wings*

The ear wings signifies the majesty of the character. Therefore, masks of clowns or minor character do not have ear wings. For making ear wings, *Yang* ordered poplar wooden planes in advance. These planes were about two inches wide and a quarter inch thick. The length of the ear wings was three quarters of the mask's length. The two ear wings were leveled into L-shape and later stringed together with the main body of the mask (at the next step). To ensure a good balance, the two ear wings had to be carved together as the mirror image to each other. Often each ear wing had a long feather fastened to it. To better secure the feather, the end of the ear wing tended to be long and straight, unlike the ones shown in the following figure.

Figure 58: Ear wings

After carving, ear wings were polished with sand paper. Then, the details of phoenix and dragon were carved out. This part required

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extra care because thin poplar planes dried out much faster than woodblocks. The timber became even more brittle. Extra care was required.

In terms of symbolism, for male generals, there would be dragons carved on the ear wing. As for female generals, there would be phoenixes carved on the ear wing. Sometimes, dragons and phoenixes both appeared on one ear wing, regardless the ear wing belonged to a male or a female general. Around the dragon or the phoenix, clouds were always decorated here and there to indicate their auspiciousness. Because clouds bring in rain, and with rain the crops prosper, clouds indicated prosperity.

9. *Drill holes*

The ear wings were tied to the either side of the mask with two pieces of hemp rope. To tie ear wings to the main body of the mask, eight holes were to be drilled. After carving, ear wings were placed against the main body of the mask along the either side of the mask's face, which had been indented while carving rough features (See Step 4). Then, eight marks for holes were made and eight holes were drilled thereafter. Two holes were drilled on each wing and two hole on either side of the main body. In total, eight holes were drilled for two pieces of hemp rope to string them together.

Holes were extremely important for mask performers. Little holes at various places on the face of the mask allowed the performer to see where they were under the thin black veil that covered their face while performing. As a mask performer himself, *Yang* described how difficult it was to see through the tiny holes on the mask to gain a

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sense of bearing while conducting those acrobatic actions. "When I just started

performing *Dixi*, under the black thin veil to see through the tiny holes on the mask

made me really dizzy. It took some time and practices to finally get used to it."

10. Embellish with colored drawings

Mask making took more than
carpentry and knowing stories and
literature. In *Yang*'s case, it also included
Chinese embroidering skills. *Yang*
proudly emphasized that his wife was
very good at embroidering. Usually, he

Figure 59: Mrs. Yang draws details

let her embellish masks after his son applied color foundations (Step 7). Mrs. *Yang* was

familiar with Chinese traditional symbolic patterns. She could easily draw auspicious

patterns with the paint and brushes. In other words, some symbols were carved out and

some symbols were drawn. The *Dixi* mask was also the collection of Chinese symbols.

11. Garnish with Paulownia Oil [tong oil]

Paulownia oil was used to lacquer masks. It not only made the mask look

shining on the surface but also protected the painting to be damaged and the wood from

splitting. Paulownia oil was an inexpensive, transparent paint that commonly used by

most carpenters in *Anshun* to garnish and protect their woodwork.

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Small mirror pieces, in place of pearls, symbolize fortune and prosperity. Pearls are dragon's favorite toys. A frolicking dragon or dragons playing with a pearl[46] symbolizes peace and prosperity. Only in the peaceful year do dragons play. So do phoenixes. However, pearls are precious jewels. To lower the costs, mirrors pieces were used but the meaning was imbued.

Yang commented that glass stores always had broken mirrors, which were ready to be thrown away. Those stores were glad to give away their unwanted broken pieces. Each

Figure 60: *Yu Hua,* the Seven-headed General. *Shuai*'s personal collections.

mask needed very small amount of mirror pieces. Most mask makers could easily obtain enough mirror supply and keep them in stock. Little mirror pieces were tailored and glued into the pre-carved circular sockets on masks and ear wings.

If the character had a beard, holes around the mouth position were drilled for small braids of beard to go through and be attached. Commercially prepared beard stock was available for this purpose. They were made of horse's mane and dyed with various colors. *Shen* (1989) mentioned that dying the horse mane was quite a challenge. It could be considered as another type of artistic talent. Therefore, most mask makers used the beard stock made by beard-making experts. *Yang* commented that most mask makers preferred beards made of human hair to the commercial ones, because human hair was much softer and smoother. But, there was not enough supply

to meet the needs. On the other hand, some characters required a red beard, but human hair could only make black beards. The choice of beards is limited.

13. Tie ear wings together to the mask

Figure 61: Mask with ear wings

After placing beard, two pieces of string were put through eight holes to tie the mask and the ear wings together. First, strings were measured and cut off from a roll of the hemp rope. They were then loosely stringed together while leave some extra length of the string for performers to pull over to the back of their head and tie the strings together on the back of the head to fasten the mask on their forehead. The string tied together not only the mask and the ear wings but also the mask and the performer. With all the parts in place and tied together, the mask could be considered complete. Some mask makers signed their name on the back, while other not.

14. Open the sacred light: Consecration

Dixi masks represent divine beings in heaven. For *Dixi* community, stars in the sky were embodiment of the divine beings that could be seen up in the heaven. *Yang* stated, "masks are the gods, and the gods are the stars. After the mask is finished, a ritual should be held to invoke its corresponding cosmic power." The ritual was to shed the sacred light from heaven onto the mask on earth, so they were connected and power corresponded with each other. Thus the mask maker vitalizes the mask and makes it the god. A few ritual items were precisely defined, some of which included a bowl of

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uncooked rice and fruit. Burning incense was indispensable and a chicken is always needed for its blood to consecrate the ritual object. In the ritual, the God of Craftsmen, the master *Lu Ban* was worshipped. Without the consecration through the ritual, a mask can only be a craftsman's work, or a tourist's souvenir. It will never be what really the *Dixi* mask is, the sacred god.

Figure 62: The Altar is set up to worship *Lu Ban*

After all, I realized I was indeed blank at the beginning of my apprenticeship. No wonder I could not use the tools in my hand, as the tool use is embedded in the cultural practice. The cultural life gives tools content. The society of practice underlies the use of tool. Tool use reflects and facilitates the user's way of living. Tool acquisition is a long process of enculturation.

As a new comer to the *Dixi* mask community, I was lacking not only knowledge about *Dixi* masks and mask making, but also the common knowledge and general beliefs that most *Anshun* people had. This realization led me to more reflections, on which I shall elaborate in the following chapter.

CHAPTER 7

TOOL ACQUISITION:
ANSWERS, REFLECTIONS, AND RECOMMENDATIONS

Figure 63: Tools, masks, and performance

After the fieldwork was done and data were analyzed, I started to understand

what Wundt (1916) [47] called "folk psychology" and what Geertz (1983) means "art as

a cultural system." Although this understanding does not, and probably will not, solve

all the cognitive puzzles that trouble educators and psychologists, it nevertheless

explains why "my mind was blank; my thought was frozen" when I tried to make a

mask for the first time. It further leads me to a broader understanding of "the fear of the

white canvas"—when the blank mind meets the blank canvas—and the challenge for

technology novices—when a new learner meets a new tool, as I was at the on set of the

mask-making apprenticeship.

In this concluding chapter, I will first answer the questions that I set out to look for at the onset. Then, I will reflect upon this learning process and experience. This reflection serves as the context for recommendations of this study. By sharing what I learned and found, I hope this study can be useful to those who are seeking a better understanding of cultural development in general and artistic cognition in particular.

Answers to the Questions

Harking back to early questions that drew me into this research, I was wondering: why did Chinese ancestors worship ferocious masks? Why do those masks look evil to me, but divine to them? Where do mask makers obtain mask symbols to represent their mask gods? Who are mask gods? How can this visual representation of masks be taught and acquired?

To answer these questions, a more general understanding of the use of Chinese masks serves as a conceptual basis, upon which more discriminated comprehension of mask makers' use of mask symbols can be constructed.

The use of Chinese ritual masks can be traced back to more than three thousand years ago, to the *Chou*, or *Zhou*, dynasty, when Chinese ancestors believed that plagues were caused by evil spirits. To deal with these invisible evildoers, they created the masks modeled after the twelve monsters, who were known for their invincible power and insatiable appetites for spirits. Hence, the mask ritual was held to invite them to dwell in the masks corresponding to them. Through the mask, mask wearers became the embodiment of the monsters and the mask performance represents the monsters in

action. While the monsters feasted on evil spirits, plagues were swept away from the human world (also see p. 93). Thus, monstrous figures became humans' guardians. Ferocity was seen as a force of protection. Masks became the embodiment of human guardians, namely, the gods. The possession of masks was the sign of wealth and health.

The mask ritual that included the twelve monsters' performance was originally a Chinese imperial ceremony, which was not supposed to be practiced by commoners. Its shift into the realm of popular culture might occur when the Mongolian government ruled over China and Chinese were forbidden to engage in any political activities. The majority of Chinese people then devoted their time and talents to entertainment and religion. Chinese scholars began to write for popular culture. A great number of Chinese novels, written for the masses, were produced at this time. An audience-engaging literary style that was rich in color, full of images, and replete with values under the cover of religious beliefs was also born. This literary style created a visual bank, where mask makers could easily find visual cues for mask making and readers could easily visualize and further elaborate what they were reading.

For example, in the original novel *The Campaign to the West* (*Zheng Dong, Zheng Xi*, 1991), written in the sixteenth century, there was a scene describing *Xue, Ding-shan*'s first encounter with the goblin as follows. "*Xue, Ding-shan* came to meet his challenger, whose head was red and eyes were green. His face was wide, but his mouth was pointed. His neck was long, but his legs were short. *Ding-shan* thought: 'What a wired-looking dude! He must be a really wicked crook.'" (p. 350).

The above depiction illustrates not only how the character looks like but also how that appearance affects its beholder psychologically. Such depiction functions as what Vygotsky called "sign use" that facilitates mask-makers' mask making and invites readers' or the audience's imagination. The performance script serves as performers' "signs" that reference to the stories depicted in the original novel. Masks serve as performers' "tools" to transform their mortal beings into the divine gods.

As a cultural unit, the *Dixi* mask is "a single cultural cell" that reflects, as well as facilitates, the development of *Dixi* culture. The mask ritual gives masks meaning, just as mask performance makes mask making a meaningful endeavor, and the mask maker's consecration transcends a mask into a god. Through social interactions and cultural participations, an apprentice becomes a member of the culture and forms a mental imagery that reflects, as well as facilitates, the making of masks. This is what I was lacking of at the onset of my apprenticeship and therefore unable to use tools in my hand.

The mental imagery not only derives from social and cultural participations but also from the history of *Tun-bao* people and the wealth of Chinese literature. The combination of religion and literature formed a unique characteristic of the culture. It also made the performance script not only entertaining but also literarily stylish. The hitherto over-polished Chinese literary style was toned down by the use of vulgar language. This mix of language styles enlivened the literary genre as a whole and became even more appealing to the general audience. As a result, literature, art, performance, and religion were integrated and embedded into daily life.[48]

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No wonder, mask makers did not have a history, because their cultural role was too fused to discriminate one role they play from another role they also play. Being nurtured by multiple cultural traditions, *Dixi* mask makers in turn integrate and facilitate multiple forms of arts and transmit culture in a diverse and silent way.

The above analysis explains why Chinese mask makers do not have a history and where they find their ideas for creating numerous masks as if their imaginative pen never runs out of ink. After all, their imagination was not solely created in their head, but embedded in Chinese literature and built upon Chinese common beliefs. Mask makers owe their creative power to Chinese novelists' creative thoughts as well as Chinese folk traditions. The wealth of Chinese culture forms a rich foundation upon which the countless mask gods built their heavenly empire in the human world via the hands of mask makers.

As Northrop Frye comments, the shaping force of conventions is a tool for creative acts of the individual (cited in Wertsch, 1998). Traditions, although are seen as baggage by many creativity-seekers, are also the bank of cultural wealth, upon which individual's cognition develops and creativity thrives. To shake off the baggage of tradition, first one needs to know what is in the bag to be shaken off, if desired.

Figure 64: The *Nuo* shrine at *Xia-yuan* Village

Figure 65: Women celebrate the newly established Pillar of the Gods

After all, the answers were not found in the field. Neither were they found in art or religion. Rather, they were found in the ancient literature and outside of the field of research. Nonetheless, it was the fieldwork that gave me the idea about where to look for the answers. Interestingly, it was not the mask that led me to the answers, but the unexpected "Pillar of the Gods" (See the above figure).

This Pillar of the Gods, the home for the gods, was made for a neighboring village that attempted to restore their religious activities after the Chinese Cultural Revolution. The need for making such a work could occur probably every ten or twenty years for each village, but it was my pure luck that I happened to have the chance to observe its creation and reception. At first, I was not enthusiastic about it, as I was anxious to have my fieldwork started. However, the mask maker had his job to do. I could only wait for his work to be done. While waiting, I asked about the pillar that I had no idea about it. In response, he was "shocked" at my "ignorance." His reaction, in turn, shocked me. Then, he patiently named a few names of the gods for

me. It was odd to me because the names, he mentioned, were known to me as characters depicted in the ancient novel *The Investiture of the Gods*, but apparently they were what he called "the gods." This was the moment that I started moving toward Chinese literature study. Upon returning from the field, I began reading Chinese classical novels that were adopted by various *Dixi* performance team. After reading more than six long and thick novels, I started to notice how one novel built upon another, and how the symbol use was carried on from one to another. Thus, later characters collected the accumulated meaning and their symbols became densely coded with layers of meaning (see p. 165).

Turning back to look at the block of poplar wood that taunted me so well in the field and inspired me so much thereafter, I realized how *literarily blank* I was. How little did I know about *Dixi* mask-making. How naively ambitious was I attempting to learn mask making in a short period of time, despite the Chinese government made it even shorter. As I look back, this shortening rather made my fieldwork time-efficient.

(Same as Figure 3: A poplar woodblock)

Although the mask maker, Mr. *Yang*, estimated that it probably took two years for an apprentice to master mask-making skills, after studying their cultural background and analyzing my collected data, I doubt any one who is not familiar with

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that culture can master *Dixi* mask making in a few years. It may be possible for an apprentice to master skills in producing commercial *Dixi* masks for tourists in two years, as *Yang*'s son was capable of doing. It will take much longer for an apprentice to be able to create a mask that will be regarded as one of their mask gods. Apprenticeship is more than simply acquiring knowledge and skills embedded in the tools. Rather, it requires an extensive process of enculturation, through which the apprentice adopts cultural values and becomes a member of the culture.

Despite of my too ambitious attempt, this study's adoption of situated learning as research methodology was nevertheless fruitful. The mask maker, Mr. *Yang*, Mr. *Shuai*, and Mr. *Li*, all had commented that my infield study had dug much deeper into the culture of the *Dixi* community than any other researchers who had watched mask performance and interviewed with mask makers. Even though these researchers who understood the local dialect so they had less language barrier than I had, the language ability seemed to give no warranty in this case. It is the fact that with Chinese big varieties of cultural groups and numerous local dialects, it is difficult for researchers to be fully "emic," to conduct fieldwork in China, not to mention their official regulations.

As fruitful as the use of situated learning as methodology is the retrospective research process that my adviser suggested and this study experimented. By encouraging me to seize the chance, my adviser turned the *ad hoc* situation into the opportunity of scaffolding. Although this situated case gives no warranty for other studies to be as well fruitful if following the same procedure, it proves that teacher's

scaffolding can certainly open the zone of proximal development. Teachers do make differences in student's intellectual life. Teachers can give meaning to education, just as mask makers can transcend a block of wood into a divine being, who brings wealth and health to the world of humans.

Figure 66: Mr. and Mrs. *Yang*

Tool Acquisition as a Process of Enculturation

People learn how to use a fork not by using a fork by itself, but by *eating with a fork*. In the act of eating, they learn *eating* as a whole, rather than forking for its own sake. This is the same as learning the use of mask-making tools, mastering the use of technology, and learning knowledge and skills in general.

As Vygotsky called tools artificial formations, mask-making tools are artificial formations collectively constructed by the mask making community, and in turn they sustained the cultural practice and enhanced cultural values of the community. They are the embodiment of social activities. Their creation entails social purposes, values, and structure. Their application contributes to the transmission of the culture and enhances the tool-facilitated social structure. Using tools not only changes the user's values but also changes the user's behavior and his or her way of organizing oneself.

Adopting tool use is no less than changing one's life style. Then tool acquisition is in fact a process of enculturation.

As this study has demonstrated, the use of mask-making tools involved not only mastering the manipulation of the tools and being familiar with the materials but also learning mask ritual performance, Chinese classics, Chinese general beliefs, *Tun-bao* people's history in particular, carpentry in general, and even embroidery. As an apprentice to the mask maker, I almost became a member of the mask maker's family and I did participated in his business activities during my fieldwork. Meanwhile, the mask maker readjusted his own schedules to fit my very limited time strains. It is inevitable that apprenticeship involves negotiation and cooperation. An apprentice's tool acquisition is a tool-situated process of enculturation.

Figure 67: Mr. *Yang* (standing at the most left), the *Xia-yuan Dixi* performance team,
Mr. *Shuai* (standing at the second on the right), and Mr. *Li* (standing at the most right)

ENDNOTES

[1] *Dixi*, pronounced as D-C (no "K" sound), is only one particular type of Chinese *Nuo* rituals, which consist of many other types, besides *Dixi*.

   Not all the *Nuo* rituals use masks in their ritual performance; some use masks, but others have the ritualists' faces painted instead. Nevertheless, they are all originated from the same Chinese ancient mask ritual tradition, which can be traced back to three thousand years ago. In general, the purpose for holding the *Nuo* ritual is to extirpate evil spirits and pray for good things to come. However, unlike its *Nuo* ritual siblings, *Dixi* is usually found around *Anshun* City in *Guizhou*, China. Its performance stories and elaborate ritual masks make itself distinct from all other *Nuo* rituals.

   The word *Nuo,* written as 儺, is an ancient Chinese character that has not been in use until recent years, due to C. K. Wang's ritual performance project (see p. 8). Currently, the definition of *Nuo* is still under scholarly debate. Some scholars consider that the word *Nuo* refers to the sound uttered when the ritual was performed (but it is unclear as to who was to make the utterance—ritual performers, or the audience, or both). Others rather think that the use of the word was because of the ancient worship of birds (Lin, 1994), but to me this interpretation based on the author's philological inference is not convincing. Adding to the definitional confusion is that some people (some researchers in Guizhou, for example) use the categorical term *Nuo* to refer to one type of *Nuo* ritual (*Nuo Tan Xi*), the altar *Nuo* ritual, whereas others still use the term to refer to the overarching category, the mask ritual. Thus, the definition of *Nuo* is still arguable.

[2] *The Romance of the Three Kingdoms* is a long, complex popular classical novel, written by *Lo, Kuan-zhong* (c. 1330-1400). The novel depicts the stories of the three small states that emerged at the ruins of the *Han* dynasty (206 B.C.- 220 A.D.) and warred for sovereignty.

[3] *The Campaign to the West* is sometimes titled as *Xue Ding-shan's Campaign to the West*.

[4] As a matter of fact, I had been collecting masks of all types for a long time. So had I been interested in masks' stories. Therefore, the actual background story of this research is very, very long.

[5] Confucius considered that a well-educated person should not discuss such subjects as ghost or shaman, not to mention studying about them.

[6] In the early 1990s, situated learning theory gained its popularity in the field of education technology. This was partially attributed to Vygotskian and neo-Vygotskian theories (e.g., ZPD and LPP). It was also attributed to the advancement of virtual reality (VR) technology, which creates a virtual environment to fully immerse its user, as computer games do nowadays. Thus, educators sought ways of "situating" learners to maximize the learning outcome from VR technology, so they applied situated learning theory and VR technology to instruction design.

[7] Vygotsky was born to a middle-class Jewish family in Gomel, a small provincial town in Belorussia. Gomel was about four-hundred miles southwest of Moscow and of a predominant Jewish population (Werstch, 1999; Davidov, 1997). Unlike most of the Jewish people who couldn't move freely, were excluded from many state jobs, and weren't allowed to attend universities, Vygotsky was among the lucky three percent of the Jewish students who were admitted into the universities. From 1913 to 1917, he studied history, philosophy, and law at universities in Moscow and afterwards he got a place. From 1917 to 1924, he returned to Gomel, where he taught literature and psychology at several schools and colleges. During this period, he also wrote extensively about language, pedagogy, drama, and poetry (Werstch, 1999).

[8] Davydov and Radzikhovskii (1985) wrote: "It was precisely this that Vygotsky's critics [Talankin (1931) and others] … accused him [Vygotsky] of proposing non-Marxist Views. In particular, they accused him of not recognizing how labor activity determines mental processes" (p. 63).

[9] In his brief overview of Luria's life and work, Michael Cole recognizes Alexander Luria as the founder of neuropsychology. As Cole had worked with Luria for an extensive period of time, his knowledge of Luria is generally acknowledged as a reliable resource for non-Russian scholars.

As Cole noted, Luria met Vygotsky in 1924. From then on, until Vygotsky died of tuberculosis in 1934, the "*troika*" of Vygotsky, Alexei Nikolaivitch Leont'ev, and Alexander Luria strived to create "a unified theory of the social and psychological development of humans. To that aim, they sought to establish an approach to psychology that would enable them to "discover the way natural processes such as physical maturation and sensory mechanisms become intertwined with culturally determined processes to produce the psychological functions of adults" (Luria, 1979, p. 43). They referred to this new approach variably as "cultural," "historical," and "instrumental" psychology. The ideas were centered on cultural mediation and the role of the social environment in structuring the developmental processes by which children appropriate the cultural tools of their society in the process of ontogeny. A strong

emphasis was placed on the role of language, the "tool of tools." It is through the acquisition of tools, such as language, that phylogeny and cultural history are merged to form specifically human forms of thought, feeling, and action.

[10] Quoted from Milller, 2003, p. 142.

[11] Cited in Efland, 2002, p. 33.

[12] Cited in Wertsch and Stone, 1985, p. 170.

[13] Cited in Wertsch, 1979, pp. 135-136.

[14] The term "layer" is sometimes referred to "plane" in Wertsch's writings.

[15] Cited in Wertsch, 1979, pp. 134-135.

[16] Historical materialism is Marx's theory of society. It considers that "historical changes in society and material life produce changes in 'human nature' (consciousness and behavior)" (Cole and Scribner, 1978, p. 7).

[17] The text was cited in Vygotsky (1978, p. 54), who cited the text from Marx's *Capital* (1936, p. 199). The same text can also be found in Hegel (1840, p. 382).

[18] Again, the theory of subjectivization and objectivization is based on Marx's philosophy, but it is initiated by Vygotsky and better elaborated by A. N. Leont'ev. As Marx (1818-1883) stated, "in production the individual is objectivized, and in the individual the object is subjectivized" (vol. 12, p. 175). This statement of Marx's is quoted in Leont'ev, 1979, p. 46.

[19] The Acorn Gunners, as a World War II display team, employ living history "to further the understanding of the period and to provide a resource for public enjoyment and education." (WW2 Display Team, 2003) The page was updated 24 January 2003. Retrieved on May 22, 2003, from http://www.ww2.org.uk/

[20] Wittgenstein (1999) argued, "many everyday concepts have 'blurred (PI, sec. 77) or 'ragged' (CV, p. 45) boundaries. Drawing a sharp boundary around such concepts would seriously distort them in many cases" (p. 24). "In fact, we say what we do not mean when we try to give an exact definition of some term that we employ inexactly and shiftingly (§77)" (Findlay, 1984, p. 206).

[21] Vygotsky (1979b) called the disappearance of psychological tools psychological subordination. Marx called it being "absorbed" or "copied" into human activity. Marx's comment is quoted in A. A. Leont'ev, 1979, p. 245.

[22] Cited in Cole, 1996, pp. 147-148.

[23] Human physical adaptation to the tool use is noticed by phylogeny scholars (Cole, 1996), neurologists (e.g., Sacks, 1970), and anthropologists, such as L. S. B. Leakey (Campbell, 1972). But, it is mostly ignored by mind-body-split Descartians. Washburn and Howell (1960) argue that "the uniqueness of modern man is seen as the result of a technical-social life which tripled the size of the brain, reduced the face, and modified many structures of the body" (p. 49). This quote is cited in Cole, 1996, pp. 147-148.

[24] What Cole means by "culture" is similar to Raymond Williams's (1983) definition of culture in the broadest sense. It is "a whole way of life, material, intellectual, and spiritual" (Cited in Chong, 2002, p. 9).

[25] Frye, N. (1957). *Anatomy of criticism: Four essays.* Princeton: Princeton University Press.

[26] In their paper *Situated Cognition and the Culture of Learning*, Brown, Collins, and Duguid (1989) noted that their tool notion was developed from the image put forth by both Richard Burton (1984) and David Perkins (1986).

[27] Cited in Cole, M. (1996). p. 132.

[28] What Bredo (1994) calls "symbol-processing view" is similar to what Clancey (1997) calls "descriptive cognitive modeling." They both refer to a computational view of human cognition; human mind works like a computer. Thinking is like data processing.

What Clancey (1997) calls the descriptive information system, or descriptive cognitive modeling that operates based on "symbols." Each symbol contains properties and values, which are expressed as strings of letters and/or numbers. This notation (programming method) differs from the classical *numeric* programming, such as mathematical and statistical operations. It is more symbolic, therefore it is called a "symbol system." Then processing them, that is, manipulating symbols, is symbol processing.

The view of the descriptive information system, or symbol processing system, assumes that knowledge consists of words organized into networks of rules and patterned descriptions, like books. Taking books as the model, knowledge engineers think that everything can be represented by words. Expert knowledge can be fully represented by computational symbols, just as words in books. Then the representation of the world is only a matter of specification of the description.

In this rigorous view, everything can be fully described and represented in terms of symbols, and all information is literally displayed out there- in the world *outside*. Information is always visible and contains equal weight. Knowledge can be

represented by symbols and rules. Expertise means one has good and *more* rules than that of others in a specific knowledge domain. Reasoning is a matter of searching and connecting symbols. Thinking is information processing, namely, symbol manipulation according to the explicit rules. Therefore, symbol processing is taken (or mistaken) as cognition itself. Such cognition (symbol processing) does take place only in the computational CPU, which is mapped *onto* the human brain in theory. As Allen Newell (1990) boldly declares: "The human is a symbol system."

[29] Marvin Minsky's synonym for human, "meat machine," is cited in Clark (2001). The term "meat machine" comes from a science fiction story, in which two aliens had the following conversation:

> They are made out of meat.
> Meat?
> Meat. They're made out of meat.
> Meat?
> There's no doubt about it. We picked several from different part of the planet, took them aboard our recon vessels, probed them all the way through. They're completely meat.
> That's impossible. What about the radio signals? The messages to the stars.
> They use the radio waves to talk, abut the signals don't come from them. The signals come from machines.
> So who made the machines? That's who we wants to contact.
> They made the machines. That's what I'm trying to tell you. Meat made the machines.
> That's ridiculous. How can meat make a machine? You're asking me to believe in sentient meat.
> I'm not asking you, I'm telling you. These creatures are the only sentient race in the sector and they're made out of meat.
> Maybe they're like the Orfolei. You know, a carbon-based intelligence that goes through a meat stage.
> Nope. They're born meat and they die meat. We studied them for several of their life spans, which didn't take too long. Do you have any idea of the life span of meat?
> Spare me. Okay, maybe they're only part meat. You know, like the Weddilei. A meat head with an electron plasma brain inside.
> Nope. We thought of that, since they do have meat heads like the Weddilei. But I told you, we probed them. They're meat all the way through.
> No brain?
> Oh, there is a brain all right. It's just that the brain is made out of meat!
> So … what does the thinking?
> You're not understanding, are you? The brain does the thinking. The meat.
> Thinking meat! You're asking me to believe in thinking meat!

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Yes, thinking meat! Conscious meat! Loving meat. Dreaming meat. The meat is the whole deal! Are you getting the picture?

Omigod. You're serious then. They're made out of meat.

Finally, Yes. They are indeed made out of meat. And they've been trying to get in touch with us for almost a hundred of their years.

So what does the meat have in mind?

First it wants to talk to us. Then I imagine it wants to explore the universe, contact other sentients, swap ideas and information. The usual.

We're supposed to talk to meat?

That's the idea. That's the message they're sending out by radio. Hello. Anyone out there? Anyone home? That sort of thing.

They actually do talk, then. They use words, ideas, concepts?

Oh, yes. Except they do it with meat.

I thought you just told me they used radio.

They do, but what do you think is on the radio? Meat sounds. You know how when you slap or flap meat it makes a noise? They talk by flapping their meat at each other. They can even sing by squirting air through their meat.

Omigod. Singing meat. This is altogether too much. So what do you advise?

Officially or unofficially?

Both.

Officially, we are required to contact, welcome, and log in any and all sentient races or multi beings in the quadrant, without prejudice, fear, or favor. Unofficially, I advise that we erase the records and forget the whole thing.

I was hoping you would say that.

It seems harsh, but there is a limit. Do we really want to make contact with meat?

I agree one hundred percent. What's there to say? 'Hello, meat. How's it going?' But will this work? How many planets are we dealing with there?

Just one. They can travel to other planets in special meat containers, but they can't live on them. And being meat, they only travel through C space. Which limits them to the speed of light and makes the possibility of their ever making contact pretty slim. Infinitesimal, in fact. So we just pretend there's no one home in the universe.

That's it.

Cruel. But you said it yourself, who wants to meet meat? And the ones who have been aboard our vessels, the ones you have probed? You're sure they won't remember?

They'll be considered crackpots if they do. We went into their heads and smoothed out their meat so that we're just a dream to them.

A dream to meat! How strangely appropriate, that we should be meat's dream.

And we can mark this sector unoccupied.

Good.

Agreed, officially and unofficially. Case closed. Any other? Anyone interesting on that side of the galaxy?

Yes, a rather shy but sweet hydrogen core cluster intelligence in a class nine star in G445 zone. Was in contact two galactic rotations ago. Wants to be friendly again.

They always come around.

Andy why not? Imagine how unbearably, how unutterably cold the universe would be if one were all alone.

[30] Cited in Efland, 2002, p. 64.

[31] Cited in Bredo, 1994, p. 29.

[32] Clancey's (1992) argument, "Coordination without deliberation," was his criticism about the "situated robot" that navigates without a map but moves about without colliding into object by corresponding to the physical environment.

[33] Therefore, a crane symbolizes longevity and transcended being. It also implies being Toaistically knowledgeable.

[34] Most of the contemporary Chinese literature that discusses the origin of *Nuo* is based on the same ancient resource. However, further investigation is still needed to decipher the details of the ritual format. The *Nuo* sound from the boys is a deducted statement at this point.

[35] The image has been processed based on the map in *Xue*, 1996, p. 18.

[36] According to the Chinese government, all Taiwanese who intend to visit the Mainland of China have to enter China through Taiwan, regardless of the place of departure. Therefore, for me, a Taiwanese, there is no direct fly from America to China.

[37] *Xia-yuan* Village put them on four benches, because there were too many to fit on a table. *Xia-yuan* Village owns probably more than one hundred *Dixi* masks.

[38] After video-taping the performance of BBF episode, I borrowed the mask maker's father's performance script and transcribed the section of BBF. It took me a few nights, as I had to study with the mask maker during the day and had very limited time at night. The official chauffeur, Mr. *Li*, told me that it was a great honor that *Yang*'s father would let me borrow his performance script, because the performance script was a treasure to them. I was certainly blessed.

[39] According to the original novel, *the Investiture of the Gods*, the ten deadly battle formations appeared in the middle of the novel. These ten formations were laid down by the bad gods and goblins who were on the side of the tyrant emperor of the diminishing *Shang* dynasty. In the original novel, there was not number sequence of the ten battle formations. The blazing battle formation appeared in the order of six or seven, not the very last two.

[40] *Ching-lin* forest is a very, very old forest.

[41] According to Chinese mythology, *Kun-lun* Mountain is the central mountain of the world where the fountain of immortality is situated, and thence flows the four rivers of the world (Werner, 1922, p. 16). Therefore, it is believed that it is the place to cultivate Taoistic skills through which one can be transcended or transforms into a feathered, as the crane goblin.

[42] Most Chinese front doors are double-sided doors. At the Chinese Lunar New Year, people post the door gods on either side of the door. Of these two gods, one has dark skin and looks sturdy. The other whose face has a yellow tone is rather thin and tall. In the novel, *The Roman of the Three Kingdoms*, they were the emperor's safeguards. One time when the emperor was very, very ill, they guarded the emperor day and night, until the emperor was fully recovered. Thus they earned their name as the door gods (guards).

[43] General *Qin* and General Tiger refer to the two door gods explained in Note 41.

[44] The golden rooster is a sign of fortune.

[45] The phoenix is, like the dragon, a precious animal whose appearance is an auspicious sign.

[46] "*Huang long xi zhu*," the phrase used by *Yang*, means that a yellow dragon is playing with a pearl.

[47] Cited in Olson and Bruner, 1996, p. 10.

[48] The popularity of the mask ritual performance finally led to its ban for the first time. This piece of historical information is still under investigation. The merge of literature and religion is the analysis that is still part of my on-going research.

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Thank you.