

Chinese Ethics in Communication, Collaboration, and Digitalization in the Digital Age

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Initiatives in digitalization supported by government with high expectations have motivated scholars from differing cultures to work together. Often, however, such collaboration result in critical and annoying ethical conflicts. Three examples are depicted. A key introduction to Chinese ethics is followed by discussion of major differences in ethical concepts between Western society and Chinese society. Chinese, instead of focusing on actions (task or matter) focus on people's relationships. The authors recommend a rethinking of Chinese ethics concepts as part of a discussion of communication ethics in general. In addressing virtual reality and communication ethics, the authors believe some vital, inclusive, and prospective conclusions might be reached in the understanding of ethical problems raised by information technology.

Since 1997, digitalization of library and museum collections and archives has become a common and cooperative goal of people from academic communities in many countries. With support from governments and institutions, scholars and researchers in the humanities and in information science/technology have begun to work together on the digitalization of cultural collections and archives. This is a new collaborative task for everyone, especially for those who have never ventured out of their own ivory towers. Moreover, outcomes of their cooperative work will be very different from that of traditional scholarly projects. With the media increasingly dominating the message, “the

world of knowledge is changing while the information is digitalized because form and content of information are changed,” according to Ching-chun Hsieh.¹

Ching-chun Hsieh, an information researcher and author of this paper, has told scholars at Peking University (and also academics in Taiwan, Japan, and the United States), “the medium is changed, therefore, the way of collecting, storing, preserving, and presenting data/papers/ideas is also revolutionarily changed And knowledge after [all the] collecting, storing, preserving, and presenting, is going to be changed.” To scholars in the humanities, this change will be a long nightmare if they do are not aware of or are not ready for the rapidly developing digital world. - This is much more obvious in Chinese studies than in other fields.

This paper is based on the knowledge experience of the National Digital Archives Program (NDAP) and the National Digital Museum Project in the Republic of China on Taiwan, and also on a study of “Communication, Collaboration, and Digitalization” (Hsieh, 2001). This paper focuses on the intercultural ethical aspects of collaboration, digitalization, virtual reality, and communication. With the advent of the digital world, concepts of Chinese ethics have had to be applied in new contexts. Discussions of various such concepts, and their contrasts with Western values, may help clarify some confusion between reality and the cyber worlds.

It is interesting to note that people involved in digitalization projects are heavily influenced by their mother culture no matter what their academic training or backgrounds. At the beginning, most Chinese scholars in Taiwan with higher degrees from Western countries had attitudes that differed from their fellows without those experiences in Western communications programs; thus collaboration while doing digitalization work

was often awkward. Over time, however, the foreign educated colleagues began to deal with their colleagues in a Chinese way. There also were interesting conflicts in information ethics between scholars in the humanities and technical people involved in information technology in Taiwan, and also among scholars from China and the United States involved in international collaboration.

In many cases, Chinese scholars with or without Western higher degrees exhibited similar attitudes toward information ethics derived from Chinese concepts in collaboration and digitalization. However, the concepts of Chinese ethics often complicated the relationships of Chinese scholars in their collaborations on digitalization with Western scholars. Primarily, the Chinese look at *ethics* as relationships *between people* instead of *with a task*. What matters are the distances of people in their relations, such as father and son, husband and wife, brothers and sisters, teachers and students, or bosses and employees, and so on. On the other hand, Western scholars deal with information ethics mainly based on the material actions of tasks or work to be done, using contracts to clarify copyright, loyalty, and intellectual property rights.

The Concept of Chinese Ethics

There is no exact equivalent in Chinese to the English word *ethics*. The Western concept of ethics in Chinese thought has two highly related but not exactly identical equivalent definitions: one is like *moral codes*, the other is translated as *lun li* in Chinese, with a meaning of normal relationships among people (involving comparison, classification, and order) (Lian, 2000). This paper will follow this approach to the discussion of communication ethics.

Chinese ethics were mainly developed and elaborated by Confucius, the Chinese

classic philosopher in the early 6th century before Christ, and his followers. Confucius was especially concerned with *jen*, which was discussed most extensively in his *Dialogues--*

(Lun Yu) (Chu, 1996, p.78, p.115-125, p.152-153, & p.155). ~~Full citation, in ref list?~~

This Chinese character means the relationship between an individual and others. *Jen* has additional meanings of benevolence, humanity, mercy, charity, magnanimity, and kindness. It also often includes concepts of philanthropy, love, love and justice, and benevolence and generosity.

In theory, Chinese ethics not only includes the relationships between people and people, but also the relationships with heaven, divinity, and nature. The Chinese people have always been told to respect the *Five Superiors*; that is, heaven, earth, the king, parents, and the mentor/teacher. They also have been told to live according to the *Five Ethics*, which are between sovereign and subjects, between parents and children, between husband and wife, among brothers and sisters, and among friends. In the context of Chinese ethics, the *Five Superiors* and *Five Ethics* are the basic concepts that guide peoples' lives and their relations in society.

These concepts are most succinctly expressed in the *Doctrine of the Mean (Chung Yung)*, one of the four basic sourcebooks for ~~neo~~-Confucian philosophy. (Chu, 1996, p.29-30). ~~(Can this be cited, for ref list?)~~ The *Five Ethics* are considered a detailed guide for all Chinese, including emperors and intellectuals. The *Doctrine of the Mean* is an extract from the longer classic on ethics, the *Li Chi*. It mainly is also concerned with manners and rules of conduct between peoples, as well as between humans and all other beings in the world, including relationships between humans and nature, Gods, ghosts, and ancestors. The book details guidelines with rationales about ethics.

In ancient times, the Chinese people paid much attention to ethics because they believed that ethics were the cornerstone for building a functioning and orderly society. For instance, it is said, “there is no difference between human beings and the beasts if a person is without ethics.” ~~[NEED detailed REFERENCE, page no. etc.]~~ (Chu, 1996, p. 538 from *Lun Yu Confucius: Analects*). The most extreme important ethical value in Chinese culture has been *hsiao*, the word character meaning filial piety or devotion to parents, to which one of the thirteen traditional Confucian classics, the *Hsiao Ching* (*Classic of Filial Piety*) ~~(Source citation?)~~, is entirely devoted. (Wang, 1992, p.909-919)

Every Chinese is educated and cultivated to respect and care for his parents in his lifetime. He would be publicly scorned with the proverbial expression “a son without *hsiao*” if he did not take good care of his parents while they were alive. In such cases, the unethical person would be severely punished by his people; not by law but by social pressure, punishment similar to ex-communication in Europe in the Middle Age, or even worse, the practice of shunning in the West. Nowadays, based on the content of mass media in Taiwan and China, to a great extent, this saying is still true in Chinese society. Ethical concerns are primary, taking priority over the legal, in all cases, for all levels of educational background, and in all arenas. In other words, the ethics of ancient China is still followed by modern Chinese people.

In Chinese culture, the core of ethics is the relationship between people, and people are the core of ethics. The relationship begins with the individual, who should always obey social rules and requirements inherited from his ancestors. If the individual stands in the center, the first and closest circle around him is his family, then the second circle is his village or community, the third is his country, then the world, nature, and heaven.

Therefore, a Chinese is always very concerned about his parents, brothers, sisters, grand parents (both father's and mother's side), uncles and aunts (both parents' sides), and other relatives, since these people are in the closest circle of human relationships with the individual. This is reflected in the Chinese language, which has an extensive vocabulary of specific kinship terms that have no equivalent words or terms in English (or other European languages). For example, nouns such as *hsiung* (the elder brother), *di* (the younger brother), *chieh* (the elder sister), *mei* (the younger sister), *po* (father's elder brother), *shu* (father's younger brother), *chiu* (mother's brother), *yi* (mother's sister), *ku* (father's sister), *sao* (wife of elder brother's), and so on; -and with verbs such as *hsiao* (filial piety or devotion), *t'i* (show brotherly, sisterly love), and so on. All these words show how the relationship between people is differentially defined, heavily depending on distance and relationship (in blood) in each case. It seems there is no such ethics context in Western culture. Ethics in modern Western culture, except perhaps for relationships between spouses and to a lesser extent parents and children, is much less developed.

The Practice of Chinese Ethics

Confucius said, "to educate oneself well, to take good care of families, to manage people in harmony, and then to rule the world in peace." [\(Chu, 1996, p.6\)](#)~~(from Lun YuAnalects)~~. ~~[NEED REFERENCE]~~ This is a very popular, central concept. From this saying, Chinese ethics starts from the self, with the individual's morality first, then extends to relationships with others. Confucius also said, "You cannot help people unless you can help yourself first, and you will be able to get to people after you get to yourself." [\(Chu, 1996, p.155\)](#)~~(from Lun YuAnalects)~~. ~~[NEED REFERENCE]~~ This idea moves one from the position of concern with self, then- reaches to family, to community, to country, and to

the world. In Confucianist philosophy, ethics aims to address the individual and his relationships with others, but also includes the practice of ethics in society. In other words, one's ethics is not only for the individual's guidance in living with others, but also as society's norm to ensure that society runs harmoniously.

While talking about *li*, the Chinese term usually translated as benefit or profits, Confucius recommended that it be looked at from relational or affectional aspects in preference to rational or legal ramifications. For instance, in the case of a father's criminal behavior, Confucius asserted that the son should not go to the police to report that his father had stolen a cow. Instead he should convince his father to return the stolen cow to the owner. Confucius said the son should never turn in his father. Otherwise, if the father went to jail, the entire family would be in a miserable situation without bread, having lost its breadwinner. It also would be of no help to the victim, since damage from stealing the cow would continue.

The better way to handle it would be to return the cow. Then, everyone in the case would be satisfied, also saving everyone's time and money. In this case, relational and affectional concerns are the first priority, rationality second, and legal concerns last. This example is a typical illustration of differences between Chinese ethics and Western ethics. Even nowadays, Chinese people prefer to solve problems through mediation by relatives, friends, or related people from both sides, rather than by suing in court.

A contemporary Chinese anthropologist, X. T. Fe, called the *Five Ethics* in Chinese culture the "gradient relationships" (Fe, 1948, p.22). He pointed out that self-centered concern is the first priority in Chinese culture and the core source of a non-unethical value system toward organizations or groups. If there is a conflict of interest,

the first human relationship takes first priority. Therefore, groups or organization with no intimate relationships with the individual always get less consideration, far behind relatives. Indeed, there are some opposite examples in literature, though they were not explicitly addressed in the *Five Ethics*, demonstrating which relationship should be considered as the first priority instead of the second or the third in practice. This issue, with respect to its impact on public service, has been discussed for over 2000 years. For example, those who argue from a national viewpoint maintain that if a soldier has to die for his country in war, his sacrifice is called “Big Loyalty” to his country, and should also be considered “Big Hsiao” to his parents, though he can no longer care for his parents. In this case, country is recommended as the soldier’s first concern instead of parents--an argument historically not well accepted in Chinese society.-

Information Ethics

As previously discussed, there is a drastic change caused by information technology (IT) and the resulting information age. Globalization of communication, with the overwhelming application of IT makes the world small (what McLuhan [\[source?\]](#) called a global village) [\(McLuhan and Powers, 1989\)](#), meaning much closer relationships between different jobs, more dependence between disciplines and between nations. In this case, IT pushes people to rethink the dimensions of ethics in the information age (Hsieh, 1992).

According to Mason (1991), *privacy*, *accuracy*, *property*, and *access* are the four important aspects of information ethics. In other words, digitalized content on the Internet raises questions of privacy, accuracy, property, and access, which are frequently discussed in communication ethics. Although these four aspects of information ethics have been

considered in Information Acts/Laws in many countries, there are still some conflicts and ambiguities not discussed, especially in communication, collaboration, and digitalization, and in domestic and international arenas.

In theory, in the information age, privacy deals with issues of free speech, free expression in the public sphere, and anonymity, and is also related to the media's social responsibility. The accuracy issue means "information integrity," that which includes accurate data, precision, timing, and appropriateness (in form and quantity). Intellectual property rights, ownership, control, and information sharing are the main topics of the property issue. Fair use, equal distribution, equal access for everyone comprises the access issue of information.

In practice, all the four aspects ethics are viewed differently, depending on culture and society. There is no universal standard to reliable counsel, even for transnational companies. Most Chinese scholars are like the famous ancient poet, Dong-po-a Su, and would like to share their knowledge freely with everyone. Su, more than a thousand years ago, said that knowledge is like moonlight and a breeze over the river; they should be freely shared by all people, the old and the young, the rich and the poor, the intellectuals and the illiterate. [\(Su, 1082\)](#) **(Source?)**

Ching-chun Hsieh promoted this idea to scholars in Chinese studies and library science while doing the 25-dynasties history full-text database in the early 1980s (Hsieh, 1986). The idea of information sharing in Chinese studies has now been widely adopted by scholars around the world. They now believe that although the Chinese heritage is collected and stored by different institutions, different countries, and scattered in many places, the heritage should belong to mankind. With this consensus, scholars in Chinese

studies officially have launched several collaborative projects for digitalization since 1997. In fact, informal and small-scale collaboration among scholars and institutions was begun earlier, in the late 1980s.

Communication, Collaboration, and Digitalization

The greatest enterprise of the mind has always been and always will be the linkage of the sciences and humanities (Wilson, 1998).

Digitalization is a high technology whose benefits have been resisted by traditionalists in academic communities everywhere; but its overwhelming power is pushing scholars, researchers, and professors to adapt to a rapidly changing environment unprecedented in their lifetimes. This involves cooperating and communicating with others from outside their own community, especially including those whom they barely know. For those who only feel comfortable in their own working environment, the globalization and virtual world created by the Internet pushes them to open or to venture out of their ivory towers. In this situation, communication among diverse people in the academic community has become much more important than before.

From innovation theory (Rogers, 1971), we find that in a traditional society, some trades such as farmers and workers have been impervious to many change processes. No one knows whether this will hold true in an information society, but it is especially important to the academic community, where not only survival but professional dignity and respect require adaptation to change. From science communication theory (Snow, 1980), we know that people from scientific (including technological) and literary communities have, historically, barely understood each other. In the information age, the two groups will have to communicate in order to help each other in their own work with the

new media environment, combined with multi-media, multi-lingual, and globalization demands. They will also need each other in dealing with their own local cultures.

Against this background, the authors sought suitable cases that typified the emerging conflicts and cooperation. Three cases since 1998 have been chosen for this study. They are from the University of California at Berkeley, the Institute for Research in Humanities at Kyoto University, and the Digital Museum Project of Academia Sinica (1998-1999)⁵ in Taiwan. Participant observation, interviewing, questionnaire survey, and content analysis were used in looking at the three cases.

In brief, once digitalization becomes the project for an institution or organization or of a group of people, communication and collaboration must occur in all settings (group meetings, formal meetings, seminars, conferences, within groups, cross between groups, domestic, international, etc.). Content holders, content experts, computer/Internet experts, and all others involved in the digitalized work, communicate and collaborate with each other constantly and ubiquitously. In the three cases discussed below, interdisciplinary and multidisciplinary teams were the core loci of communication.

In the process of adopting digitalization, there is no significant difference between individuals among the three cases. But, some different patterns of collaboration appeared among different groups in the three cases. In general, the two cultures' syndrome appeared in all three cases regardless of underlying national culture. In other words, although all participants realized the importance of sharing information and communicating with each other in the information age there were communications problems and differences between, for example, the technical and the literary people.

In short, communication played the primary role in all three cases, and it not only

involved patterns of interaction, but much that was cultural among the groups.

Relationships among the people involved played the second most important role in the digitalization process, and timing (and time pressure) was the third key role.

In Chinese culture, the key to progress is to find the right, competent person, both in terms of competence and also with the support or the authority to get things done.

Examples from a previous major scholarly project, the translation of Buddhist texts into Chinese, included the two best known and most prolific translators: Kumarajiva (AD 344-413) and HsüaShnaun Tsuang (AD 596-664) (Chen, 1964). Both were superbly qualified, but more importantly, each received extensive financial and personnel support from the imperial governments of their day to set up translation organizations. to translate Buddhist texts in the Tang Dynasty. In both cases, the timing was clearly right. The Digital Museum project in Taiwan is a modern analogue to this case.

Ethical Issues

Intellectual property rights, copyright, loyalties, money financial matters, and professional courtesy are the ethical issues raised in the collaboration and digitalization projects. In Chinese history, intellectual property rights and copyright have not been such important issues as they are in the modern world. In most cases, it was a related matter not of rights but of the professional courtesy expressed, as in acknowledgement or citations. Inclusion of verbatim selections from earlier works is common in classical Chinese works, as are shorter selections in the form of allusions. Even in the 21st century, among Chinese scholars and professors, there is not the same professional obligation to keep detailed records of all sources used, with names, dates, and locations as exists in the West. Ethical issues in the Western sense have not been taught or emphasized in Chinese classes on

research methods.

This does not mean that the Chinese people do not care about copyright, intellectual property, and creative work. Rather, traditional notions of what is ethically appropriate behavior for (high class) scholars as opposed to (low class) merchants prevails. The Chinese have always had immense respect for knowledge and intellectuals. It can be easily found in all Chinese literature. Since earliest times, the educated have been given the highest social esteem, but that is coupled with an obligation to use their knowledge to serve society everywhere at all times. However, in the traditional class system, this respect meant that an educated person, to a great extent, usually was not expected to care much about money, since he would be supported by his family, his community, and his government or his king (in ancient times). This has meant that Chinese tend to despise the practice of selling knowledge for private gain; to teach or to sell books if it is for gaining profits is considered immoral and beneath the dignity of a respectable person..

With this cultural background, it is easy to see that in cross-cultural collaboration and digitalization projects, there may well be disputes and debates related to ethics or to copyright law among different people from different arenas.

The following three examples are typical cases not addressed in most information ethics literature. These three concern issues in intellectual property rights, as well as some problems of access in practice. For privacy, the discussion uses anonymous symbols to identify participants.

Example One (within the same culture)

Researcher X, who is also the IT developer had knowledge of content and familiarity with the technology of digitalization. Y is the content holder(s), who had knowledge of the

collections and archives to be digitalized, but neither knowledge of IT techniques, nor appreciation of the impact digitalization would have on the cultural collections. Z is one reviewer of the research project. X, Y, and Z are living in the same cultural surroundings, but X and Z hold higher advanced degrees from Western countries, and also have much more experience in dealing with people from Western culture than does Y.

The story is:

X wanted to join the national digital project by digitalizing Y's collections and archives. In fact, X is a scholar in the field related to Y's holdings and has been involved in digitalization for several years. X and Y have known each other for years. Therefore, Y agrees to let X digitalize his collections. In this case, there ~~iswas~~ ~~were~~ no conflicts between X and Y in the collaboration. But, Z (the reviewer) wondered whether the project proposed by X involved ethical issues, and was reluctant to approve X's application.

Z thought that X took advantage of Y's lack of familiarity with digitalization. Y might not have been able to catch up with the technology even if he we able to learn from ~~from~~ X. There is always a risk of an "information gap," or even a "digital divide" between X and Y. Indeed, X himself cannot do this project alone if there is no material to digitalize. In other projects, such as the National Palace Museum, researchers are both content holders and IT developers.

It seems Z wanted to protect Y (the content holder) because he could see no solution to the intellectual property rights questions which would arise from the digitalization of these collections. But, in the long run, someone else finally would digitalize Y's holdings. Z's concern would still be relevant even if Y did become a sophisticated IT developer.

The controversy is still going on.

Example Two (within the same culture)

V is lead scholar on a digitalization team in a research-oriented institution with full technical support from the institution's computing center. V, an expert in the subject matter holding exclusively copyright for digitalization, also has received a series of grants to support his work. Though he received his Ph. D. from an American private university, V is very much in the mold of a classical Chinese scholar.

W is the IT developer assigned to help V on the digitalization project. He has some knowledge of digitalization, but has little knowledge about the subject matter area. W has neither a Western higher degree nor any experience dealing with western people before doing the digitalization for V.

The story is:

V had been working on the content, as well as collecting valuable related data for years. W was an engineer working as a computer center data manager who also had periodic assignments to help scholars from different fields in the institution. The role of the computer center was primarily as a service provider. In this setting, much of W's normal job was doing maintenance and assuring the center provided its routine services. In addition, W was assigned to help V develop a system to digitalize his subject matter holdings.

From the beginning in 1998 until early 2001, V and W worked well together as a team, for they concentrated on learning from each other, with much attention to communication and collaboration on how to do the digitalization. V and W worked cooperatively in preparing and presenting papers or reports in meetings and conferences, both domestically and ~~in~~ internationally ~~fora~~. Both were named co-authors on the papers.

This arrangement held through an international conference in ~~September~~, September, 2002. In all these settings, V was first author (presenting- the major idea and content), and W was second author (doing technical presentations and demonstrations), showing how the subject matter can be transformed into digital formats.

On the surface, it appeared their work was clearly divided; subject matter on one hand and the digitalized product on the other. In fact, the outcome is no longer one of clear division. Basically, the information associated with the original subject matter has evolved into new post-digitalization knowledge, making an impact on the relationship between V and W. As a result, though each was conscious of his weakness in terms of either technical or domain knowledge, V and W could each present the overall results alone, without the other's presence but with some weaknesses in dealing with the other's area. However, when W, the technician, presented their work without V's consent or presence, V felt uncomfortable and unhappy that W was making presentations without his consent or without him on a project that was undertaken with his leadership, and had depended on his academic expertise. V insisted that W had been an assistant, basically a technician, much like a graduate student. He insisted that W was not qualified in the domain (subject matter) area. In V's view, W was, like a thief, misappropriating his property (knowledge), even stealing his fame from this pioneer research. On the other hand, W was unaware of V's anger and concern because V had usually been very gentlemanly, polite, and indirect as one would expect of a traditional Chinese scholar.

The conflict between V and W was not simply a communication problem. It was, instead, a typical case of disputes arising from the creation of new intellectual property which resulted from the digital transformation of knowledge after its digitalization. The

knowledge/property was not like chapters by different authors in one book, nor like a device collaboratively invented by a group or a team sharing common loyalties. Rather, it was a new type of knowledge in which the technical processes provided possibilities for newly available perspectives in themselves, with much potential. The team members who created the knowledge (digitalization of archives) also changed as the engine of technology replaced archiving in potential importance.

In this story, V and W face this changing working relationship with still no solution or resolution. Several similar examples are under study.

Example Three (within a multi-cultural setting)

A represents a research group also and is both an IT developer familiar with the technology of digitalization, who has knowledge of the subject matter. The group has financial support for digitalization. B is in a second research group and also an IT developer familiar with digitalization technology, and the subject. This group also has financial support for digitalization. C represents the institution which houses the subject matter resource and has expertise in those collections and archives, as well as some knowledge of the technology of digitalization, but has no funding for digitization. D wants to control the distribution of digitalized materials by contract in the name of a non-profit organization. Representing a fourth party in this case, he has no archives and, no technological expertise, but is familiar with the subject matter. A and C are both living in a Chinese cultural environment.

The story is:

A, B, C, and D are an inner core of a specific project interest, but located in different countries. They have become much closer than would historically have been expected, but

a common interest in digitalization has brought them together. A, B, and C have been working on digitalization for several years, mainly in terms of the metadata of the data and holdings. In addition to the domain knowledge of their field, A and B are well versed in IT and C has the access privilege to subject matter holdings. With some financial support, A, B, and D have had enough financial support to be able to meet and discuss the digitalization work at least twice a year. Usually, C has not been able to attend for lack of travel funds.

Over a two year period, the digitalization work had developed enough that it could be made available to other scholars and researchers. At that time, D proposed to initiate a cooperative organization under D's institutional name to combine the work of A, B, and C. Under this proposal, D would fund A, B, and C to continue digitalization projects, and D would have free access to the database. Once finished, the database would be freely and universally available scholars and institutions.

Free access was an attractive concept, but under this arrangement A, B and C's, ownership of intellectual property rights would be uncertain. A, in particular, was displeased with D's role in this scenario. It appeared D would end up controlling and/or owning the database, getting credit, but having made no more than a small funding contribution to the entire project.

This dispute remains unresolved.

Discussion of Case Studies

In none of these three examples does Mason's (1991) concept of privacy, accuracy, property, and access seem to help with the disputes, controversies, and bad feelings among the scholars. Digitalization changes the scholarly hierarchy as the process becomes more

important than the changes made. The application of Chinese ethics to information can be helpful in solving the disputes and controversies which happen in cross-cultural and Chinese-cultural collaboration, especially in the case of intellectual property rights. In other words, issues of intellectual property rights or of access and professional loyalties involving collaboration by several parties in the preparation of digital data archives in the information age might be better approached not from a legal aspect, but from Chinese concepts of fairness in relational ethics.

Other Ethical Issues

A related area involving conflicts between Western and Chinese ethical values centers on archeological matters stemming from the 1920s when many ancient Chinese artifacts were (in the modern view) pillaged by foreign collectors, and which are now in the possession of, but do not belong to, various libraries, museums, or private collectors around the world. These objects from our ancient heritage have been historically treated as private and exclusive goods, even creating fortune for those who restrict access, keeping them out of sight for long periods of time. In the information age, however, the situation is changing. Digital data and archives created from the collections of libraries, and museums, are like Virtual Goods, an equivalent of the real artifacts in libraries and museums. Due to technology, these can be easily and freely accessed by all people.

However, there are obstacles to the ideal of open access through digitalization. The required sophisticated information technology is not universally available, nor is it shared among every country. The rich nations created, and there still remains, the Digital Divide. Thus, access to the Virtual Goods of ancient heritages is still restricted, while the real goods remain sequestered in museums and collections not free to people.

The new global technical environment calls for a different look at the ownership of

information, with a new ideology in order to avoid continual global disputes and fighting. According to Chinese ethics, no matter whether artifacts of ancient heritages are Real Goods or Virtual Goods, they are the records of human civilization which belong to all humankind, to all the people, and should be made accessible in the public domain freely to everyone. All governments as well have a responsibility to bring this to pass. Henceforth, the mechanisms for rewarding information property and the concomitant problems in cyberspace should be reviewed, studied carefully from a multi-cultural perspective.

Chinese Ethics in Cyberspace

“Virtual” means “with the same function, the same utility,” and comes from the same Latin root as virtue. Virtual reality suggests a situation in which artificial objects or settings have the same function and utility as do the real the real ones. Spoken and written languages use symbols to represent thoughts. In this sense, what languages describe is a virtual world version of the reality. Some sayings in Chinese tradition approach the gap between linguistic and external reality from two perspectives. Both Taoist and Buddhist thought have focused on the arbitrary and ultimately unreal nature of linguistic constructs. Confucianism, on the other hand, focused on the ethical imperative to better align linguistic models with reality (known in Confucian thought as “rectification of names”)--to recognize that the reality is not the words, the sentences, or the case described. While in theory there is no need to differentiate between reality and virtual reality, in practice, reality and virtual reality in real life still have demonstrable differences.

A salient difference in cyberspace is the way in which communication changes with different settings and environments, controlled by pseudo-characters. The history of human communication teaches us that oral communication and written communication are

different. Similarly, communication in cyberspace must be based on different assumptions from the old ones to which we have become accustomed. In cyberspace, a real person can become virtual, and vice versa. How people react in cyberspace is similar to how they act in a play or drama, or even similar to how they relate to the author or the subjects while reading a novel. People have different attitudes toward cyberspace than toward their real life. In cyberspace, most people assume they can do anything as a pseudo-character without any responsibility for language or behavior which contravenes law or violates real world ethics. That is why many suspects in cyber crime cases profess to believe they were not breaking the law within their virtual roles and pseudo names, a rationale that sounds logical at first glance. However, as long as the deed hurts someone or does real life damage, it is wrong whether or not it was carried out in cyberspace. Free thought is allowed in all kinds of communication, but actions and behaviors involve a price associated with consequences. This is a philosophy of Chinese ethics that appears a natural fit in cyberspace matters.-

According to Chinese ethics, to communicate with a real person face-to-face or by writing will be different from the way one communicates with a virtual character over the Internet. If the virtual character is a friend in the real world, then the relationship with a friend is the baseline. Otherwise, the relationship with a stranger (the virtual character) or other objects will be a totally different concern. This principle is also appropriate for facing and dealing matters or incidents that happen in real life and the virtual world..

As previously discussed, Chinese ethics emphasizes social justice, fairness to everyone, and the harmony of human relationships in society. In cases of cyber crime, such as a hackers' invasion of a database, this behavior has caused real damage such as

reading someone's personal without their consent, stealing information constrained by certain restrictions, and so on. Damage occurs though nothing may have been removed from the database. In real life, hackers violate both privacy and also the rules of fair access by abusing their technologically privileged skills. In addition, people are made to feel uncomfortable, insecure, and worried by the hacker's actions, doing harm to the harmony and peace of society. In terms of Chinese concerns with social harmony, there is no doubt that hacker behavior is unethical even in cyberspace. Therefore, protection and respect for everyone in the real world is a priority concern no matter whether the threat is from a real person or a virtual character.

Conclusion

A human society assumes people are more or less rational. Traditional societies have largely relied on face-to-face interactions and communication. With the advent of the mass media in modern society, communication became multifaceted and much more complicated than in previous times. However, ethical principles are much the same, that is, human dignity, social justice, reciprocity, free expression, equal distribution, assertion of cultural difference, and so on. In practice, ethical issues have always been ambiguous in different societies.

In an information society, people are facing a very new world, with new knowledge, new experience, and new behavioral patterns. In these new cultures, ethical issues must be different, or at least have different dimensions in practice from the old. Mason's (1991) assertion of information ethics can be a starting point; however, all his four ethical issues need to be studied further, especially in the case of international collaboration among content holders, Internet developers, and distributors.

A global society balances both local and global concerns, needing to learn from the multiple value systems involved, it may be that Western ethics and legalities by themselves are not sufficient to deal with problems caused by virtual characters on the Internet. Nor are they sufficient to help scholars from different cultures who m collaborate on digitalization projects. Intellectual dialogue should consider not only technical and disciplinary issues, but also philosophical reasoning about ethical principles as they impact cyberspace behaviors. Virtual character, cyberspace, and information ethics should be reconsidered in the dialogue of intellectuals. As Fe (2001) said, “I hope, ‘Consilience but preserving diversity’ will be a shared common ground while reconstructing humanities in the rapid developing technological society.... We must live together in peace, with collaboration to fulfill the work of reconstructing the humanities in using technology.” The authors propose that Chinese ethics mainly suggest “consilience (Wilson 1998) of the real world, and fairness and justice in a society, as the supreme concerns in human society.” This can be another approach to studying the problems occurring in the virtual world and for collaboration in digitalization.

Notes

- 1 In the early 1980s, Dr. Hsieh was the first person to build a full-text database on the history of the 25 dynasties in Chinese. He also invented CCCII (Chinese Character Code for Information Interchange), which has been adopted and used by most East Asia libraries in the United States and Taiwan. In addition, he was first to lead the research project of the National Digital Museum in Taiwan in 1998, and is office director for the National Digital Archives Program (NDAP). Since 1997 he has been a visiting professor and scholar to Peking University, Kyoto University, and the University of California-Berkeley.
2. According to a 2001 survey by the Internet Software Consortium (Kiiski and Pohjola, 2002, pp. 297-298), “in January 2001 there were 110 million computer hosts on the Internet.” By comparison, in January 1991, the number was only 376,000.
3. In the early 1970s, Ching-chun Hsieh led a research team on “The Statistical Study of the Chinese Character Set for Computer Uses” (Lin, [1973](#)[1972](#)). Another

- research team led by Dr. Hsieh focused on computer storage and representation of Chinese characters (Hsieh, ~~Du~~ & ~~Su-hong~~Chi, 1973). Later, a compendium of the research work on Chinese characters was published (~~Da-jen~~Liu, ~~Min-wen~~Du, ~~Ching-chun~~Hsieh, ~~Chung-tao~~Chang, ~~Chung-chuan~~Tsai, & Lin, 1979). Later this dictionary was used for the development of CCCII (Chinese Character Code for Information Interchange) as well as being used by Japanese scholars in computerization of Kanji (word for Chinese characters).
4. The former Minister of Finance, K. T. Lee, promoted a movement called “To Reinforce the Sixth Ethics” a few years ago. It focused on the relationship of individuals and their organization (society). But his promotion did not gain much attention for many people believed the six ethics is included in the *Five Ethics*.
 5. Three key persons, Lewis Lancaster at UC Berkeley, Testuya Katsumura at Kyoto University, and Ching-chun Hsieh at Academia Sinica, helped conduct this study.
 6. See the details in X. T. Fe (2002, October 8-10). “A retrospect to the 20th century and a foresight for the 21st century: The development of science and technology, and the reconstruction of the humanities,” a keynote speech delivered at the Conference on Modernization and Culture, held at the National Library, Taipei.

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