# The Impact of Information Technology on Korean Culture

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#### A. Industrialization and Korean Society

For the past quarter of a century, Korea has experienced unprecedented sociocultural changes in her history, both in quantity and quality. The changes mainly emerged from the rapid pace of economic development, together with industrialization and urbanization. Culture process during this period may be characterized as industrialization. It required fundamental readjustment to the traditional mode of life, based upon an agricultural subsistence economy and the width and strength of change have been unmatched.

Industrialization is a matter of not only science and technology, nor is it a matter to be considered in terms of economic development only. As a matter of fact, industrialization is a complex process, in which technological change affects all other aspects of culture, including social organization, politics, economics, and religious beliefs, and vice versa. Thus the wave of industrialization has reached every corner of Korea society. No one could remain unaffected from the changes it brought about.

The most notable change in the sphere of the social organization appears to be the exodus of the rural population into urban areas, namely rapid urbanization. Urban industrial sector needed more labor forces, especially in the fields of manufacture, which were subsequently filled by rural-to-urban migrants, known as "peasants in the cities" in anthropological literatures. Now more people live in cities, and the population engaging in agriculture has been reduced to less than one quarter of the total population by 1985.

The population rearrangement has led to changes in the traditional pattern of human relations, based upon family and kinship. Now kinsmen are scattered throughout the nation, and, due to the lack of face-to-face contact, well integrated organization among the kinsmen is no longer possible. In addition, the way of thinking, and the way of perceiving the world around them in

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particular, has also undergone a marked change.

Although, statistically speaking, the tertiary sector of industry including services has grown to more than 50% of the total industrial structure, Korea basically remains to be an indutrial society. From various indications, however, it is not difficult to find that Korea is rapidly approaching the threshold of the information society. Technological innovations based upon the development of microelectronics have reached every corner of the Korean society, especially turning into the 1980's. While the average citizen hardly notices that little chips which have brought about the information revolution, microelectronics affects our lives in various ways. If we look around ourselves, we can easily see that microelectronics is not far from us. Wrist watches, calculators in our pockets, telephones, typewriters, personal computers, and many of our home appliances are made possible by the microprocessor revolution.

The information technology that transformed many countries with advanced high-tech from an industrial society into an information society is thus quite rapidly capturing Koreans' lives. Every household in Korea is expected to have at least one telephone by 1987. Without the development of microelectronics, it wouldn't be possible. The technological innovations, especially taken place in the field of communication alone, have made a considerable impact on the everyday life of Koreans. They are now exposed to far more information than ever, which would undoubtedly affect their behavior.

This paper attempts to examine the ways by which the newly arrived information technology, and microelectronics in particular, does and will affect the Koreans' way of life. Here we regard the information technology as a newly added element on the culture process of Korea. It goes without saying that information technology has not originated in Korea, but is an alien cultural element. The new technology does not remain to be just one more additional element. Instead it has undergone active interaction with the existing culture elements. Before we proceed further, it is necessary to say something about the components of a sociocultural system.

## B. The Nature of Sociocultural System

A sociocultural system may be defined as the culture possessed by any distinguishable group of people. Like all other living beings, man is confronted with the problem of adjustment to and control over his environment.

social and natural. In order to effect the adjustments, man has mobilized various adaptive mechanisms including tools, customs, language, political system, religion, etc., which we call "culture". These consist of the way of life of the people. Along with Leslie A. White, we may distinguish these classes of cultural phenomena into three categories including technology, social organization, and philosophy, or the ideological component. Each of these components is not independent, but is closely interrelated so that we may consider the culture as a whole as a system.

Man is required to maintain a certain minimum adjustment to the external world. There must be food, protection from natural forces, and defense from enemies. These are done by technological means. The sociological component of cultural systems such as institutions, rules and patterns of interpersonal relationships, etc. makes social life possible, providing an order to the social process. And the ideological sector of culture, or the philosophy, is an expression of experience. It may be either naturalistic or supernaturalistic. "Man needs courage, comfort, consolation, confidence, companionship, a feeling of consequence in the scheme of things that life is worthwhile, and some assurance of success." (White 1959:9) It is the business of the ideological sector of culture to serve these needs.

There must be some other ways to divide the culture system into more sectors in detail. It must be pointed out, however, that none of the component parts of a culture system is independent from the other. Culture is an interactive process: each culture trait, or constellation of traits, acts and reacts upon others, forming from time to time new combinations and permutations. We may think of the interactive process of culture as a stream flowing down through time (White 1959: 16). Innovations including inventions and discovery are the names we put on the new combinations of novel synthesis of culture elements. The stream of culture undergoes constant changes of its content as well as form. From time to time, however, new elements are introduced into the stream of culture. Going through active interactions with the existing culture elements, some may survive in a modified form, and others drop out if they become incompatible with their respective context in the stream. The new elements may be additional, or replace the old elements. In addition, it should be pointed out that the new elements may produce entirely new cultural elements through the interactive process with the existing elements. Thus, with the new cultural elements, the stream of

culture at any given point of time is no longer the same as before.

#### C. Information Technology and Korean Culture

With the concept of culture process in mind, we now turn to the arrival of information technology, or microelectronics in particular, to the Korean culture. Surely the information technology which is a product of western civilization, or modern science and technology, is entirely a new cultural trait in Korea. Although it is just one component of a culture system, it is widely recognized that the new technology has been powerful enough to reproduce numerous technological innovations, which we do not hesitate to call "information revolution". We may say that now we live in a world put together by information technology. As John Naisbitt(1984:11) puts it in his MEGATRENDS, "innovations in communications and computer technology will accelerate the pace of change by collapsing the information float", bringing sender and receiver closer together.

The information technology in Korea is just beginning, as compared to such technologically advanced countries as the United States and Japan. In the most part, its application is limited to the industrial and business sectors. The frontrunner of Information Age, namely the personal computer, is yet to be widely known and still an object of curiosity. However it would be difficult to find any Korean home that dose not have any single product utilizing microelectronics. As a matter of fact, we are now surrounded by a multitude of little *i.c.* chips which are epuipped in various industrial products around us, including digital watches, radios, T.V.'s, electronic games, and such home appliances as refrigerators, washing machines, microwave ovens. Some products were made possible by the development of microprocessor. But, in many cases, the microprocessor is being used to improve what we already have···cars, manufacturing, sewing machines, telephones.

The leading example of information technology in Korea appears to be telephones. Even until the 1960's, homes with a private telephone were ranked very high on the scale of socioeconomic status in most social surveys in Korea. The other two prominent indexes were to own a car and a piano. Time has changed. Now it doesn't take much time for anyone to have a private telephone installed in their home, on request. The telephone is no longer a symbol of high socio-economic status, but has been reduced to a

home necessity. Of course, telephones were long used before the development of the microprocessor. But it was due to the development of microelectronics that the heavy shortage of telephones has been met.

One of the important features in modern Korea, especially in the field of social organization, has been the wide dispersion of close kinsmen. It was an ideal for kinsmen to live together in a lineage-based village in traditional Korea. Despite the physical distance, they want to maintain close tie among themselves, as before. Now the development of modern microelectronics, especially telephones, puts them together and helps them keep kinship solidarity. Long-distance phone calls can reach almost everywhere throughout Korea directly or within a few minutes through an operator. With the help of the microprocessor, the traditional physical space had been losing its importance and people's concern with conceptual space connected by electronics has increased.

When telephones were not widely available, people had to move in order to transfer messages. But now the information itself flows electronically. In a sense, it may be said that the modern information technology makes the traditional social organization, in a modified form, survive. With industrialization and urbanization, kinsmen who are now widely dispersed have considerable difficulties in maintaining close contacts with each other, in a physical sense. Without close cantacts, or face-to-face contacts to be specific, intimacy can not be developed or maintained among kinsmen. And this would result in the disorganization of the traditional form of kinship system. However, information technology entered upon this scene and performed an excellent job in holding the boundary of kin group intact. We may regard information technology as an integrative mechanism in the sense that it has served as a means of networking among members of society, and kinsmen in particular. The telephone as an information technology has been well accepted without any problems in Korean culture. It is interesting to note, however, that it served well in reaffirming the traditional mode of life, that is, to maintain close tie among kinsmen.

With the development of microelectronics, many "amazing" new electronic products have been appearing and undergoing active interactions with the existing cultural elements in Korea. Progress made in the field of new media seems to be far behind the level of the most advanced countries, but highly significant. Facsimile, POS, small business computer, wordprocessor, and

personal computer open a new era of office automation in Korea. But these are mostly limited to the business sector. Progress made in broadcasting media, and audio-visual technology, is remarkable so that the options for its citizens are increasing. The number of privately owned VTRs in Korea is said to have already reached over one million sets. This compact machine gives its viewers a variety of options, even including opportunities to enjoy viewing pornos at home. These new medias broaden the information network of the people, and bring the advent of the information age one step closer, providing multiple options.

By May of 1986, the number of bank credit cards issued in Korea has reportedly reached two million. Without the progress of computer technology, this would not be possible. As a matter of fact, financial institutions including banks and insurance companies are now entirely dependent upon the microprocessing technology for their operation. They are offering various service programs with the help of high-tech. Although the home banking system, connecting between home and bank, of advanced information societies is yet to be known, the progress already made in this field has been remarkable in terms of networking, that is, connecting different sectors of a sociocultural system such as work places, banks, and business sectors.

Entering the 1980's, personal computers made in Korea began to appear on the market. For a while, it gained its popularity at a high speed. But it has been losing its popularity gradually for the past 2 to 3 years. Government authority also had made considerable efforts to stimulate computer-minding. A multitude of computers were installed in educational institutions of various level throughout Korea. But manpower to teach and softwares to attract the trainees did not follow. In some cases, bureaucratic tendency to avoid the trouble of getting the machines repaired led to computers being locked up in a room, or covered with a sign warning "Don't touch with your hands" (or ch'oksu-gumchi).

The trouble that personal computers encounter in getting widely accepted in Korea seems to come from the conception of the "computer" itself. Average Koreans seem to regard the computer as a calculating machine: they hardly think it is a machine for office automation. Thus, in many cases, personal computers at home have been treated little more than game machines. Furthermore, when parents realize their personal computer becomes a source of trouble, in the sense their children spend more time playing com-

puter games than doing school work, the computer finds no room in a home setting.

As the personal computer becomes cheaper, value of the machine begins to be known. It is, however, still a long way to go for the personal computers to be widely accepted for office and home automation. It must be pointed out in this connection that many Koreans do not have a good sense of importance of the softwares. They often think softwares are "free", to be supplied by the hardware makers. Such conception blocks the way to develp good softwares.

Korean culture does not have any good tradition of typewriting. Average Koreans are not accustomed to touching keyboard of a typewriter or a computer. I think this is a part of the reason that the wordprocessor is not yet widely accepted in Korea. Although wordprocessors are still very expensive, there are many other ways of utilizing the wordprocessing functions of much cheaper personal computers. Traditionally, scholars and writers had placed a high value upon hand-writing. I think the tradition has not been changed much. It is not a matter of "I can't type", but "I won't type, my secretary would do that". It is interesting to know about the names of two Korean-made wordprocessors: Myong-p'il, or an excellent writing or noted calligrapher, and Chang-won, or the person who won the first place in the higher civil service examination during the Yi Dynasty.

### D. Concluding Remarks

The information technology is quite a new trait appeared on the culture process of Korea. This technology is indeed a very complex sub-system, and it contains numerous parts interacting each other. It is also not an isolated trait. Instead, the information technology has entered into a very active interaction with the existing cultural elements in Korea. So far it has served well as lubricants for a smooth operation of the sociocultural system. But the full scope of the information technology is yet to be known. With the development of information technology, Korean culture would experience further internal adjustments following upon the acceptance of alien traits or patterns, and innovations coming out of new combinations of traits.

#### References

Burke, James, et. al.

1985 The Impact of Science on Society, Washington, D.C.: NASA.

EPB(Economic Planning Board) (ed.)

1984 Korean Economic Indicators, Seoul: EPB.

Evans, Susan H. & Peter Clarke (eds.)

1984 The Computer Culture, Indianapolis, Indiana: White River Press, Inc.

Naisbitt, John

1984 Megatrends: Ten Directions Transforming Our Lives, New York: Warner Books, Inc.

Reid, T.R.

1984 The Chip: How Two Americans Invented the Microchip and Launched a Revolution, New York: Simon and Schuster.

Simons, Geoff

1985 Silicon Shock: The Menace of the Computer Invasion, New York: Basil Blackwell.

Stoler, Peter

1984 The Computer Generation, New York: Facts on File Publications.

White, Leslie A.

1959 The Evolution of Culture, New York: McGraw-Hill Book Co.