CYBERSPACE AND THE INFORMED RATIONALITY OF LAW*

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ABSTRACT

Pervasive use of information system forms an irresistible force in shaping nearly all lives of our society. It poses great challenge to the previous legal system and requires special attention from the academic field. The purpose of this article is to identify potential change of legal systems in cyberspace, and to deal with the correlation between enhancement of legal literacy and the informed rationality. The article applies Weber's two-dimensional coordinate system comprised of "formality" and "rationality" and expands it into a three-dimensional model by distinguishing "informability" and "uninformability". The article also considers the relationship between internal and external control over the cyberspace order. Finally, the article discusses the infeasibility of the idea of computerized justice system.

Keywords: cyberspace, informed rationality, law, legal literacy, computerized justice system.

INTRODUCTION

Inventions and innovations during the last two or three centuries have revolutionized the landscape of human society, that has a recorded history of several millennia. Change, which could take a variety of styles, is not inevitably equivalent to advancement and improvement. Consequently, both constructive changes and unconstructive changes, both active and passive changes have been taking place where there are appropriate conditions and contexts. Pervasive dependence on computer information systems since the 1940s is one of such changes that utterly improves the general excellence of social life on one hand, but inexorably worsens certain aspects on the other. Contemporary society steps into an inconvertible position of deep addiction to this artificial instrument: while the

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efficiency of production has been constantly enhanced, the foundation of conventional social control is challenged and shaken.

Information systems could hardly be considered as of either beneficiality or harmfulness according to an amalgamated criterion. Any criterion is unavailable due to the diversity of people's attitudes towards the value of overflowing information. The general public, nonetheless, have always been predisposed to pose it as a positive factor that assists interpersonal and international communication. The common use of "information systems" and of various other relevant terminologies, as a result, is, in a sense, any not neutral, but value-laden. It is as good as any spiritual and material asset. Some others also recognise the difficult issues in identifying the real value behind the surface of the illusory common knowledge about this new technological and social phenomenon: people connected through information systems might neither necessarily be as good as within a formally rational regime as Max Weber stated, nor necessarily be as bad as in "bellum omnium contra omnes" (Lat. the war of all against all) as in Hobbes' *Leviathan*[1], nor as ideal as in Plato's *Republic*, and Thomas More's *Utopia*. All the possible views are, however, in existence in defining the sphere of legal status of cyberspace.

This article will be devoted to identify the change, if not all improvements, of legal systems in the environment of information systems. It will first define the sphere of this discussion to exclude the so-called virtual space from cyberspace, pointing out that the virtual space, in the psychological and imaginary sense, is not relevant in addressing law. The article will be subsequently concentrated on issues of legal literacy. Information systems improve the enhancement of legal literacy on one hand; it posits the focus on informed rationality on the other. Formal rationality is one of the four ideal forms of law and legal thought constructed through Weber's two-dimensional coordinate system including "formality" and "rationality". (See Milovanovic, 1994, p. 40–47). The article depicts the revised model of Weber's ideal form of law and legal thought, by introducing Weber in a three-dimensional coordinate system. The article also considers the relationship between internal and external control over the cyberspace order. Finally, it discusses the infeasibility of the idea of computerized justice system.

[1] The Latin phrase itself was first presented in the preface of *De Cive* (Lat. *The Citizen*): "Ostendo primo conditionem hominum extra societatem civilem (quam conditionem appellare liceat statum naturae) aliam non esse quam bellum omnium contra omnes; atque in eo bello jus esse omnibus in omnia". (Hobbes, 1839, p. 148). I demonstrate in the first place, that the state of men without civill society (which state we may properly call the state of nature is nothing else but a meere warre of all against all; and in that warre all men have equall right unto all things.) The English translation is cited from a version printed by J. C. for R. Royston, at the Angel in Ivie-Lane, 1651 (available online at http://www.constitution.org/th/decive00.htm).

EXCLUSION OF CONCEPTUAL VIRTUAL SPACE

During the 1990s, there emerged many comments conceptualizing cyberspace as an unadulterated and uncontaminated "virtual space" (Mason, 1998), without any involvement of people, society and state. Neither would cyberspace invade and infringe society, nor would society invade and infringe cyberspace. Under such a perspective, cyberspace could be explained as a space mirage existing in information-systems-facilitated games, communications and germane economic transactions. The most noteworthy instances were those where "virtual rape" was perceived by a number of authors to be committed (Dibbell, 1993) and losses of virtual property were undergone (The concept of virtual property has been defined in various ways, particularly in articles written by different authors representing various disciplines; for a few examples, see Bartle, 2004; Fairfield, 2005) by cyber game role-players. Under such circumstances, I understand that a virtual space is an imaginary space (not necessarily a place) where real human individuals exist and behave behind a curtain of sign, symbol, or graphic-being represented by bits and bytes of digits. Virtual rape is not a human physical experience but one during which a feminine sign, symbol, or graphic-being manoeuvred by a human player (not necessarily a female) is subject to a position of similar psychological and imaginary suffering through activities performed by a masculine sign, symbol, or graphic-being manoeuvred by another human player (not necessarily a male). Thus far virtual rape is not rape in the legal sense, even to the dawn of the information age.

A virtual property is a sign, symbol, or a graphic-being available with the cost of real money, that is, it has use value and exchange value and is a commodity, even though it exists only within the sphere of information systems.

While we are barely convinced to accept a case where virtual rape is comparable to real rape and subject it to the criminal justice system, we are prone to confirm the status of virtual property as real property, because it has the same attributes as that of a real property: exchangeability through the intermediary of money.

Once "virtual property" enters the sphere of circulation through the intermediary of money, be it a sign, a symbol, or a graphic-being, it becomes a thing that we are measuring through such a ruler as value. It does no longer stand still in a pure psychological and imaginary sphere as ambiguous as virtual rape. It comes out of virtual space and goes into real life. If we own this "virtual" property valued one million dollars, we are millionaires through the value of this sign, symbol, or the graphic-being. If burglars or robbers take this "virtual property" away from us, we are suffering loss. It is now no longer "virtual" at all.

When we explore law in cyberspace, we are not discussing about anything that is so unperceivable as virtual rape, or virtual space. Rather, cyberspace is simply an extension of the real space, of our society. It is the extension of this society through the facilitation of information systems that connect many people

in different temporal and spatial distributions into globally accessible, 24/7/365 available, and linguistically-interpretation-powerful networks. Society has been a web, but this is a new style social web with intervening factors of machine filling situated in the human-human interaction process. The new social web is constructed more by instant and remote chains of human-machine-human interactions. The quantity of face-to-face human-human interactions decreases and its role weakens.

The social order along the newly-emerged social ties, however, would not be expected to turn over the fundamental social order. Rather, the conventional social order would be to operate continuously with the assistance of machine-enabled mechanisms. People, societies and states should not enter a cave or hole as virtual as a psychological and imaginary space and begin their exploration into the value of existence from the beginning of history. Law and order would become more realistic and simplified if our conventional mechanisms run in the same to operable way as in the past. Cyberspace thus gives more sense to the extent that its existence empowers the existing social order, regardless of its reasonable or unreasonable character. In sum, the creation of cyberspace extends the sphere of existing society, but does not carry the function of undermining the current society or separating it from its traditional frame.

IMPROVEMENT OF LEGAL LITERACY

Although cyberspace would not be as bizarre as a society that is as virtual as a psychological and imaginary phenomenon, it would bring about changes relevant for the present status of society. Cyberspace is a new field and a new frontier that runs law and order of our society as a programme. It does more than merely copying, duplicating or repeating conventional modes of law forms and legal thought.

The quality of the legal framework and the effect of its operation are severely dependent on the legal literacy of citizens. Traditionally, legal illiteracy is not even a reason for citizens to be more or less excused, because there is such legal maxim as “ignorantia juris non excusat” (No one should be excused for his ignorance of the law). Here, by legal literacy, we refer to the condition of people knowing law and thus becoming subject to the order under the constraint of law.

As far as legal literacy is concerned, the degrees to which literacy exists differ from one person to another. There are persons (citizens) who are rather legally illiterate, persons who are more or less legally literate, and others who are highly legally literate. Certainly, there is hardly one who is absolutely legally illiterate and one who is completely legally literate. Literacy exists on one certain point along the line of degrees between zero percent and one hundred percent. Thus far, we can list ideal types of citizens according to different degrees of their legal literacy:

1. those who are illiterate and are also legally illiterate of both domestic law and foreign law;

2. those who are literate but are legally illiterate of both domestic law and foreign law;

3. those who are literate and are also legally literate of domestic law but not of foreign law;

4. those who are literate and are also legally literate of foreign law but not of domestic law;

5. those who are literate and are also legally literate of both domestic law and foreign law.

The reasons why citizens are illiterate of law are many, but two of them are of utmost significance: the unawareness of citizens and the unavailability of law.

The unawareness of law was once a primary factor for citizens to hold an alienate attitude towards any law, be it of civil or criminal nature. In many countries in previous centuries, ties with something called "law" were somewhat bad, unfortunate or pertaining to mystery. Therefore, persons who were assigned as subjects operating law would be mystified as a result of their priority over power and knowledge, through such symbolic things as crosiers and ritualistic robes; persons who were involved in legal issues would be categorized as either vulnerable individuals who suffered from infringement or invasion from others, or vulgar individuals who imposed infringement or invasion on others. As a whole, law has not been a usual practise in daily life and social activities. On the contrary, escaping from law and relevant affairs was preferred by the majority of citizens.

The awareness of law has been increasingly strengthened over years due to the seriousness and severity of legal issues being decreased and the position of the legal profession being demystified. The current situation is that even though no one knows everything about law, most citizens know something about law. The legal profession is gradually becoming a profession that is increasingly comparable with other specialities, in Durkheim's words, different divisions of labour in society. Therefore, unawareness of law is gradually becoming a minor reason for citizens' legal illiteracy.

The other important reason for which citizens are legally illiterate is the unavailability of law. In ancient times, the universal practise was that "if the penalty remains unknown to all, its power would be immeasurable." (The words are cited from the comments by Kong Yingda, a Chinese writer in Tang Dynasty on a classic *Zuozhuan* in the volume of Zhaogong.) The function of earlier law was supposedly repressive (See Durkheim, 1933.) With the view to maintain the repressive ruling order, the ruling class needed to grasp, control, monopoly and manoeuvre the legal power. Along with the change of the legal function, the "keeping-unknown" of law became less important in maintaining the mysterious power of the state. Thus this issue became less significant in unavailability of law. The notion was only one side of the coin of the the unavailability of law that kept

law far from the reach of citizens. The other side of the coin was that the specific conditions of transportation and communication in the ancient times made it impossible to inform most population about law.

Thus, the active refusal of law on one hand, and the passive refusal of law on the other, severely impeded the wide spreading of legal bodies, legal knowledge and legal consciousness. The coming of the legal enlightenment did not happen until the end of the Middle Ages. Thomas Paine stated the principle of rule of law in 1776: "For as in absolute governments the king is law, so in free countries the law ought to be king; and there ought to be no other" (Paine, 1844, p. 28).

In modern times, it is not true that citizens are legally well informed. Even today, states are not fully making efforts to inform their citizens about law. However, there is an interfering element in spreading law: the invention of the electronic digital computer and the connection of information systems through the publicly-accessible networks. Once the printing technique and wide-distributed libraries made it possible that every citizen could access available bodies of law. However, availability of law depends on the limits of time and space. Contemporary information systems change the picture of legal availability and accessibility by providing the possibility of superseding the spatial-temporal boundary of looking up a printed copy.

Other facilities and inventions did ever improve the availability of law – we have in view the postal system, telephone, telegraphy, and facsimile. But the severe dependence on human resources and the high expenses implied still left it unreachable to most of the population. Current information systems seemingly overcome the shortcomings of traditional media.

However, we must bear in mind that getting informed about law (or medicine, or doing many other scientific practices) is not like doing dictionary looking-up. What we view, read and understand does not equal what we would receive by reading from specialised legal agencies. Therefore, specialised legal agencies are not substitutable through the common reading of law and widespread legal knowledge. Society should aim at giving its citizens the chance of a better access to law and legal knowledge, so that they could achieve a higher level of legal consciousness. The evolution will help to demystify the legal bodies and the legal profession, to maintain legal rights and limit the arbitrary power.

INFORMED RATIONALITY

When Weber proposed his ideal models of law forms in *Economy and Society*, he had hardly the concern about whether citizens were legally informed or not. Therefore, we could imagine Weber as depicting his models on the premise of

citizens being either completely legally informed or completely legally uninformed. But today, we are confronted with an increasingly deep concern about the issue whether citizens are legally literate or informed, because we are in an age when people are better informable due to tremendous information systems, and they are migratable, due to the powerful transportation mechanisms.

If we could suppose that the ideal model of form of law in the past consisted of uninformed formal or substantive rationality or irrationality, then our model thereafter should be revised as informed formal (or substantive) rationality (or irrationality). Thus we could place Weber's ideal models into a 3-Dimensional coordinate system. Borrowing from Weber's four ideal forms of law and legal thought, plus our extra dimension of informability, then we have (the description part of each item mainly refers to the induction of Milovanovic, 1994, while the part about informability is my own):

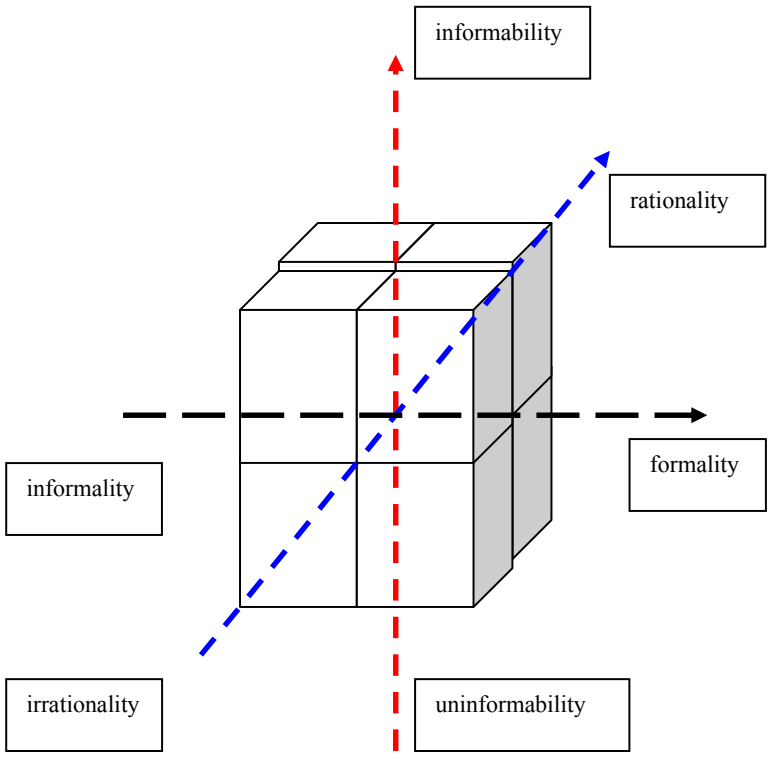


Figure 1. Three-dimensional coordinate system of forms of law and legal thought.

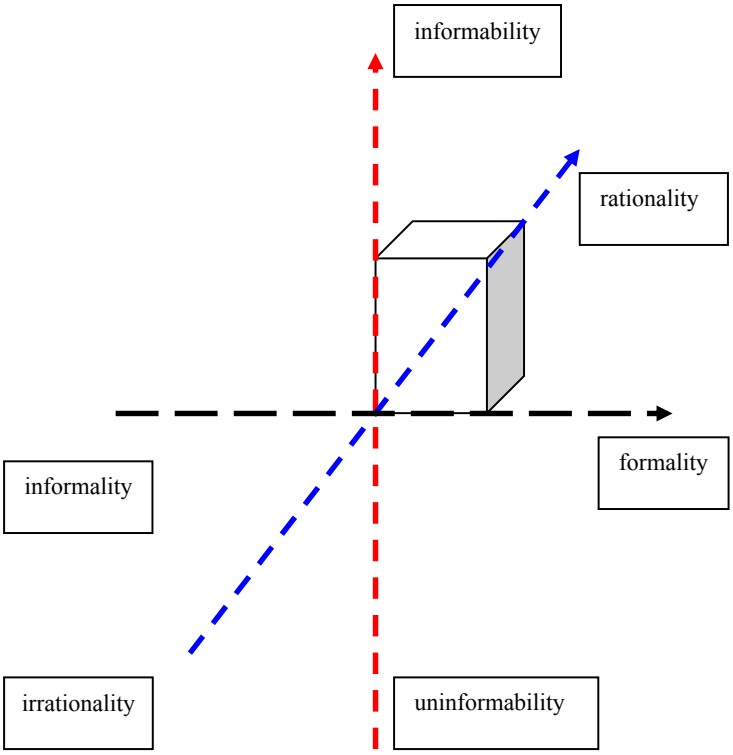


Figure 2. Informed formal rationality.

Informed formal rationality. This represents formal rationality with the subjects informed. Under this model, the legal system was operated under the circumstances where clearly-addressed and clearly-observed rules were applied to all like cases in a consistent form. Similarly situated were similarly treated, without external interference with the decision-making process. Besides, the decision-making process has a higher degree of transparency by ensuring that the subjects are informed about the applicable rules and/or processes. In sum, this model could be trichotomized as unified criterion, due process, and transparent operation.

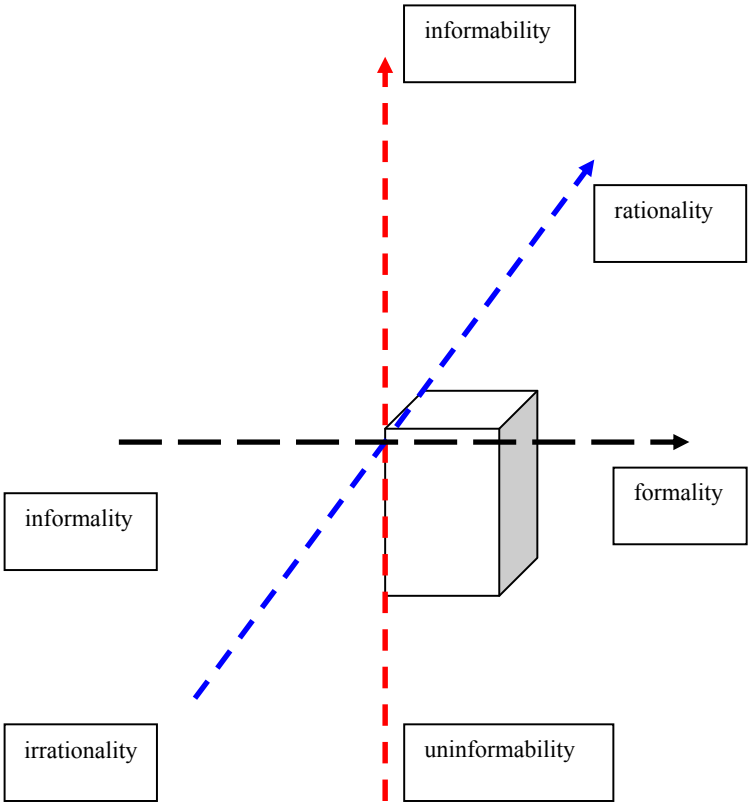


Figure 3. Uninformed formal rationality.

Uninformed formal rationality. It represents formal rationality without the subjects informed. Under this model, the legal system was operated under the circumstances where clearly addressed and observed rules were applied to all as cases in a consistent form. Similarly situated were similarly treated, without external interference with the decision-making process. However, the decision-making process has a relatively low degree of transparency and the subjects are not informed about the applicable rules and/or processes. In sum, this model could be trichotomized as unified criterion, due process, and opaque operation.

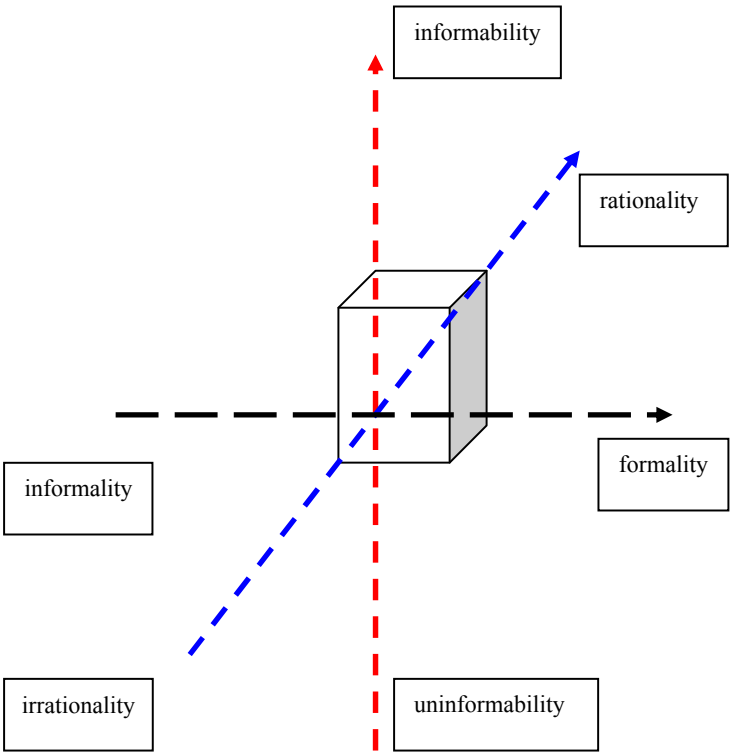


Figure 4. Informed formal irrationality.

Informed formal irrationality. It refers to formal irrationality with the subjects informed. Under this model, the legal system was operated in the process where it was uncertain whether clearly addressed and observed rules were applied to all similar cases in a consistent form. Similarly situated were differently treated, with some mysteriously arranged mechanisms functioning in the decision-making process. Arguably, the decision-making process has a certain degree of transparency by providing opportunities for the subjects to be informed about the applicable rules and/or processes. In sum, this model could be trichotomized as diversified criterion, due process, and transparent operation.

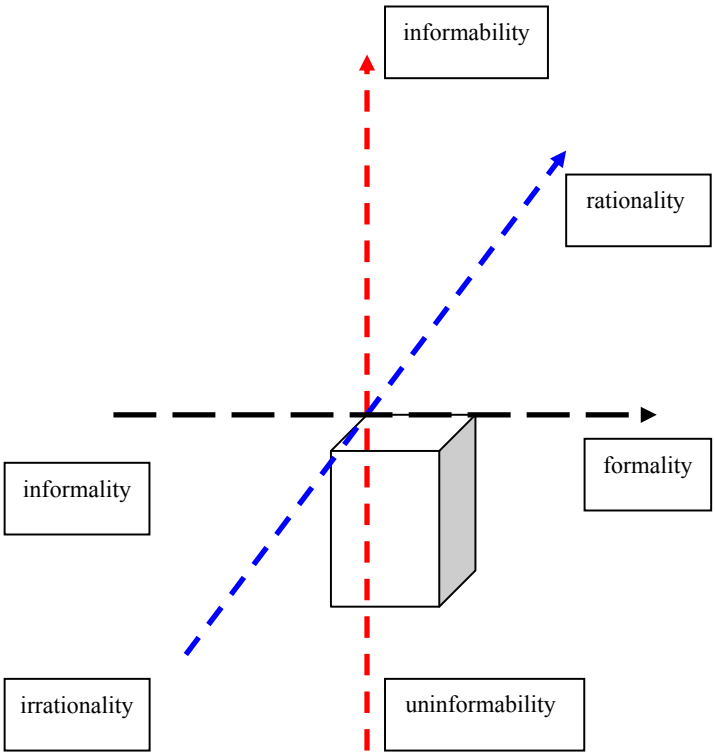


Figure 5. Uninformed formal irrationality.

Uninformed formal irrationality. It refers to formal irrationality without the subjects informed. Under this model, the legal system was operated in the process when it was uncertain whether clearly addressed and observed rules were applied to all like cases in a consistent form. Similarly situated were differently treated, with some mysteriously arranged mechanisms functioning in the decision-making process. The decision-making process was absolutely secret through depriving any degree of transparency by denying opportunities for the subjects to be informed about the applicable rules and/or processes. In sum, this model could be trichotomized as unified criterion, due process, and opaque operation.

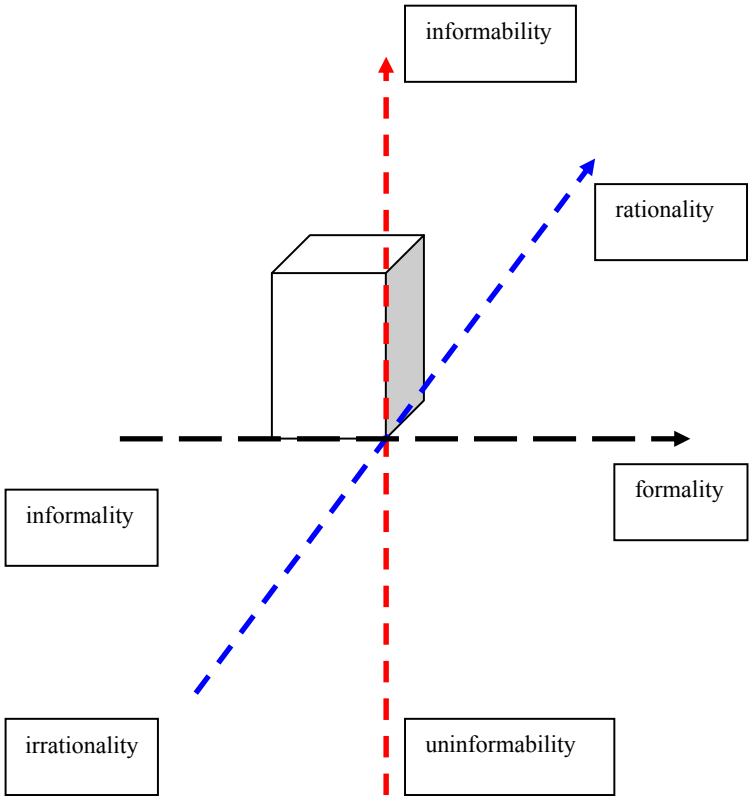


Figure 6. Informed substantive rationality.

Informed substantive rationality. This model implies substantive rationality with the subjects informed. Under this model, the legal system was operated under the circumstances where clearly addressed and observed rules were applied to cases according to the detailed situation. Similarly situated were differently treated, with severe external interference with the decision-making process. Besides, the decision-making process has a certain degree of transparency by providing opportunities for the subjects to be informed of the applicable rules and/or processes. In sum, this model could be trichotomized as diversified criterion, random process, and transparent operation.

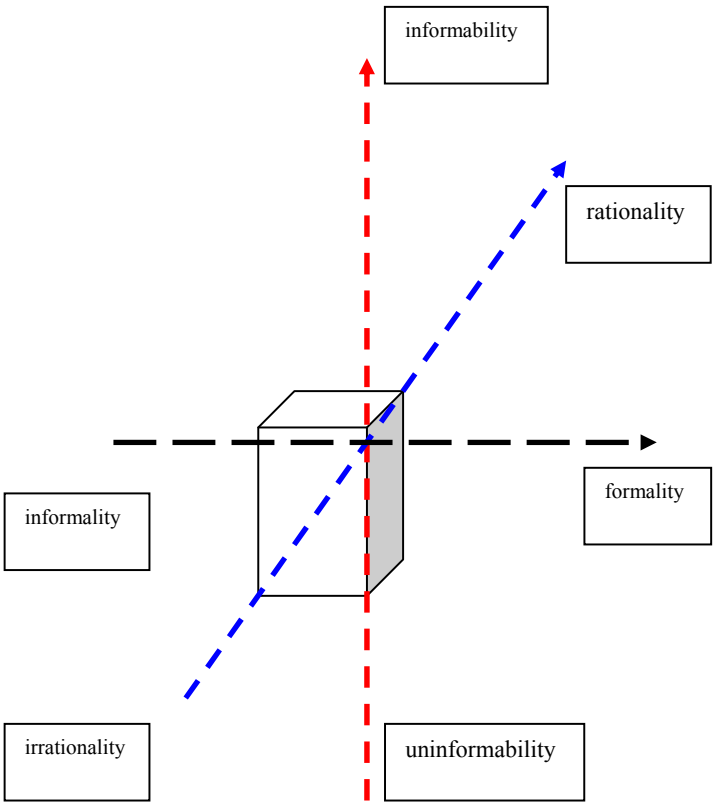


Figure 7. Uninformed substantive rationality.

Uninformed substantive rationality. This represents substantive rationality without the subjects informed. Under this model, the legal system was operated under the circumstances where clearly addressed and observed rules were applied to cases according to the detailed situation. Similarly situated were differently treated, with severe external interference with the decision-making process. Furthermore, the decision-making process has no transparency due to denying opportunities for the subjects to be informed about the applicable rules and/or processes. In sum, this model could be trichotomized as diversified criterion, random process, and opaque operation.

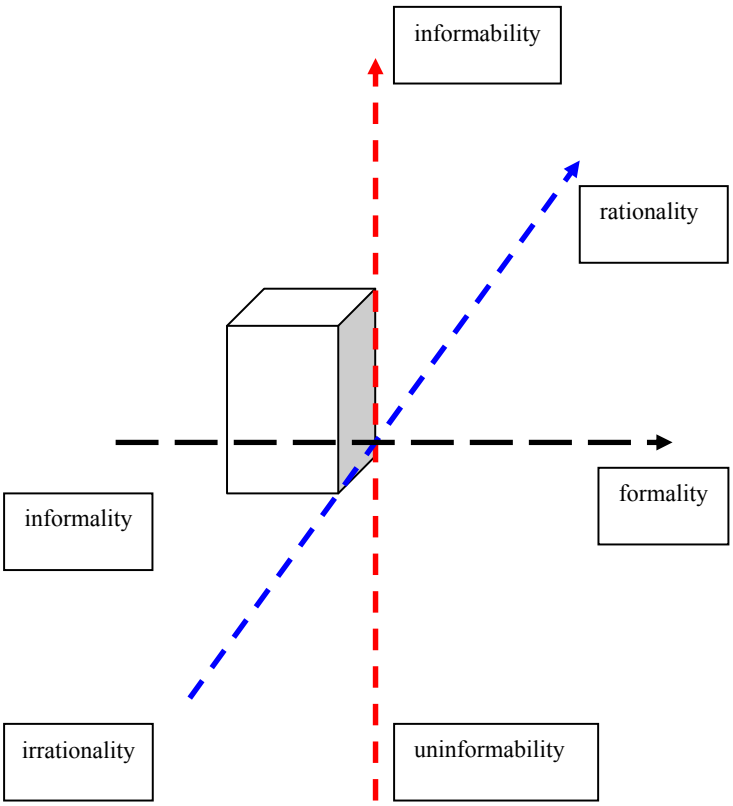


Figure 8. Informed substantive irrationality.

Informed substantive irrationality. Is shows substantive irrationality with the subjects informed. Under this model, the legal system was operated in the process when detailed situation determined the decision. Similarly situated were differently treated, with severe external interference with the decision-making process. Ironically, the decision-making process has a certain degree of transparency by providing opportunities for the subjects to be informed about the applicable rules and/or processes. In sum, this model could be trichotomized as diversified criterion, random process, and transparent operation.

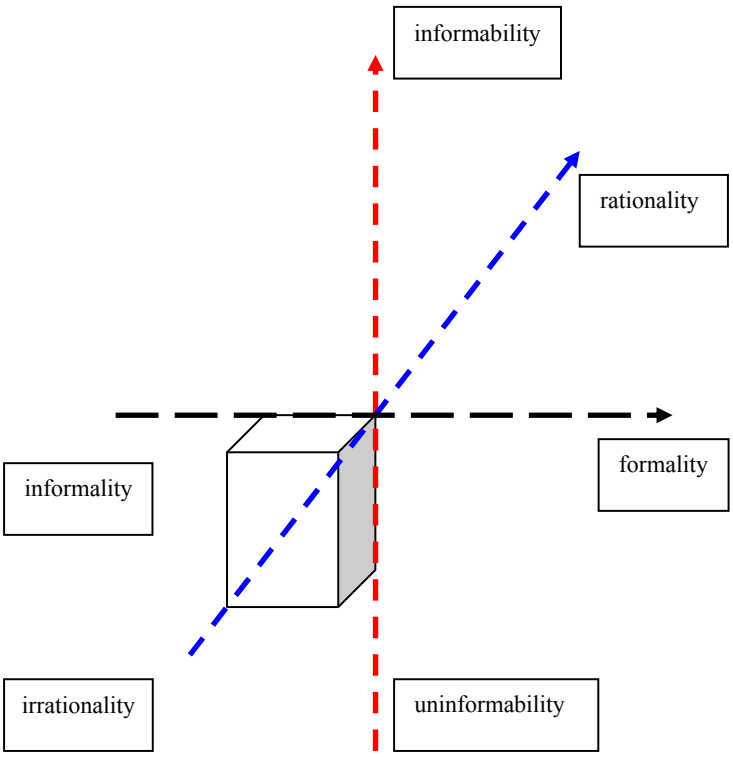


Figure 9. Uninformed substantive irrationality.

Uninformed substantive irrationality. It refers to substantive irrationality without the subjects informed. Under this model, the legal system was operated in the process when detailed situation determined the decision. Similarly situated were differently treated, with severe external interference with the decision-making process. Furthermore, the decision-making process has no transparency due to denying opportunities for the subjects to be informed about the applicable rules and/or processes. In sum, this model could be trichotomized as diversified criterion, random process, and opaque operation.

In the past, the legal form of law sank under he surface drawn between the informed and the uninformed. That is to say, it was located in a certain point within the contour constituted by the points of Uninformability-Informality-Irrationality-Formality-Rationality. Today, it has been raised to the level of being informed. Thus we are talking primarily about the informed form of formal (or informal) rationality (or irrationality), located within the contour constituted by the points of Informability-Informality-Irrationality-Formality-Rationality. That is the upper part of the coordinate system, which is floating above the surface by information systems.

LIMITED CHALLENGE TO THE CONVENTIONAL STATUS OF LEGAL PROFESSION MONOPOLY

In the past, legal profession happened to be highly monopolistic, mainly through the close control of the texts of law: everyone who wanted to know law was denied the chance to know, with the exceptions of those situations when the legal agencies publicized law through some limited fixed form (for example, ancient Romans' *The Twelve Tables*). The legal system was manoeuvred by a group of people who were not necessarily the representatives of citizens and who operated secretly and mysteriously.

The legal profession grew less and less monopolistic due to the evolution of society in general and to the transparency of the legal system in particular. But without citizens being well informed of law, it remained highly secret, mysterious and monopolistic: everyone who wanted to know law was neither denied nor granted the chance, but remained unable to know more.

Rendering public the real face of law has never been fully ensured throughout history. But with citizens highly informed, the monopoly of legal profession is confronted with a strong challenge: everyone who wants to know law is not denied but granted the chance, and is really able to know. The going-online of laws and governance into information systems and the development of the legal retrieval system serves both legal professionals and citizen laymen of access to law. The monopoly of legal profession through control of legal texts becomes uneasy.

The development, however, does not represent a process of breaking up the monopoly of the legal profession in a foreseeable future. Rather, the monopoly is achieved more through control of employment quota and qualification but less through control of bodies of law. This is related to a more important and more complicated issue in which the achievement of the qualification for legal profession could only be possible through the specialised legal training during which only a limited number of people could be taught the legal discourse, which others could hardly grasp through merely reading the clauses of law. Anyway, information systems do not provide systematic law school education. Even if they do, it is still different from what the officially qualified legal professionals received in the original form of law school. The legal profession is thus determined to be monopolistic, despite that the monopoly of legal texts is less strong than before, when there was not any legal retrieval system. In a word, the resistance of the conventional sets of factors of the legal system is not sensitive and vulnerable to the upcoming new challenge.

PRIMITIVE CYBER SOCIETY

Another dimension we are concerned with is related to the legal order in cyberspace. We could find little evidence on whether the cyber society will repeat or replicate the developmental process of the traditional or non-cyber-society. But we have witnessed a lot of statements that impressed us as if they described the state of the emerging societal existence in relation with information systems as in a primitive stage depicted by writers only in the last several centuries. While whether what they have actually experienced or investigated were "primitive" societies is still to be determined, we could find a publicly recognized model of primitive society characterized by lower developed culture, economy and political structure. The similar situation occurred in the inquiry of the cyber society and an impression of primitive cyber society is quite clear in current literature.

Hobbes' Leviathan, and Rousseau's state of nature were relatively pessimistic scenarios. Marxian primitive communist society was a far more optimistic picture than theirs. In this primitive communist society, there was no private property, no class and class struggle, no state, no deprivations. People commonly owned both productive and living materials, commonly worked and lived, and equally distributed products. Only when private property, the source of all evils, emerged did the primitive society become involved into conflicts of interests. Despite all these distinctions between the viewpoints on how the primitive society existed, the twentieth century observers from different standpoints viewed the emerging cyber society as different from those primitive societies observed several centuries ago.

Classic writers wrote on the primitive societies from relatively *post de facto* positions, while the modern writer writes about the primitive cyber society from relatively *priori de facto* positions. It could be safely said that the classical writers hardly ever lived a practical life in the primitive societies they investigated, heard, wrote or imagined. At best they were observers of some of the objects, but their observations were not sufficiently convincing evidence to prove us that these objects were the just models that preceded societies of ours, or more exactly, of the classical writers who were inquiring. In fact, the practical primitive societies of the current mainstream societies remain unknown to present people. Cyber society, however, has been closely witnessed by many of the commentators who write about its developmental process. Therefore, the primitive cyber society might be one of the primitive societies that have ever been mostly investigated and written, if there was ever another one that was investigated and written by writers in person.

INTERNAL AND EXTERNAL CONTROL OF CYBER SOCIETY

Control over a society can be mobilised by either internal or external factors, or in case there is no control at all, by neither internal nor external factors. But it is a rare case where there is no control, or no order at all. However, most writers are claiming that the cyber society is not regulation-free, because order exists everywhere maintained by certain internal or external control mechanisms.

Society could be regarded as representing integrity, of which cyberspace is a part. The order of cyberspace is also a part of the integrative order of society. Cyberspace as a social existence, however, has special patterns and could be defined as a sub-societal unit. The order maintenance in cyberspace, therefore, could be achieved by internal control and/or external control (for society as a whole, it is still internal control).

Those concerned with the organizational forms of cyber society only wrote about what they observed and found. To understand the full picture of the complicated situation of the possible organizational forms of a society, we should use the ideal models of the internal and external control in order to simplify observations and descriptions of it.

Order can be maintained in different degrees and by either internal or external mechanisms. The internal control is the order maintenance through the internal mechanisms within the cyberspace. That is to say, the netizens self-regulate themselves by adopting codes of practice. The internal control is characterized by three considerations: ***1.*** the netizens in the cyberspace could not engage in legislation activities and implement forcibly enacted rules such as constitution or law, but could only compile ethical codes with sanctions limited to the change and refusal of services; ***2.*** cyberspace is a place where inheriting inequality prevails and netizens are situated in an unequal status due to their inequality existent before they migrated into the cyberspace; ***3.*** once established, the internal control has little influence on the external control, but external control has a strong impact on internal control. Based on these characteristics, the decision-making process of the code of practice for the internal control is hardly run with the principle of democracy and mass participation. Rather, these codes are simply drafted by one or two persons who have more concern with their commercial benefits from the service provision, with limited reference to the reaction and comments from the service users. The discretion is at the side of the service providers on the scale.

The external control is the maintenance of order through external mechanisms outside the cyberspace. The pure external control refers to law and order being solely imposed by the state. There cannot exist such external control with the source of power coming from any other organs. When we consider the issue of external control, therefore, we are inevitable to place netizens into the web of real society, which could in no way escape from the constraint of law and regulation.

By referring to internal and external control, we temporarily separate the cyberspace that does not exist without the connection of information systems, from the meat space, that is, society that has existed without information systems but has integrated information systems into its territory. More safely speaking, the frontier between cyberspace and society in the broader sense is only drawn for the convenience of this theoretical framework. Otherwise, I am strongly insisting that the cyberspace should be regarded more as an extension and an integral part of society. What information systems connect are the elements of this society, but the elements of this society do not become independent and connected in a space of their own.

The possible forms of incorporation of internal and external mechanisms could be induced as the following:

1. ABSENCE OF INTERNAL CONTROL, ABSENCE OF EXTERNAL CONTROL

This is a case where neither internal nor external power was installed to operate deliberate control over the order of the cyberspace. It is a rare case with little or no internal or external factor directly controlling over the cyberspace. But there exist arguments that claimed to leave the cyberspace maintained by pure technological mechanisms. This is a kind of preset arrangement, with human factors appearing far behind the appearance of their codes and programs.

Rather than case-by-case judgment over activities in the cyberspace according to existing rules, order is maintained by preset rules that only deal with a variety of situations through mechanical application of unified standard. In sum, this is a kind of technological control, with instant internal or external human elements being absent. The model could be depicted as in the following figure:

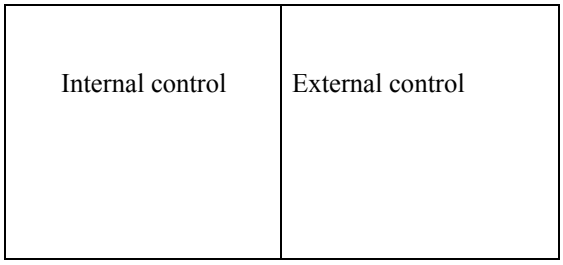


Figure 10. Absence of internal control, absence of external control.

Under this model, the cyberspace was in a state of anarchy (anarchy does not necessarily mean confusion). The advocators of anarchic cyberspace claimed that the cyberspace has been created solely by technicians with technology, in a way which is independent of society, and free from the governing of the state while forming a new existing space. This is a kind of space where the human relationships are in the “null-gravity state”. We can well describe it as the balance

in the unbalance, the order in the disorder. The activities under such circumstances involve lower costs but take higher risks. Without any regulation and control, the Wild West metaphor of the virtual community will be the most appropriate. (Many authors have exploited the metaphor of "Wild West" about the circumstance of the cyberspace. For random examples, see Morris, 1998; Clairmont, 1998, p. E1 and E2.)

Due to the vacuum structure of this kind of cyberspace, the occurrence of collapse and disruption would be inevitable sooner or later. Thereafter, the attempt of internal control, motivated by desire of ownership of interests and dominative power, and/or external control, motivated by maintaining and enlarging existing interests and power, would take place. It is therefore an instable and unacceptable structure.

2. ABSENCE OF INTERNAL CONTROL, PRESENCE OF EXTERNAL CONTROL

Under this model, the internal control mechanism is not established. The order maintenance is primarily the task of the extended control from society as a whole. Although society might have different degree of democracy or autocracy, and it would naturally extend the existing mechanisms into the cyberspace, for the cyberspace, an autocracy was created with the absolute and exclusive external control, without a position of internal control, that is, through the participation of the Internet users.

This autocracy is not an autocracy in its true sense, where a society is controlled by a few people who arbitrarily exercise control over the majority. Here, the cyber autocracy was only under the pressure from outside the cyberspace, lacking any internal control mechanism.

In addition, autocracy is not one fixed model. Rather than an absolute form of autocracy, its possible forms might differ from each other by the degrees of autocratic nature. At the same time, cyberspace differs from society as a whole according to the degree in which control power is enjoyed.

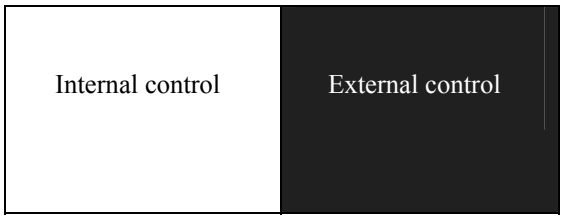


Figure 11. Absence of internal control, presence of external control.

If netizens enjoy few rights to organize themselves, and the government maintains the order solely, the cyberspace could be subject to a higher degree of autocracy, and vice versa. The current situation is that the government polices the cyberspace in the same way as the traditional society. The rate of the cyberpolicemen to the whole population of netizens is close to, or higher than the rate of the policemen

to the whole national population. Therefore, the cyberspace might become a special zone of society but could not remain syncretised with the social unity.

Under such a model, the cyberspace is disciplined forcibly by the external power. For society as a whole, the activities would involve higher costs but take lower risks. However, the external control might meet with resistance from the netizens in the organized form. Again, the external control might not completely fulfil the requirements of the running of the cyberspace, which is in a sense like a well built machine. Stepping into the stage of the internal control would thus be unavoidable.

3. PRESENCE OF INTERNAL CONTROL, ABSENCE OF EXTERNAL CONTROL

This mode of cyberspace is organized according to the common ethics established within the online community. While ethics is needed, law is lacking. On one hand, it is not possible to implement rules on the level of "law" due to the absence of the legislative power and institutions. The available and feasible rules fall on the level of ethical dimension.

On the other hand, ethical dimension is relatively developed in cyberspace due to the initial independent development and self-regulation practice. The advocators of the mode believe that the ethical mechanism can work well, thus keeping the cyberspace into order. The netizens under this model constraint their own behaviours according to the ethical code of the cyberspace, abstaining from the breach of the cyberspace, and from invading society. However, the internal control might be confronted with the risk of breakdown due to lack of forcible enactment of sanctions, thus calling for the outside interference, that is, the filling-in of the external control.

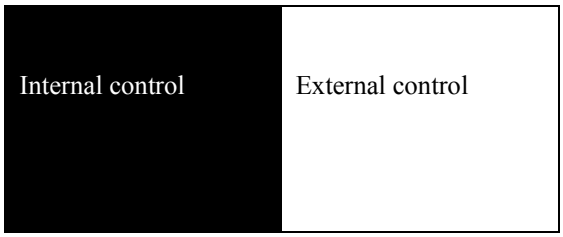


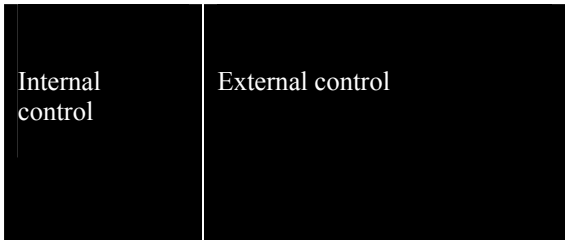
Figure 12. Presence of internal control, absence of external control.

4. PRESENCE OF INTERNAL CONTROL, PRESENCE OF EXTERNAL CONTROL

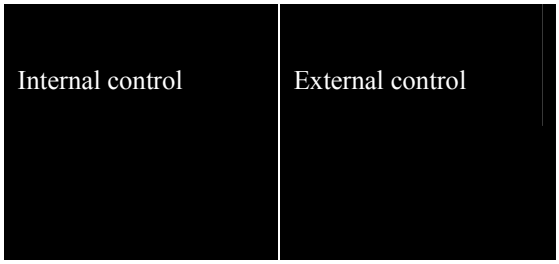
By the fourth model, we are seeking to balance between the external control and the internal control. Both controls would play roles in the order-maintaining process. This includes balance between internal factors, between external factors, and between internal and external factors. The model includes both a certain degree of internal control and a certain degree of external control, in which the activities might involve higher costs but take medium risks.

The creation of this dual control could either be the result of compromise between the desires of cyberspace as an integral part and as an autonomous zone of society as a whole on one hand, and the other parts of society; or be a result of conspiracy between some of the netizens and the other part of society. Regardless of the nature of such compromise or conspiracy, despite the continuous change of balance between powers of internal control and external control, this is the most possible and stable model, be it not within the ideals of many acclamations.

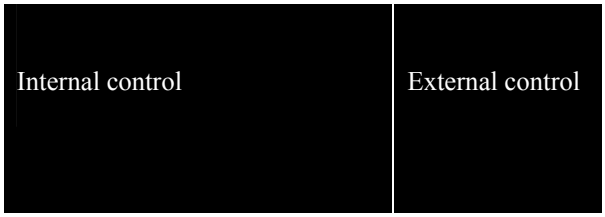
The leverage in this model could move from the left to the right, that is to say, the degrees of internal control and external control could differ from strong and weak. In some case, as depicted in *Figure 13* (*1*), the internal control is weaker but the external control is stronger with the leverage located in the left part deep into the frontier of the internal control. In *Figure 13* (*2*), the internal control and the external control are ideally balanced with the leverage located on the medium frontier between internal control and external control. In *Figure 13* (*3*), the internal control is stronger but the external control is weaker with the leverage located in the right part deep into the frontier of the external control.



(*1*) Internal control < external control



(*2*) Internal control = external control



(*3*) Internal control > external control

Figure 13. Presence of internal control, presence of external control.

We can hardly conclude which model is the beneficial or practical. It is a question of which discourse is the dominant. There are those who advocated the cyber anarchy, leaving the cyberspace as it is, resisting any artificial control either from inside or from outside. Yet their voices have been too weak to be heard by the netizens and non-netizens. Particularly, society's prevalent discourse might not be compatible with an anarchist view. The same happens in the cyberspace. Many also argued for solely internal control over the cyberspace, denying the externally imposed state arrangement. However, in this case, it is not words, grammar and reasoning that are functioning. It is the legislature, police, court and jail doing so. Therefore, solely external control rather than solely internal control is more proximate to the goal of the order of the social unity.

Given neither absolute internal control nor absolute external control is possible, the more acceptable and more stable structure of cyberspace order might be under a mechanism in which the cocktail of internal control and external control is mixed. It is as if the cyberspace were a globe, inside which the force of gravity gravity attracts the elements and materials towards the core, while the outside pressure condenses its cubage. As a result, cyberspace exists in the shape of a dwarf star, only in which form, cyberspace becomes an integral part of society as a whole, with a stable and acceptable order.

THE RISK OF THE HYPOTHESIS OF FORMAL RATIONALITY TOGETHER WITH COMPUTERIZED JUSTICE SYSTEM

Modernity of law was supported by many idealistic ideas of which formal rationality is one most recommended by the Enlightenment thinkers, but one most criticised by the postmodernist advocators. The ideal of formal rationality believed that rule of law could be achieved, given goals such as systematization of legal system, installation of professional jurists, well arranged proceses etc.

The use of the powerful computing machine in the latter part of the last century became an incentive for those who insisted that formal rationality could be achieved with the help of the mechanical calculation of the elements of mens rea, actus reus, due process, equal protection, etc. Their inevitable operations have been to quantify both the quantitative and the qualitative factors with the tools of pinch cards, sentencing guidelines and computer software.

Ironically, the coming of the idea of computerized justice system roughly coincided with the initiation of the postmodernist criticism against the blankness of formal rationality. The phenomenon could well be conceived as a hidden form of resistance of the despairing ideal of rule of law against the possible adaptation to the changed social environment. While legal retrieval system is a beneficial element in impelling subjects to be more informed about the certainty of the law, the computerized justice system might pose a hindrance by maintaining the conventional order on the contrary direction to the former.

In all accounts, mechanical computerized justice system is not akin to the postmodernist legal studies. It is a misplantation if there is such a discourse as to incorporate such different creatures in the macro-environment where what happened simultaneously is prone to be considered to have the same features. In doing such logic reasoning, the balance of linguistic powers out of the opposed fronts is inevitable and unfortunate.

The use and abuse of information systems in doing law and legal studies are common occurrences in current time. But the divarication of the use and abuse would come into being sooner or later. This would imply giving up the seemingly reasonable but practically unreasonable ideas, divulged from the prevailing information systems facilitating legal discourse. Thus the clarification of the role of the mechanical computerized justice system and the like should be given first priority in addressing the informed legal order of society and its extension into cyberspace. The time when everything could be hidden behind this information curtain and appear with this fashioned mask would come to an end, together with the dream of mechanical computerized justice system. Information systems, in fact, cannot do such a thing as doing law. The basic questions such as “who would write codes and compile law into such a program?” and “who would sit at the desk to finger keyboard to operate such a system?” cannot even get logic answers without referring to the outdated ideals.

CONCLUSION

The change of legal systems in the environment where the pervasive use of information systems forms an irresistible force in shaping nearly all lives of society needs specific attention. The discussion above briefly defined the limit of its boundary. While we have the very reason to exclude the so-called virtual space from the current field, we make no attempt to negate the value of further inquiry into all the unique respects brought about by the development and understanding of the new technologies, which in turn indeed leads the old legal thinking up to a novel platform. It is on this higher level that the hypotheses of improved legal literacy and informed rationality operate. The other objectives of this essay are to construct the models of order in cyberspace over which internal and external forces exercise control to varying degrees. Although the information society in general and the cyberspace in particular are designed toward an environment accommodating a more ideal legal system, mechanistic calculable justice standard would not be realizable in an optimistic future.

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