17 Basic Considerations on Forms of Information Transactions —Focusing on Protection and Use of Information Goods in Cyberspace and Related Legal Disciplines—

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Although the emergence of cyberspace brought benefits, specifically, easier information access, easier acts of expression and easier information transmission, it has come to show the possibility of restricting the free exchange and use of information in combination with legal revisions aiming to restrict the circumvention of technological protection measures as well as the prosperity of contract-based private discipline.

This study carries forward consideration on the forms of future information transactions in the mass market. Major subjects for consideration are (1) relationships with contract doctrine and technological protection measures and (2) relationships between intellectual property law, contract law and price discrimination theory, which is often used to justify information transactions using contracts. While paying attention to these points, this study aims to provide consideration by outlining the entire information distribution process from the viewpoint of fares for information use.

In terms of free use of information, this study aims to acquire knowledge by making reference to the recent progress in discussion on copyright law and freedom of expression in U.S. law.

1 Awareness of the Issue and Analytic Viewpoints

With new legislation and legal revisions aimed at prohibiting circumvention of technological protection measures, information providers have been using contracts to take the initiative in distribution in information transactions in cyberspace. Consequently, a situation has arisen where forms of use, which have been cost free in the past, are now prohibited or charged. Is this present situation considered unfavorable because it waters down copyright laws, or can this situation be reconsidered positively from another viewpoint?

The following confirms the present situation, which is the precondition of this study. While the advances of digital technology and global-level networking as represented by the Internet have brought about the benefits of easy access to information, they are considered to have created the possibility that creation and distribution by information providers are hindered by illegal copying of works and exchanges thereof (see Napster etc.). In the conclusion of the Copyright Treaty at the World Intellectual Property Organization (WIPO) in 1996, the Contracting Parties were required to establish legislation prohibiting the circumvention of technological protection measures that prevent illegal copying (for example, copy protection technology that prohibits cut-and-paste and access control technology that makes it impossible to access information without certain certification). In the United States, the Digital Millennium Copyright Act (commonly known as DMCA) was enacted in 1998, and the act of circumvention itself was prohibited. In Japan, the provision of equipment mainly used for circumventing technological protection measures was prohibited through revision of the Copyright Law and the Unfair Competition Prevention Law.

The establishment of laws that prohibit the circumvention of technological protection measures (though the level of protection differs between the United States and Japan—the act of circumvention itself is prohibited in the United States while the act of providing equipment mainly used for the act of circumvention is prohibited in Japan) means that it has become virtually impossible to conduct the act of circumvention at a general user level. Consequently, the importance of contracts secured by technological protection measures is now attracting attention. While technological protection measures have a passive character of preventing unauthorized access to information by hackers (it would be more appropriate to say "crackers": who are technically "professionals"), they also have an active or aggressive character of promoting or forcing general users, who are technically "amateurs," to conclude contracts supported by themselves. This point should be noted.

In plain language, a situation may arise or has already arisen where forms of use, which

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have been in the territory of free use in conventional intellectual property law, are constrained by contracts secured by technological protection measures. It is now an urgent task to consider how intellectual property jurisprudence should respond to this issue.

2 Area of Law to Be Referred to and Law Used for Comparison

Based on this reality, this study examines the question of how information transactions, mainly in cyberspace, will be changed by contract law and technological protection measures. Though conventional studies involved discussion over the legal nature of provisions restricting rights under the Copyright Law (from Article 30 onwards of the Copyright Law), they lacked the dynamic analysis of the actions of parties concerned in relevant situations. This report aims to acquire a basic, uniform viewpoint for the legal consideration of future information transactions, through examination of desirable information transactions in the future that are based on contract law and technological protection measures by using “fares” and “costs” in the overall order of transactions as analytic viewpoints.

In analyzing the theme of this study, it is necessary to adopt such viewpoints as intellectual property law (especially, copyright law), contract law and technological protection measures in the sense of restricting access to and copying of information.

For analysis, the following viewpoints are also indispensable: (1) trade secret protection law in terms of the analysis of information to which access is not permitted; (2) the Constitution from the viewpoint of relationship to creative/ expressive activities, especially the relationship to freedom of expression; (3) the Anti-Monopoly Law and the theory of industrial organization in terms of the present situation where information providers often exercise monopolistic power in the market. As long as this report considers information transactions from the viewpoint of “fares,” knowledge in fields such as the Anti-Monopoly Law and the theory of industrial organization is fundamental in terms of the question of what price action monopolistic companies take. In addition, (4) consideration on the public domain, which is a concept contrary to the confinement of information, is also essential. Due to space limitations, this report cannot cover all points in this argument in full detail, but broad viewpoints as above should always be kept in mind.

This study considers U.S. law for comparison due to the following reasons.

Firstly, in the United States, there is a judicial precedent which recognized a shrink-wrap license, dramatically enhancing the position of contract law in cyberspace (ProCD case appeal decision).

Secondly, the United States was the first country to take legislative measures that prohibit the circumvention of technological protection measures accompanying the progress of digitization (Digital Millennium Copyright Act).

Thirdly, the United States aimed for a legislative solution (Uniform Computer Information Transactions Act) in terms of the handling of information in contracts.

Fourthly, in line with movements in the real world, there are principle considerations established by several groups with a view not only of neighboring areas of law, but also with an eye on neighboring science fields.

From the viewpoint of future legislation and establishment of global views, the accurate understanding of U.S. law is indispensable. This is also considered meaningful from the viewpoint of the importance of steady work beyond mere “imitation of the outer structure” of U.S. law.

3 ProCD Case

To analyze a certain phenomenon, it is necessary to go back to the point when the phenomenon first occurred and seek the prehistory of or the prerequisites for its occurrence. In line with the main subject of this study, that point is the ProCD case(*1) in which a shrink-wrap license was first recognized.

The plaintiff ProCD, Inc. developed a database covering the information of more than 3,000 telephone directories, and set the price of one set at 150 dollars for general users and at a higher price for commercial users. On this occasion, the products for general users were subject to prohibition of use for commercial purposes. This is known as a “shrink-wrap license.” The defendant Zeidenberg bought the product for general users and started database services contrary to the usage restriction. In so doing, Zeidenberg set a lower price for commercial users than the price set by ProCD. A noteworthy point in dispute in this case is the establishment and enforceability of a shrink-wrap license. The establishment of a shrink-wrap license was denied at the stage of the trial court.

The appeal court(*2) is controversial. Judge Frank H. Easterbrook of the Seventh Circuit affirmed both the establishment and enforceability of a shrink-wrap license. The grounds for justification

(*1) *ProCD, Inc., v. Zeidenberg*, 908 F. Supp. 640 (W.D. Wis. 1996).

(*2) *ProCD, Inc., v. Zeidenberg*, 86 F.3d 1447 (7th Cir. 1996).

used there are known as the price discrimination theory. That theory is to be explained later, but an example cited by Judge Easterbrook can be summarized simply as follows.

A law student uses the Lexis database, containing documents in the public domain, under a contract limiting the retrieval results to educational endeavors, and Lexis charges a law firm a much higher hourly fee. In such a case, may the student resell his access to the database to the law firm?

ProCD offered software and data at two prices: a lower price for personal use and a higher price for commercial use. Zeidenberg tried to use the data without paying the latter price. If the law student could not sell his access to the database to the law firm, neither can Zeidenberg use the data.

As can be seen from the price discrimination theory, two important points for analyzing the ProCD case are as follows: (1) the viewpoint of "fare" for the use of information and (2) the point that consumers can choose from several forms of use. In these points, the costs to which attention should be paid in the process of use and distribution of information are questioned. Therefore, before proceeding to discussion on the price discrimination theory, the next part verifies one model for the use of information, which has been discussed in U.S. jurisprudence in recent years.

4 "Fair Use," "Fared Use" and "Price Discrimination"

It has been pointed out from the viewpoint of the overall distribution process that a transition from "fair use" to "fared use" is expected to occur in future information transactions.[(*3)] An important matter there is transaction cost, which is also counted as an element to be considered in determining the establishment of fair use. In the case where a license is easy to acquire, the establishment of fair use is liable to be denied. Therefore, the area of fair use will be reduced with the development of information and communications technology. This knowledge is very valuable for the reason that it indicated the possibility of fares being charged for the forms of use stipulated in provisions restricting rights, which have been cost free up to now, because transaction cost is taken into consideration in several provisions restricting rights under Japanese law (from Article 30 onward of the Copyright Law).

Seen from the viewpoint of cost, there is another question of whether fair use is "free use," that is, cost-free use. This idea applies to the area of information use only, but users pay costs such as copy fees and time and transport costs necessary for going to a place where information can be collected. Moreover, since the boundary between fair use and the act of infringement is unclear, the possibility of being sued is also included in the cost. These are "hidden costs" for the use of information.

Purely theoretically, if all sorts of hidden costs are reduced through fared use and development of information and communications technology, and the application of the price discrimination theory expands the scope of choice for goods and services, consumers will be able to choose goods according to their own state of interest and goods providers' profit will increase, which is desirable from a welfare viewpoint.

In this manner, considering information contracts with the mass market from the viewpoint of overall price in the process of information transactions, one of the important keys for the solution is the price discrimination theory. The price discrimination theory is a mechanism in place of the acceptance of the establishment of shrink-wrap licenses and click-on licenses, which requires information providers to prepare several options in advance depending on the form of access to or use of information, and to allocate different prices for the respective options. This framework for thought is the one advocated by Judge Frank H. Easterbrook in the appeal court (Court of Appeals for the Seventh Circuit) on *ProCD Inc, v. Zeidenberg* (commonly known as the ProCD case), as mentioned above.

There are wide-ranging discussions over this issue. For example, there has been fierce debate on the issue at the stage of revising the Uniform Commercial Code Section 2B (commonly known as UCC 2B) to make it applicable to information contracts. This issue was tentatively settled in the form of the enactment of the Uniform Computer Information Transactions Act (commonly known as UCITA), but judicial precedents are lacking and problems are yet to be clarified in many points.

In this regard, some argue that the establishment of shrink-wrap licenses should be approved since mass-market licenses themselves increase social efficiency. However, it must be noted that a descriptive statement that the establishment of shrink-wrap licenses and click-on licenses brings about Pareto superior (this point must also be reserved) is not directly linked to a proposition that "contracts should be formed." Another step of justification is required

(*3) *See* Tom W. Bell, *Fair Use vs. Fared Use: The Impact of Automated Rights Management on Copyright's Fair Use Doctrine*, 76 N.C. L. REV. 557 (1998).

to accept the formation of a contract, which is a kind of "fiction."

Apart from discussion on contract formation, another subject being hotly debated is the question of whether price discrimination itself increases social efficiency. On this point, efficiency increases according to economic analysis. However, it is also said that social conditions premised in economic analysis are hard to achieve. As one of the conditions for the effective functioning of the price discrimination theory, it is said to be necessary for information providers to completely understand consumers' preferences as well as the amount of fares that consumers are willing to pay (that is, willingness to pay). In this point, there is a strong tense relation between the introduction of the price discrimination theory and privacy, which must be noted.

5 Points Revealed by the Price Discrimination Theory

However, taking into account the legal protection of technological protection measures such as copy protection and access control, discussion over price discrimination seems to be unavoidable in seeking the establishment of a new legal system in anticipation of the information society of the future. Problems revealed by the price discrimination theory are pointed out below.

Firstly, the price discrimination theory revealed the location of "costs" in the entire information distribution, as mentioned above. The theory is thus considered to have shown the possibility that the overall costs of information transactions will be reduced as a result of "fared use" and price discrimination.

Secondly, there is a problem that appears through price discrimination and arbitrage, which is related not only to cyberspace but also to the world of corporeal things.

It has been repeatedly questioned why a license contract is necessary in terms of shrink-wrap licenses despite the fact that the ownership of the corporeal thing has essentially been transferred to the consumer. In the case where we buy books or music CDs, we never conclude a contract such as a "reading license contract" or "listening license contract" before enjoying information attached to such media. Why do we need to conclude a contract only in the case of shrink-wrap licenses? Which is to say, it is necessary to clearly recognize that there are several hurdles to clear before software license contracts can be established as an obvious thing.
On the other hand, for books, music CDs and software games, regulations on the secondhand market and rental market have been frequently discussed. Secondhand goods are capable of substituting for new goods, which means that a sort of arbitrage is conducted at the stage of a secondhand market. As mentioned above, the prevention of arbitrage is cited as a condition for the effective functioning of the price discrimination theory, and relevancy can also be seen here.

The above indicates problems arising from overlap of ownership of corporeal things, the discipline of contract law and the use of information. In information transactions in cyberspace, click-wrap licenses, in which information providers and consumers are in a direct contractual relationship, are becoming mainstream, beyond shrink-wrap licenses. However, it cannot be overemphasized that shrink-wrap licenses are not relics of the past, but are in fact shedding light on an old but new problem, which is relationships between the ownership of corporeal things, intellectual property rights and surrounding contracts. Consideration of desirable information transactions in cyberspace seems to be a good example indicating that a classic problem is being redefined with a new face.

Thirdly, there is a question of who will take the initiative in information distribution as a result of price discrimination, "fared use" and technological protection measures. If the scope and level of protection under the current intellectual property law remain the same, the power of information providers will naturally increase. In this regard, the way of considering free use by small-scale creators and consumers is questioned.

6 Intellectual Property Law, "Freedom of Expression" and Enrichment of Information

The previous intellectual property laws have aimed to enrich information. It is now necessary to improve the understanding of the meaning of "enrichment of information." In the first place, can this remark itself be talked about in a value-neutral way? It has been argued recently in the United States that the strength of the right for commodification of information, including contract-based commodification of information, is closely related to the political form. That is, paraphrasing this into the context of intellectual property rights, the protection of strong intellectual property rights by necessity promote information distribution by large-scale information providers (they often have many "strong" intellectual property rights) in some aspects. If the level of protection of intellectual property rights is lowered, in other words, if the free use of information is promoted, user-level

creative activities will be encouraged.[*4]

Also interestingly, there are views asserting that it is unconstitutional for the authors or copyright holders of original works to exercise their right to request an injunction against the creation of derivative works.[*5] This issue is suddenly getting attention because a lawsuit was actually instituted in the United States in relation to the publication of a parody of "Gone with the Wind." In this regard, the idea of "profit allocation" has been advocated in place of the right to request an injunction. This idea aims for coordination between authors (copyright holders) and the creators of derivative works at a low cost, and it seems to be an idea close to the right to claim fares, which has been discussed in Japan. At any rate, it is worth noting that constitutional scholars express doubts about the existence of the right to request an injunction, though only in terms of derivative works.

A clear strategy can be seen in these arguments for the review of copyright (intellectual property right) and freedom of expression. That is an intention to strengthen the standing of small-scale creators in information distribution, which is virtually dominated by large-scale creators and information providers. This is an indication that is unavoidable when considering future information transactions, if criticism against the price discrimination theory, "welfare loss," is taken into account.

This also corresponds to the move towards transition from property rules to liability rules, which has recently been proposed in intellectual property law (in Japan, there are views proposing transition from the right to request an injunction to the right to collect fares).

A pioneering study on "property rules" and "liability rules" is a paper by Guido Calabresi, etc. in the Harvard Law Review in 1972. In terms of a desirable choice between "property rules" and "liability rules" in considering property law and tort law, Calabresi, etc. drew a very clear conclusion. That is, the amount of "transaction cost" determines which to choose between the two rules.

Applying this idea to information contracts, it is considered reasonable to a certain extent to introduce liability rules by using the price discrimination theory as leverage in the situation where some people point out a low predictability in cyberspace, that is, the possibility of increasing transaction cost in the network society of the future.

7 Toward Establishing an Order of Information Transactions

This part briefly points out problems with actually establishing an order of information transactions by using the price discrimination theory.

The first problem is the overlap between the confinement of information and the use of services. For example, in terms of database, although access to information appears to be under control at first glance, it actually involves the mere use of retrieval services. In this case, relationships with intellectual property law do not matter. However, the situation differs if the use of information itself is restricted beyond the use of retrieval services. In such a case, a tense relation with intellectual property law becomes apparent. It may be permissible to put restrictions on use conditions in the case of confidential information such as trade secrets, but information confined by technological protection measures cannot be treated in the same way. It becomes necessary to work on setting detailed conditions for access and use according to the characteristics of individual information, such as paintings, music, literary works and factual information. In doing this work, it will be necessary to borrow knowledge from neighboring academic fields, such as aesthetics and semantics.

Secondly, there is a possibility that forms of use, which have been cost free up to present, such as quotation, will be charged due to "fared use," bringing about the effect of fading academic freedom and other kinds of fundamental freedom. A noteworthy point here is the actual condition in which when researchers and students access commercial databases, they are, in general, substantively exempted from the payment of fares for access within the scope of academic research on the basis of attribution to a research organization or other organization. It is considered necessary in the future not only to view such actual conditions as mere fact, but to also normatively create situations where fundamental freedom is ensured.

The meaning of "fared use" also requires consideration. Under the current system of the right to request an injunction, information users always take the risk that their freedom of action will be bound by right holders. Such a risk may be

(*4) *See* Wendy J. Gordon, *Market Failure and Intellectual Property: A Response to Professor Lunney*, 82 B.U. L. REV. 1031 (2002); Noguchi Yuko, "Dejitarujidai no chosakukenseido to hyōgen no jiyū (ge)" (Copyright system in the digital era and freedom of expression (2)," *NBL*, no. 778 (2003): 36-.

(*5) *See* Jed Rubenfeld, *The Freedom of Imagination: Copyright's Constitutionality*, 112 YALE L. J. 1 (2002). Professor Rubenfeld's paper is very interesting since it reveals relationships between the creation of derivative works and the freedom of expression by using two concepts, "freedom of imagination" and "fiction," as key elements.

settled as a mere monetary matter or may cause fear of being deprived of creative activities. The right to request an injunction even functions to fix a relationship between right holders and users into a hierarchical relationship.

However, under "fared use," it is possible for users to defect from such a hierarchical relationship and take an equal position to right holders by paying a certain amount of fare. That is, a hierarchical relationship is reconstructed into a horizontal relationship. Dynamic creative activities are carried out based on the continuance of such a horizontal relationship to tertiary and quaternary creation.

Although this study mainly considers information transactions in cyberspace, it is not as if information can only be obtained in cyberspace. The "off-line" world exists authoritatively, and its importance has not been reduced in the least.

An important point is that it is desirable that there is more than one access route to information and alternate means are available. This is also related to the point that users can choose from several forms of use under price discrimination. The significance of secured possibility of choice does not remain within the price discrimination theory.

In short, a desirable situation in the future information society is a pluralistic one where users can choose from several channels, such as the public domain, commercial retrieval systems and databases, open sources, information provision by administrative organizations, libraries, art museums, museums, universities and other social infrastructures, depending on their own situation.(*6)

8 Conclusion

This study aimed to obtain analytic viewpoints and legal viewpoints for considering information transactions, through examination of desirable information transactions in the future from the viewpoint of "fare." Since the problem covers a wide area, the whole picture thereof cannot be grasped without analysis from various viewpoints. Although it is an undeniable fact that the author intended to conduct this study because of his stay in the United States where interdisciplinary studies are vigorous, to be frank, the author keenly felt the lack of his ability.

Though the theme covered by this study is modern, problems questioned therein are quite classical. The author strongly felt the necessity of continuing steady study without being deceived by the prima facie pomposity of the phenomenon. Based on analytic viewpoints obtained though this study, the author intends to conduct fully-fledged consideration on desirable information transactions in the international society, including relationships to contract law in general, in light of the characteristics of individual types of information and in consideration of trends in Europe, which are not mentioned in this study.

(*6) *See* Pamela Samuelson, *Mapping the Digital Public Domain: Threats and Opportunities*, 66 LAW & CONTEMP. PROBS. 147, 153 (2003).