# SHIP Project Review 2001

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**Edited by Takato Natsui**

**Published by SHIP project at Meiji University, Japan**
**(Social and Human Information Platform Project)**

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# Contents

## Acknowledgements

Our SHIP Project (Social Human and Information Platform Project) have been studying on basic models for XML database systems for the social science, especially legal information database. Also we have been studying and discussing many issues relating legal information, for example, the fundamental right to access to legal information, several types of intellectual properties of legal data in database, privacy protection included in legal data, remote legal education environments, and so on. We had some conferences in previous years and published their reports in Japanese.
This review that is the first experience for us to publish in English, owe much contributions of our project members and many associates including students of Meiji University.
Prof. Peter Martin, prof. Graham Greenlief, prof. Shin-ich Yamamoto and prof. Makoto Ibusuki deserve our special thanks for their speeches and discussions at the 4th Joint Symposium 2001 in Tokyo.
And we have acknowledged their special contributions and efforts by Japanese-English or English-Japanese translations below.

| | |
|---|---|
| Rikihiro Fukushima | Prof. Martin's guest speech |
| Naoko Ibusuki | Prof. Greenleaf's guest speech and panel discussions |
| Hiroko Hayashi | Prof. Natsui's report and Prof. Yamamoto's report |

# Preface to this review

Takato NATSUI
Project leader of SHIP project

This review has published as an annual report by SHIP project (Social Human and Information Platform Project as one of the Academic Frontier Promoting Programs of Meiji University).

Our SHIP project had an international conference named the 4th Joint Symposium on May 2001 at Meiji University in Tokyo.

We had three experiences of similar conferences in previous years from 1999. In the first conference on May 1999 at Meiji University in Tokyo, we had examined and discussed about responsibilities on database service provider, main issues around the legal informatics and so on. In the second conference on December 1999 in Osaka University, we had examined and discussed about some privacy issues relating legal information and citation rules of legal information in digital forms including Web contents. In the 3rd conference on May 2000 at Meiji University, we had examined and discussed about some intellectual property issues relating legal databases, and we had reported and previewed some legal information systems by using XML technology.

And, in the 4th conference on May 2001 at Meiji University, we had examined and discussed about the social roles of functions of legal information systems with guest speakers who were Prof. Martin (Cornell Law School, USA) and Prof. Greenlief (AustLII, Australia). Also, Prof. Yamamoto (Library Information University, Japan) and Prof. Ibusuki (Kagoshima University, Japan) joined and contributed in this conference.

We discussed several important issues based on different view points. And, we had tried to study on different models for legal database systems by comparative methods.

This annual review includes official records of this 4th conference. PDF formatted file of this review will be able to download or read at our Web Site below.

http://ship.mind.meiji.ac.jp/

We are now planning to publish more reviews in English including other records of our conferences and relating articles by project members.

SHIP project and publication of this review are funded by Meiji University and the Education and Science Department of Japanese government.

# Invitation message to 4th Joint Symposium

Takato Natsui
Meiji University (SHIP Project)

The degree of public presentation of legal information can be a barometer of whether a specific country is a law-governed or not. Moreover, great development of an information society and economic activities are strongly asking for quick and exact circulation of legal information. The measure for legal information is also a certain kind of the national strategy in itself.

In the scene of international dealings, if the legal system of an other party country are not known (i.e. he structure of a judicial system, the administrative regulations of everything that are applied to dealings, the judicial precedent of a court that dealt with the related problem), business companies would be not able to establish their business strategy and carry out their risk management.

International evaluation of a specific country may be measured, by whether or how the legal information of the country is open and available.

It has also become possible to receive legal information required for everyday life of a common member of society. This is having big influence also on ordinary people's life style.

Under these circumstances, governments in the world, the legal information company, the scientific organization etc. have built and exhibited various legal information databases. The statutes and judgments are the information as the first resource. Such information can be generated from only a government organization, the legislation Diet and a court. Therefore, these organizations serve their own legal resources by themselves.

Also in Japan, the information dispatch from a government organization, the Supreme Court, a local self-governing body, etc. prospers at last. Here, the accuracy of the data itself will be thought most as important. On the other hand, the commercial database and the scientific site have the social function to offer the information as the first resource. For example, statutes, administrative regulations, judgments may be included.

In the 3rd joint symposium (in May, 2000), discussion was made focusing on the function and role of commercial database.

In the 4th joint symposium, we would like to argue also about the function and role which legal information database, focusing on the social roles of academic legal databases. Especially, if use of the remote lecture using the Internet will spread, the legal database system will have much more importance to design and construction for legal education itself. We would like to argue also about this point. Being based on these viewpoints, SHIP project aims at construction of the platform of a social science system database, as the actual proof application, applies the technology of XML and is building the various information systems of a law field.

For example, bilingual automatic management systems of domestic and foreign statutes, automatic replacement systems, automatic statutes management system by historical method and privacy information under judgment are contained in products of SHIP Project. It is expected that these serve as important teaching materials also in the law education using the future Internet. We would like to make various proposals at this symposium based on such experience.

For our symposium, we invited Professor Peter Martin (Cornell Law School: United States of America) and the professor Graham Greenleaf (AustLII: Australia). They are both one of the most famous authorities on the legal database of the world. Cornell's system points to a distributed database system. On the other hand, the system of AustLII points to the concentrated management

system. How will be these two systems with different approaches developed from now on?
Moreover, how do these systems contribute to the actual society containing economical dealings or law education?
The evaluation may come to become settled by how the design idea is what thing, not only a legal database but future government and people's database is realized, and it is managed.
Based on the latest theory in the world, research, practice experience, and technology, it is expected that the newest arguments be exchanged.
We expect that much more people will attend to our Symposium, including practicing lawyers, educational persons, researchers engaged in legal education, XML engineers, database engineers, and university students and so on.

# Programs

**Theme**

**Social Roles of Legal Information Database**

**Co-sponsored by**

**Meiji University**
**Institute of Social Science of Meiji University**
**Information Science Center of Meiji University**
**Cyberlaw Association Japan**
**Legal Informatics Association Japan**

**Funded by**

**Meiji University**
**Education and Science Department Japan**

**Organized by**

**Prof. Takato NATSUI (Meiji University, School of Law)**

09:40－10:00 Opening Speeches
President of Meiji University Yuichi Yamada
Director of Institute of Social Science Tetuyuki simizu
Director of Information Science Center Haruo Shimosaka

Part 1 : Reports (10:00-12:00)

10:00 －11:00 Prof. Natsui, Takato (Meiji University, Japan)
"Social Functions of Academic Legal Database System"

11:00－12:00 Prof. Yamamoto, Jun-ichi
(University of Library and Information Science, Japan)
"The Library's Function in the Legal Information Environment"

12:00 Lunch (12:00-13:30)

Part 2: Guest Speeches (13:30-15:30)

13:30－14:30 Prof. Martin, Peter W. (Cornell Law School, USA)
"The Legal Information Institute (LII) - Providing Catalysis, Innovation, and Integration in a Complex Legal Information Environment"

14:30－15:30 Prof. Greenleaf, Graham (University of New South Wales, Australia)

AustLII and the achievement of free access to the law

15:30－15:45 Tea break (15:30-15:45)

Part 3: Panel Discussion (15:45-17:30)

15:45－17:30 Panel Discussion
"Social Roles of Legal Information Database"
Chair: Prof. Ibusuki, Makoto (Kagoshima University, Japan)
Panel: All of speakers

18:00－20:00 Reception

## WELCOME MESSAGE

President of Meiji University
Yuichi Yamada

Good morning, ladies and gentlemen, welcome to Meiji University. My name is Yamada, Yuichi Yamada, president of Meiji University.

It is a great honor and pleasure for us to hold the fourth Joint Conference of Social Human and Information Platform (S.H.I.P.) Project at the Liberty Hall of our university.

I would like to express our gratitude for all of you, speakers, panel members, and participants, especially guest speakers, Prof. Peter Martin of Cornell University and Prof. Graham Greenleaf of New South Wales University. They come all the way from continents over the Pacific Ocean.

This project started in 1998 just at our university and has developed year by year since then. On this fourth conference, I am informed; you are going to discuss such themes as the role of academic site and the social function of legal information database.

As you know, in our university, there is already a graduate school of law. Besides that, our Meiji University is now preparing to establish an American style law school in 2004(two-thousand four). In this situation, it is very significant for us to hold this conference in which all participants can share the high level of intelligence in this field.

I would like to express my best wishes to all of you for success in this fourth joint conference. Thank you very much for your kind attention. Thank you.

## Greeting for the International Symposium

Director of Institute of Social Science
Tetsuyuki Shimizu

This year marks the third anniversary of the launching of the SHIP project by Meiji University's Institute of Social Science, as part of the university's Academic Frontier Promoting Programs.

We have hosted three joint symposiums so far, including the one at Osaka University, and each one has met with a highly favorable reception.

As the project term has reached its halfway mark this year, we have arranged for an international symposium, inviting two world-renowned scholars, Professor Martin and Professor Greenleaf. The aim of this symposium is to share and contribute to society the achievements of the project and to promote further research in the future.

This is a project of joint research participated in by a number of scholars from Meiji University and others from outside the university. This highly unique research has attracted considerable interest and attention from various fields. As we all know, globalization and computerization are making rapid and ever-increasing progress. The spread of the Internet has brought great changes to many aspects of daily life, not least of all economic activities. However, this has also given rise to new and hitherto unknown problems. To solve many of these problems, conventional ideas and concepts will no longer suffice.

I believe the significance of this SHIP Project, undertaken as part of the Academic Frontier Promoting Programs, lies in its role of helping society by building up a database in the field of legal information.

I would like to extend my profound gratitude to Professor Martin and Professor Greenleaf, who have come here as lecturers of this international symposium, to Professor Natsui, who organized the event, and to all of you who are here today.

I hope the SHIP Project, and this international symposium, will achieve great results and contribute significantly to the progress and development of academic studies, this also being the founding purpose of this institute. To this end, I ask for your continued support and cooperation. Thank you.

## WELCOME MESSAGE

9 May. 2001
Director of Information Science Center
Haruo Shimosaka
(Professor of School of Science and Technology)

Thank you for introducing Mr MC.

On behalf of the Information Science Center of Meiji University, I am very grateful to have an opportunity to address welcome message at the 4th symposium of the SHIP project.

We are responsible to have classes of fundamentals for information. We are also responsible to plan and do everything about information and network. Through activities we have stored rich fruits of information and network technologies. A lot of academic projects including the SHIP project are taking place in Meiji University. We are very proud to be able to give know-how to each project. That is to say, our know -how is very helpful to carry out a project.

I have heard that the objective of Professor Natsui's SHIP project is to build a platform for judicial information database. I have special interest in the SHIP project, because the project is carried out with information and network technologies, some of my staff are participating in the project, and because of the distinguished devotion of professor Natsui to the activities related to the information science center and the network.

In Japan it takes very long time to get a sentence. The SHIP project can be expected to speed up judicial works. I hope that Japanese judicial system will be not only familiar to everybody but also an equitable system with less errors by the aid of all of the attendants.

This is an international symposium. Various kind of races show up here. I myself am a mechanical engineer. I was raised up in the borderless field. Today I am convinced that judicial field is now borderless as much as technology's field. In the borderless world human relationship is very important. I hope that all of you will enjoy the symposium, exchange information, and enlarge the human network. Thank you very much.

# Social Functions of the Academic Legal Database System

Prof. Takato Natsui
(Meiji University, School of Law)

## Introduction

In the SHIP project, I and our members have been not only developing some XML based database systems for social science area, but also studying and discussing various legal problems that would arise in the process of or relating to developing legal database system from various different view points.
In this 4th Joint Symposium, I would like to present my ideas about the social meaning of making academic legal information database system. Today, we have Professor Peter Martin from the United States and Professor Graham Greenleaf from Australia participating in the symposium. I hope that the different standpoints of our respective countries will stimulate the discussion and result in a fruitful exchange of views.

## I. Functions of Legal Information

What are the functions of legal information?
Here, I will focus on three functions; recognition function, storage function and function as one of the social tools.

### 1. Recognition Function

Human beings need some kind of symbols in order to recognize the existence of law. There are various types of symbols. And, the symbol used for recognizing law is usually called "Legal Information."
Legal Information is and will be transmitted by writing systems, as well as by other means. In ancient era, such transmissions were mainly done verbally. Terms such as *ofure* or *otassh*[1]*i* must have their roots in such historical background.
Legal information is often recorded and transmitted by characters on fixed media. One such example is the Code of King Hammurabi[2]. Legal information has been recorded on various media such as slate, clay tablets, bronze ware, parchment, bamboo and wooden strips, and paper. Some were inscribed on rocks and cliffs. Today, the most commonly used media is paper, or sheets of paper bound into a book. Despite the differences of

1 In Japanese language, *ofure* and *otassh* used in ancient era and have the same meaning. These terms mean any directions or orders from government or local states to ordinary people verbally. In many historical cases, *ofure* and *otassh* also had same meaning as laws or court orders. Most of evidences of legal information in ancient era are included in *ofure* and *otassh* such as Tax orders written on small bamboo pieces.

2 Hammurabi was one of the famous kings of ancient Babylonia. The Code of Hammurabi has been recorded on a big black stone that is in the Louvre Museum.

materials or forms of such media, there is no qualitative difference in the fact that legal information is recorded and transmitted by symbols in the form of characters that can be visible or readable for human beings.
In recent years, symbols are often exchanged by means of electronic tools. Here again, it is just the same as the recording and transmission done by conventional characters, as long as such tools exist in order to help humans recognize the symbols.
This is based on the fact that human beings can recognize things only through symbols. Legal theories of today, whether they are European Legal Theories, or U.S. Legal Theories (in particular Common Law), are structured on the basis of "human intent." This intent is formed through a variety of symbols.
However, in the future, "intent" may become no longer necessary when a contract between software agent and software agent, existing irrelevantly to human intent, comes into being. In such a situation, legal information will not have to be recognizable to the human eye. I call such a legal system, in which human intent does not exist, the "*processing theory*[3]." At present, it is commonly understood that a contract should not be legally binding unless there exits human intent, so a contract with a software agent still involves human intent at some point. But in the future, when a contract is made exclusively between two software agents, the digital symbols (electronic codes or signals) used there will not necessarily have to be recognizable to human beings.

## 2. Storage function

The next point to consider is that legal information is stored. There are two kinds of human memory; short-term memory and long-term memory.
While short-term memory is usually processed in human beings and thus is limited in duration, long-term memory often exists outside of the human brain. Of course, human memory fades away as time passes, and gets lost when the holder of the memory dies. Thus, in order to preserve memory for a long period of time, it is necessary to store it in some media outside the human brain. By utilizing the function of long-term memory, human beings have made possible communication among individuals living in different time and space, thus creating the culture of mankind.
Characters are not the only possible medium for long-term memory. There are symbols that cannot be clearly classified into categories of signs or marks, such as those used in Linear A letters in ancient Greece or Mayan epigraphs, which have not been

3 Processing Theory was named and defined by me in my book, *Jurisprudence and Computers* (1993). This theory based on automatic processing environment by computer systems without any human beings' action. In such environment, contracts will be constructed by computer programs but not human intents. And rights and responsibilities made by such automatic contract will be processed or executed by computer systems without any human beings' action. This world will not need any human intentions or wills. I also argued "the network sanctions" in my second book, *Culture and Law in Networked Society* (1997). The network sanctions mean a kind of direct and automatic execution of legal rights (or legal right like digital process) by computer systems. But, such environment will not bring any happiness to us at all, I think.

deciphered yet. Also in modern times, there are mathematical formulas that are composed of symbols only. Even if such formulas use symbols whose forms are similar to characters, those symbols do not necessarily function as characters.
But human beings have always used characters as the most common means to record information. Legal information database itself is a set of symbols called characters (more correctly, character code sets and font sets) that indicate legal information. Statute books and casebooks are such database. A casebook database, being a digitalized version of casebooks is also one such database.
However, in the field of legal information, we often use symbols called characters as something that evokes "concepts" associated with a certain social behavior. This is because legal information would be meaningless if it did not function as a part of the social system of its environment. The context functioning here is purely personal, but all societies are maintained on a kind of communal illusion about the understanding of context.

## 3. Social Function

Legal information is a set of symbols that can be recognized as characters, and those symbols appeal to the human brain. This then becomes a determining factor as its response. Such sets of characters, in their own role of "being aggregate," function to determine actions or intention under a certain social context. Therefore, it is more precise to say that legal information exists not in sets of characters, but in the brain of human beings who function according to such sets of characters. But when the legal world becomes too large to be accommodated in human brains, society cannot function without another storage system external to the brain. Then, it can be said that one of the essential functions of legal information is as a social tool.
In other words, legal information is not just information to be recognized by humans, but a tool of controlling society.
The fact that legal information functions socially does not mean it functions in every time or place, or upon anybody. It requires a certain environment. Only one specific set of legal information functions in each particular environment, where the requirements for the legal information to function are met. For example, the policy making by augury in ancient China functioned as a social system to establish legal rules[4]. In modern days,

4 Emperors and his priests in ancient China had tried to tell his fortune or unfortunates by burning bones. In many case, bones of ox, turtle or other kind of animals had been usually used. If any good cracks had appeared on the surface of the bones then they had done any political decision. But, if any good cracks had not appeared then they had try again to reach good cracks. For example, once an Emperor had a question whether a small umber of slaves to be killed or not for his ceremony, but he could not get any good signs. Then, he tried again whether more slaves to be killed. But, he didn't get good shaping cracks. He tried again and again. Finally, he got the best cracks that he believed, and many slaves were killed by his order only for his ceremony. This was one of the most miserable examples. But, in ancient days, many people believed something constructing super-natural power, and these were powerful basis to make their decisions and orders for them. Today's people can know these historical facts by many

however, reading records of such augury inscribed on old bones does not have any social relevancy. Because, the environment that enforces what is inscribed on the bones or that enables the inscriptions to establish legal rules, has been lost. Now, only the vestiges of a certain social system are remaining. Such a social system had been that functioned during a certain period of time in the past But, such a legal system no longer functions in our times, because we do not have an environment in which people burn animal bones and draw some conclusion from the way the bones cracks. By the same token, various legal systems currently functioning will not necessarily work in future societies.

The situation mentioned above is also largely true of the existing legal rules in present day. For example, rules regarding "due process of law" are functional in the current environment. However, they may not function any more in a future environment. In other words, law does not function by itself; it functions in tandem with an environment within a certain social context. Another example is domestic law, which functions only in the nation concerned. Generally, legal scholars understand this as a matter of national sovereignty. From an information theory standpoint, however, this will be understood as a problem of the environment (or difference of the environment) that enables a specific system to function. Even in the same country, many of the major domestic laws are ignored and do not function at all in a certain local territory like in the society of the Japanese *yakuza*[5]. The converse is also true. In a federal state, a multinational country or a country where centralized national authority is not established, this will emerge as a situation in which each interest group claims its own legitimacy. In some countries that are constructing European Union, we may be able to observe similar phenomenon. Such a local system, of course, does not have power over the rest of society, but within that group, it functions as a legal system.

In short, legal information functions as a social tool. So, without an appropriate environment in which to function, legal information is no more than a set of characters. Herein, an importance of developing any legal information database systems lies. I believe that the first step in establishing a legal information database system must involve a close examination of these social-context-related-functions embodied in this legal information.

## II. What is the Source of Law?

Next, in the process of putting legal information into any database systems, we need to consider what original data is and what source of law is. Here, I will take up the question of "What is original?" Then, I will discuss secondary data that is derived from the original. Lastly, the issue of commentary and usage of data will be examined.

### 1. Original data

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old burned bones that were excavated from underground.

5 *Yakuza* means crime syndicate or mafia in Japan They have simple but severe rules for their behaviors and organizations. They may be polite inside of their territory, but betrayal will cause directly death or fear sanctions for them.

First, let us think of law itself in the abstract.
The symbols by which one knows what law is, is called "source of law." "Source of law" is recognized by humans through recognition of a group of symbols called "legal information". Thus, legal information is a symbol representing the source of law itself. Now, one can argue that "right law" is law and that source of law can exist for right law only. Here, "right law" refers to law that functions as socially justifiable at the time in question.
Many legal scholars believe that there should be only one set of legal information used as source of law, whose reliability is publicly guaranteed. Like the meter standard, such legal information is the ultimate standard.
For example, the source of law of the legal rule stipulating that murder is an illegal act and thus to be punished, is Japan Penal Code Article 199[6]. This 199 article is not subject to a specific font or size of characters. In a sense, it is an abstract entity. Even if the minute books of the Imperial Diet[7] that instituted the Japan Penal Code, or documents of legislative bills were lost, the Article 199 as an abstract entity would continue to exist. Of course, this is only true in theory. In fact, certain legal information can be obtained through several different media, including copies.
For instance, many books have been published, detailing the provisions of various laws, including Japan's statute books called *Roppo*[8]. These collections of laws usually have many different versions. Each of tens of thousands of provisions is printed and published in tens of thousands of books. But there is only one Article 199 that exists. Also, several channels are available to those wishing to obtain this legal information. As for paper media, information can be obtained from several different publications.
On the Web, it can be obtained in different HTML or databases systems. Article 199 is a provision to be understood as a provision in an abstract way. So, regardless of how it is printed and published in different fonts, sizes of letters, colors or forms in different collections of laws, the provision exists abstractly as itself. In that sense, source of law should be, in the first place, deemed as something that exists irrelevant to objects; rather, it is something that is recognized *through* objects. Otherwise, it would be difficult for legal information to play its original role in a large society with a

6 Murder will be treated as a criminal behavior, and criminals will be sentenced to death or 3 years or more imprisonment by court under Criminal Procedure Code in Japan.

7 Diet refers legislative organ in Japan.

8 *Roppo* refers to either six codes of law including Japanese Constitution, Japan Civil Code, Japan Penal Code, Japan Commercial Code, Civil Proceedings Act and Criminal Procedure Code, or the book (statute books) containing these six codes. It was created after the Meiji Restoration in 1868, as the Japanese government had been under the urgent pressure to introduce basic codes of law in order to resolve unequal treaties with Western countries, especially, Great Britain, France of Napoleon III, Imperial German, Imperial Russia and USA. Very few countries in the world have this kind of statute books with such historical background. The current *Roppo*, which contains many codes, laws, statutes and ordinances other than the six basic codes of laws, has functioned as a sort of paper database of legal information in Japan.

large-scale bureaucratic structure and a legal system.
Legal information, while having several different expressions, originates from one original.
Even today when legal information is transmitted by means of electronic tools, the belief that the original data is the most reliable has remained intact.
But in a derivative process, bugs and typographical errors inevitably occur. Rather, there are problems peculiar to electronic tools. For example, it is difficult to tell from the text itself whether character codes and fonts, which are used in the printings of legal information, are consistent with each other. Sometimes, as the result of using a different font, characters that appear on the browser are different from what the creator of the HTML first intended.
By using with XML technology or other similar markup languages, such a problem is a bit mitigated due to its design as language, I believe. The problem is even less observed in a Unicode compatible environment. Of course, one can avoid such problems in HTML by specifically designating character codes and font sets in tags.
Although such function is available, the consistency between codes and the forms they represent is not guaranteed by any means, for a client machine that is not equipped with required font sets. When external characters are used[9], this problem will become quite serious. In that instance, if an original text should exist in a database system on the Web, there would be no knowing whether it is guaranteed as the original.
Thus, we need to keep on examining what original is, whether on paper media or Web media. Even today, the pursuit of source of law in terms of what original data is still carries on, possibly with more difficulty. This issue carries with it a further difficult problem in regard with secondary data, and will be taken up in the next chapter.
Meanwhile, the original data can be provided only by those who generate or hold the data. Generally, in an organization called a nation, only the legislative and judiciary organs can have such functions of law making or law holding.
In some nations, the two organs are not separate, and the same governmental agency performs these functions, but the fact remains that an organ credited with a legislative or judicial state power is the only creator and holder of legal information. Thus, any other organizations, for example, legal information corporations such as WESTLAW and Lexis-Nexis, or academic organizations such as Meiji University School of Law, Cornell's LII or AustLII, will never be the creators of original data. These organizations can be nothing but the holders of secondary data that has been derived from the original.

## 2. Secondary Data

Today, almost all legal data available to us is secondary data.
As for statutes, Japan's *Roppo* and collections of statutes are composed of secondary data that were copied and compiled from articles in official gazettes. Judgments printed in casebooks available at bookstores are also secondary data. Even judgments printed in official casebooks are not original data in that they were compiled from the

9 http://www.watch.impress.co.jp/internet/www/column/ogata/part1_2.htm

original texts (scripts). Almost all collections of law and casebooks on the Web are secondary data.

More strictly speaking, even official gazettes are not original data because they are merely compiled copies of the provisions established in the Japanese Diet. In short, almost nobody is granted a means to seek the source of law by using original data; in Japan, at the very point when a law is made public, only non-original data is available to the ordinary people.

This situation is just the same in the United States, where citizens are provided with secondary data through major publishers such as WESTLAW. In every country, the means to access the original data, in the true sense of the word, is quite limited. (Examples of such limited means are the reference service files of scripts at courts, or law-making-related materials in the Diet Library or in various archives.)

Nevertheless, almost all legal scholars and practical lawyers believe that sets of characters printed in official gazettes are original, although such characters are obviously not the first script.

Then, what renders reliability to much secondary data?

First, we can cite the social status of publishers, such as major publishers of legal books, or a project backed by a prestigious university. From a different point of view, this kind of reliability is based on past achievements; there is no guarantee that the reliability of a publication is based on current data. (Tomorrow is another day.)

Once, a judge made a judgment that contained a misapplication of law because he did not notice a typographical error in a statute book published by a famous publisher in Japan, which he referred to in writing the judgment. Later, the judgment was revoked in the appeals court.

Then, what about publications by a governmental organization, such as an official casebook?

Typographical errors or compiler's mistakes may happen even in such publications. It is widely known that Japanese official gazettes have typographical errors. Not only that, such errors and mistakes can sometimes be observed in legislated laws. I have found several such mistakes in provisions printed in official gazettes. Some of the provision data stored in the LII database of Cornell University is appended with comments saying, "So in original." pointing to possible errors that existed in the original text[10].

Then, how about casebooks of courts?

Those printed in the casebooks of courts are compiled copies of original documents. There is a publication entitled "Supreme Court Casebook," which serves as Japan's official casebook. Although it is evaluated as highly as the original, it does not mean it is the original. There is only one original version in the true sense of the word; that is, the original script, which was signed by the judge in charge. So, judgments included in the Supreme Court Casebook are not original, but secondary data. But the Supreme Court Casebook, which is published with its reliability guaranteed by the Supreme Court, becomes the first source for any other publications.

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10 For example, comment saying "So in original. The period probably should be a semicolon." at footnote to U.S.C. title 15 section 631(f) in LII.

Here again, what is believed to be original is nothing but secondary data. In the United States, major publishers such as WESTLAW sometimes become the first to publish legal data. Nevertheless, what is printed by WESTLAW remains secondary data, even if it may be given credibility as the original. The original script is, of course, the document signed by a judge who wrote it.

When it comes to judgments, even more difficult problems arise. Every judgment, written by humans, has the possibility of typographic errors. In Japanese law, a ruling of rectification can be delivered upon a judgment which had typographical errors[11]. The significant point here is that the original document is a mixture of the document before the correction and the other document to correct the error. Since the two documents cannot be mixed physically, the true original exists only in idea. People generally believe that what is original is a tangible object, but this example shows us that there exists an "intangible" original.

In foreign countries, some judgments have several versions. It is impossible to make comments on them unless one picks up one particular version to focus on. In regard to such judgments, each version is the original as well, about the same judgment. In this case, which is the original? In addition, the case number alone is not enough as the identification for the data, called judgments. A combination of case number and version number will be necessary.

The same logic also applies to law. When provisions of the very first version of a law are amended, the new provisions generated in idea become the original, even if the amendment completely rewrites the former provisions. For example, let us suppose that here is a law which has two provisions and a subsequent revised law that deletes the second provision of the first law. So, what we had had originally was a law that had two provisions, but the subsequent revised law generated it into another law whose true original has the first provision only.

However, no legal document carrying the first provision alone exists in a physical sense. Such document is generated in mind, but never exists as a document. Since there is no physical entity, it can be said that there is no original source in the true sense of the word.

In fact, this is not a rare case; many laws are like this and most of them are revised dozens of times. It is rather hard to find laws that have not been modified. This implies that an overwhelming majority of laws do not have an original in a physical form. In short, what was generated in idea as a secondary becomes the true original. So, in law as well as in rulings, identification numbers will need to be a combination of version numbers to specify the original. The official number of a specific law will be insufficient to identify the original.

Digital contents will present even more difficult problems in this regard, because the original data and the copied data will have exactly identical character strings unless errors occur during the copying process. Then, it will be hard to decide which is more accurate, the original data or the secondary data.

Thus, we can understand that for almost all the legal information currently distributed,

11 For example, Article 256 (change of judgment by court themselves), article 257 (correction of judgment by court themselves) or article 258 (addition of judgment by court themselves) in Japan Civil Proceedings Act.

there may be no guarantee that it has the same value equivalent as that of the original.
As we have seen so far, in the digital world, there is much data that does not have an original, and not only that, all the copies – whether they have gone through tens and hundreds of duplication processes, actually have the same value as the original. To abstract various problems like fonts as mentioned before, a complete copy of digital data will be the same as the original, so there will be no difference in value between the original and its copies. Under such circumstances, it could be meaningless to discuss the difference between original data and secondary or derivative data.
Of course, errors and bugs sometimes happen during a copying or remaking process, but usually, the two have the same value. Then, the traditional rules in evidence will not apply to a digital environment any more. For example, in the conventional, non-digitalized world, an original, signed contract has great value as evidence because there is only one such document, whereas its copy has no such value. Or, conventionally, law stipulates one cannot claim the content of a contract from memory as valid evidence, because such content is not accurate. But such rules will not work well when there is no difference in value between the original data and the secondary data. This issue will also have substantial influence on a case, when a crucial aspect is whether evidence should be recognized as hearsay evidence or not. In other words, the difference in legal value between an original and its copy is disappearing.
In some cases, legal information derived from copies is more reliable than the original because it has been corrected, and so is free of typographical errors and other mistakes. We can see quite a few such examples in legal information stored in commercial databases. Probably, the Best Evidence Rule is gradually being revised[12].
Then, we will need to entirely reconsider the criteria to measure reliability in seeking source of law. In short, it will be necessary to establish a social system under which someone certifies that the data at hand is equivalent in value to its original. Furthermore, the reliability of that someone has to be measured, evaluated and certified by someone else. As for contents on the Web, it will be possible to argue this point on even stronger grounds; we will need someone or some system that will guarantee the reliability of the data on the Web. Publication by the government or the Supreme Court will no longer guarantee the reliability of data in the future[13].

### 3. Commentary or usage of data

Legal documents are filled with special technical terms or insider language that can be used and understood only by lawyers. They are like a set of jargons.
Then, how are such sets of characters like hieroglyphs in ancient Egypt (hieroglyph), which are incomprehensible to today's ordinary people, socially functional?
In order for law to function in a society, there needs to be an environment in which legal information can function as symbols comprehensible to human beings. So, legal information requires a social system of commentaries and usage manuals aid to carry

12 Cf. Federal Rules of Evidence article VIII.

13 We also must consider any illegal modification to electronic data by cyber crimes.

out its function.
As I stated before, a certain "environment" is necessary for law to function as law. This "environment" does not represent an abstract entity but a set of various systems that enables a law to function as law. How has such aid been given so far?
Such aid may have been given in lectures by scholars like me, or in textbooks at university. A government agency and officials may have performed such a function. In Japan, when a new law is made, government officials concerned with the legislation process write commentaries and publish them.[14] It is natural that those officials be the first to write the most detailed commentaries, because they were involved in the lawmaking.
The issue here is that those commentaries, though giving the most detailed explanation about the law, are already imbued with some interpretation. A law is usually made for very concrete and various purposes, be it economical, financial or military and so on. The persons in charge of a legislation process are most likely to promote such purposes and write commentaries to accomplish them. But we cannot know from a law if its purpose itself is right or wrong. If a government policy is wrong in the first place, the resulting law can eventually be wrong. Then, the commentary written on the premise ("the law is right.") is still not right.
Moreover, such commentaries are not written for every statutes and ordinances. Because such commentaries represent a one-sided view of a law-making organ or a government agency, there is no guarantee that they are the right commentaries for the statute. (Especially, since such commentaries rarely acknowledge any flaw in the statute itself.) However, people in general will believe that commentaries written by officials involved in the law-making process must be reliable and trustworthy[15]. This poses a problem.
What, then, can be done about judgments?
Every judgment must be appended by a Court opinion as a basic reason to judge[16]. But since there is a rule stipulating that a judge should show grounds for the validity of his/her judgment (the rule called "A judge should not justify him/herself," or "A judge should not explain him/herself.") it is very rare that a judge writes any explanation or commentary to the judgment that he/she wrote. They are not allowed to justify their

14 In Japan, many statutes were and will be drafted by government officials, because Japanese Constitution adopted a special relationship of Japanese Diet and government - parliamentary cabinet system.

15 There are many commentaries written by legal scholars. Useful and good commentaries are included in such academic commentaries. But, in easy way, many business people in Japan may believe of official's commentaries more reliable than academic commentaries. For example, some people may buy and read official's commentary to get governmental permission from a governmental agency as possible as soon. Moreover, by historical reason, many Japanese people have over-reliability to agencies or officials. These may be all fantasy, but it is real phenomenon that there are many people who believe officials' faith in today's Japan. They know that there are many criminal activities by officials. But, also they believe that Japanese officials are and will be very clever, and their works such as commentaries are and will be still reliable. I am one of Japanese too, but I can not explain this phenomenon so well.

16 Cf. Japan Civil Proceedings Act article 253, Criminal Procedure Code article 335.

judgments outside the court. I myself wrote a number of judgments when I was working as a judge. I was not allowed to make any explanation to justify my rulings at the time. I do not know if I am allowed to do so now that I have retired, but I hope I am.

Next, let us take a look at the Diet.

In Japan and Australia, I think it is common that government officials or agencies draw up a bill, which will then be proposed by the Diet members in an assembly meeting. I am not sure how it is in the United States, but it seems that congress members supporting the President often propose a bill that will support the President's intentions. We cannot make an easily modified comparison because the two countries have different government systems, but I suppose in the United States, the President serves the same kind of function as is performed by the government in Japan.

It may be too demanding to expect that such commentaries and usage aid should be given by those who *generate* the original data. Especially, since diet members will come and go as a result of an election. For example, let us suppose that a proposed bill is passed in an assembly meeting. Ostensibly, the diet member who proposed the bill should be the one who knows the most about the bill. But in fact, diet members do not know so much about bills they propose. Generally, it is very common for them to forget the details of a bill, which they have proposed, after its passing. (Diet members do not have much time to spare. They need to get on to the next agenda item.) By these reasons, a third party needs to establish a method of using a law or a support system to enable a law to function.

In conclusion, the three issues that I discussed so far – the difficulty in identifying the original, the difficulty in evaluating the reliability of secondary data, and the fact that a law as data cannot function by itself – are significant points in building a legal database. The first issue dealing with the question of originality carries with it many highly abstract factors. Also, I would like to stress that the originality and reliability of a text needs to be guaranteed by somebody. Not only the reliability of a text should be guaranteed, somebody needs to provide aid in order to allow the text to function properly in a society. Who should attend to these three factors? I believe that this is one of the tasks that academic legal database should carry out in mainly.

## III. Functions of Legal Database in a Network Society

Next, I would like to consider the functions of legal information database with the focus on a networked society such as cyber world.

I believe that there are four functions that legal information database should perform in a network environment; it should function as a research tool, as an educational tool, as an administrative tool for society, and as an economic strategy tool.

These are four points we need to focus on, as we consider the function of legal database in a network world.

### 1. Functions as a Research Tool

What do we mean by the act of "research"?

One may think simply that "to research" or "to retrieve" means to put a key word for

data retrieval into query box at Yahoo, AustLII or Cornell's LII systems, or to obtain any outputs processed by the computer systems.
But is that really "researching"?
Human beings think by means of a certain set of symbols. And most legal information exists as character strings. Humans perceive and recognize legal information through the process of accessing the character strings to map or place them somewhere inside the brain. This process is essential as long as law exists, circulates and functions in a society as some form of legal information.
When such accessing is executed with a specific intention, we can understand it as a "research." To research does not mean to grope for some information as a result. Thus, a research result is always something that was predicted as a hypothesis before an actual research result is provided. Even when a research result turns out to be something that was not predicted previously, if one can relate the result in a new way and adopt it into one's world, the act can be called "research." But if the research result turns out to be something both unpredicted and incomprehensible, then it is not research.
I always tell my students this, but they find it difficult to understand. This is because they do not yet have the "world" to understand what research is, I guess.[17]
In order to understand research, one needs to understand the process as taking the research result into his/her inner world, not just as obtaining data as output. To do that, it is necessary to have a "map" in one's mind or brain prepared to accept the result of the research. I believe this to be very important. In short, one cannot conduct a research without knowing its result in advance. This is commonly called "hypothesis."
Nobody knows if the expected result will actually be obtained or not. But at the same time, one cannot understand the research result unless one obtains any of the several hypotheses that were conceived before the research. In other words, without having several answer options in our mind in advance, we cannot recognize an appropriate research result even if it is included in the result list.
Thus, the act of research is not about taking out a lump of outputs by putting in a key word, but about matching one of the character strings, which came out as outputs processed by a computer, with one of the hypotheses we have in mind beforehand. Without a map in our mind, we cannot conduct such matching. So, the act of research

17 I met Professor Kagayama of Nagoya University at a meeting of the Japanese Association of Society of Law held on May 12, 2001. Mr. Kagayama and I had had been discussing whether education is possible or not for about 10 years. I had argued that we cannot "educate" students, while he had believed we can. But during the meeting this year, we finally reached an agreement. We agreed that we cannot expand the world inside the students' minds but we can help students, who have not realized what a wonderful world they have in themselves. However, we cannot expand their inner world itself no matter how we, their professors, train them. Our ten-year discussion came to an end after concluding that there is no training method that will miraculously expand the world in the brains of our students. I am using a paradoxical rhetoric here; what I would like to stress is that education is not about training students and forcing them to acquire skills like a military camp. I believe that a teacher's task is to help students recognize their own wonderful world, which everybody has, and to encourage them to cultivate the world by themselves.

is feasible only when an answer called "hypothesis" has already been provided.
A string of characters is nothing more than characters. I can mange to read essays in English written by Professor Martin or Professor Greenleaf, because I know how to read the alphabet and how to use it from my past experience. But I cannot understand Mayan hieroglyphic letters inscribed in rocks in the Yucatan at all. Mayan people in those days could understand them, though. Without such understanding, the society would not have functioned. Those designs that look like a drawing of a jaguar or the sun to us, served as letters for them. But we cannot understand their meanings. Letters or characters are nothing but forms. A set of such forms can be a trigger or an element to make people act in certain ways, because we humans can give some meaning to that set of forms through characters or by accepting characters. I think what I have referred to as "inner world" is a kind of system connecting a network of meanings with symbols.
A notable function of legal information database in a network environment is that it is now becoming possible to transfer parts of a research process, as described above, to an external device, something which is normally done only inside the human brain. For example, data retrieval by a robot or automatic sorting by software that filters collected data, are types of such transfer.
However, there are several points that need to be considered in this kind of transfer. First, as an automatic operation often deals with a massive amount of data, there is a possible risk of oversight in the examination of an algorithm employed for external operation. Also, the massiveness of data may blind us to inappropriate algorithms.
Secondly, matching done by an external device cannot reflect "meaning" in its search result. As "meaning" functions in relation to the context in which it is used, a system that cannot process context is unable to function as a provider of "meaning". Moreover, meaning is something peculiar to an individual, not universal. Since ordinary network search can only perform matching of character codes located on the network, search of "meaning" in such a sense is not being executed. Despite this, network search somehow gives the illusion that it is capable of providing meaning.
Also, searching activity in itself does not accompany evaluation of the reliability of found data. This problem may be solved in the future by combining search process with something like a reliability certificate system. But at present, a matching of character codes, without regard for the degree of data reliability, is possible.

## 2. Educational Function

Adding above, there are several problems peculiar to network environment.
Many of these are caused by illusionary factors derived from technology development in a data processing that allows handling of massive data on a network in a short period of time. The unfortunate result of this can be seen both in Japan and the United States, where many law students mistakenly believe that information on the Internet alone is what composes the world. Such students may not know about official casebooks, believing that legal information is comprised of WESTLAW and Lexis-Nexis only.
Such a situation is consolidated by the very fact that WESTLAW and Lexis-Nexis are well-established systems and serve as highly useful educational tools. In the future, the situation may be deepened or aggravated as excellent legal information providing

systems become more and more sophisticated. Two of such systems are Legislation Data Providing Service[18] managed by the Ministry of Public Management, Home Affairs, Posts and Telecommunications in Japan[19] or Thomas[20] of the Library of Congress of the United States.

On the other hand, many students may come to find it troublesome to actually go to a library. Or they may think that it is a waste of time. But information functions only in a certain environment. If the environment is limited to a certain degree, then the information obtained there may be discarding many of what should originally function, even if it does function.

In addition, easy thinking that it suffices to search only when necessary will discourage students from trying to expand their mental world. But as I mentioned before, there exists a paradox that a person who does not have a framework of rules in the brain, or a person who cannot predict search results as a hypothesis cannot conduct a "search." Thus, legal information database poses a great problem in legal education area.

Nevertheless, legal information database system plays a very useful role in a network environment. It is convenient that legal information is available for educational purpose in a network environment. Here, I would like to discuss some points related to the role of legal information database systems, while considering the meaning of research itself and the importance one's inner world.

I am listing the following points, starting with forma aspects and then going on to essential ones.

The first, with legal information database systems, you do not need your own library. This might appear to be a shortcoming, but it is impossible, and unnecessary, that all students get a complete set of thick casebooks or statute books. By making full use of database in a network environment, students no longer need a private library of their own.

Secondly, teachers are able to grasp more accurately each student's degree of understanding by analyzing the search log of a student. This means that teachers are provided with a powerful tool to make more efficient the highly difficult task of measuring the effect of education. With such a tool, teachers can conduct various statistical surveys (including checking if students are fooling around in their work!) by reviewing a log of key words by which students have performed a search. At least, this will give teachers concrete grounds for evaluation. It may be a misery for the students, but it is a blessing for teachers.

Thirdly, especially in a distributed database, we can overcome functional limitations of each database to perform higher functions by interrelating them with one another. What is impossible as cross-reference on paper media can be processed almost automatically in a network environment?

I think this is a fairly significant function. For instance, if a professor writes a textbook

18 http://law.e-gov.go.jp/cgi-bin/idxsearch.cgi

19 http://law.e-gov.go.jp/cgi-bin/idxsearch.cgi

We can retrieve complete text of current statutes at Japanese government's Web Site (but, only in Japanese).

20 http://thomas.loc.gov/home/thomas2.html

in a world consisting of books only, it is an isolated world, like a small island in the vast ocean. It is as if each professor is standing on one of a myriad of islands of his own declaring himself king. It is a pity for students drifting in the ocean and eventually landing on one of those islands. But in a network environment, those islands are no longer just small, isolated islands; people on the islands can contact each other, and know what is happening on other islands. Only a network environment can make this feasible. Humans as imperfect beings can compliment each other in capability by connecting to other databases or other systems. I believe this is one of the biggest advantages of legal information database systems in a networked environment.

The fourth point is that a legal information database may update information more quickly compared with paper media, sometimes providing legal information in real time. This means that a tool offering interesting material in the field of education is available to us. Conversely, such database is useful in finding out very old material. The storage area is becoming immense and seek speed is growing faster and faster. There is virtually no limitation in archive space.

In Japan, a collection of laws is usually published in a printed form called *Roppo,* or the six codes, once a year. But in today's hectic world, the same law can sometimes be revised several times a year. In this case, which version of the law should a publisher print? It takes several months to print, so the text considered appropriate at the time of printing may be revised and deleted when it is published. Establishing a system that can provide the latest text at the current point in as real time as possible is the only solution to this problem. And such system can be realized only through database service on a network.

Lastly, not only character strings but also graphics (still and animated graphics), sound and even "feel", can be retrieved as digital data in a network environment, as long as they can be converted into a digitally transferable data format. There is much more legal information involving such factors than one may think. Previously, it was mistakenly believed that legal information is composed of sets of characters, but it was a belief bound by the limitation of media. For example, a judge's direction based on his/her court administrative authority is an act of generating temporary and local legal rules as well as stating such rules. It is comprised of sound, not sets of characters. What turns sound into sets of characters by records and by stenography is an expression of legal information in terms of characters (secondary data), but its original data is comprised of sound only. Paper media can handle pictures, photographs and illustrations, but nothing else. Certainly, animation graphics cannot be accommodated in paper media. But some legal information may include motion material, which is likely to appear in court most often.[21] In hearing witness or examining evidence via

21 I had an opportunity to visit Professor Martin at Cornell University in March, 2001. Professor Martin told me that in the United States, it is possible to use a videotape of the court procedure of the controversial presidential election result in 2000, which was brought into the Federal Supreme Court. Law students actually can watch the video in a classroom and have a discussion about it. Such videotaping of court procedure is not approved in Japan, but I think it is a significant legal information tool. If such videotaping of court proceedings were allowed in Japan, it would help citizens supervise the fairness of trials. Also, such documentation would serve as a very significant means of knowing

telemedia, motion material has to be processed. And there are some cases in which motion material is referred to in a sentence, although not included in the sentence itself. For example, in a ruling that finds a videotape or an animation work illegal, what should be cited there – motion material such as videotapes and animation graphics on CD-ROM – is usually omitted from the ruling because it cannot be fixed on paper as characters. Instead, it is subtly expressed in words. But originally, it should be included in a sentence. In most cases in Japan, such material is listed just as "a videotape described in an annexed catalogue." The content of the videotape is described in words. For example, its "illegal content" as graphics is described in the catalogue. But it is only for the convenience of publishing because otherwise, it is impossible to publish a casebook. Originally, the graphics themselves should be part of the sentence.
In a contemporary society, motion material can be accommodated in a network environment. Digital network environment has developed so much that we can receive and transfer not only character strings but various things such as images, animation graphics and even smell, taste and feel.
Moreover, if a judge should write a judgment as a digital content, s/he would be able to give a more precise judgment because such materials could be included in the ruling. At least, it is my opinion that motion material can be accommodated in a database system.
The overall hypotheses after considering these five factors are that the legal information database systems may expand the difference between capable, diligent students and incapable, idle students and divide them into clearer categories. Students who already have a wide mental world can expand it further with the help of legal information database, but the other students may get even more confused and come to hate studying. Meanwhile, teachers who fail to master these tools while understanding their limitation can lose the respect of their students. The same thing will apply not only to students and teachers but lawyers and judges.

### 4. Function as an administrative tool for society

Law is a social tool that functions in a certain environment of the social system. There are different purposes for using this tool.
In a despotic state, it will be used to maximize the profits of the dictator and his entourage. In a democratic state, it is rare that a certain law concerns the whole nation. Rather, it is more common that a law concerns specific groups only, so law is generally used in order to adjust the interests of persons or groups concerned. In a country where the government has dominance over the national assembly, law is mainly used for the purpose of carrying out government policies. Also, the same applies when the direct

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afterward how the trial actually proceeded. Such videotapes would be useful in education, as law students would be able to see firsthand what court procedures are like. As it is now, they have to imagine what a courtroom is like by just reading characters printed on paper. So, for various purposes, motion material is quite important. I think that motion materials have been omitted, previously, just because we had no choice, but to substitute them with characters. In a network environment, it will be easy to adopt such materials.

beneficiaries of a certain law are those who are really entitled to the benefit.
An example of this is a law which is aimed at compensating a group of victims of environmental pollution, using tax revenue for the compensation money. In this case, tax is a burden imposed upon every taxpayer, including the victims themselves, so a tool named law is eventually used for the purpose of social control to redistribute the resource in the country.
What is common in these cases is that law does not have an autonomous purpose by itself.
Law is one of the social tools, which is to be used by somebody for explicit purposes stipulated in provisions of law, or for whatever other purposes needed.
To implement law, in any society, there needs to be some internal or external engine, other than the power of law itself, to allow the use of law to function satisfactorily. Such engine is usually provided by a state power system that possesses an enforcement system such as a military force or police force. Law that is not compulsory is powerless.
Traditionally, legal philosophers have believed in the internal power of law itself. Kant[22] is an example of such a philosopher. Universal ideal of law does exist, but the system to implement the ideal and make it function in a society is not embodied in law itself.
Every law directly reflects styles of administrative organizations and interest structures in a society. Thus, the true aspect of law is seen only when the provisions of law are integrated with legal information that is related to the mechanism at work in that society. For example, in Japan, many laws set up only a basic framework, and the detailed contents or standards of their enforcement and operation exist only in government ordinances and notifications. In addition, it is not rare that the concrete operation of a law is neither provided as written information nor recorded. This is especially true when the operational standard itself is left to the discretion of an official in charge.
The same thing can be said about a trial. In an open jury, a part of the judgment process is open to the public because, at the very least, the report of the jury will be announced in the court. In a collegial court, even when the consultation itself is not made public, judges concerned in the trial know the process through which the court reached a decision. But such process does not exist as written information. In a single-judge court, the judgment process only exists as a memory in the brain of the judge in charge. However, unless we obtain information related to these processes, or information that is adequate enough for one to suppose such processes (e.g. judgment papers or classification table for punishment issued by the court, written decisions or operation guides issued by government offices), we will be unable to know what law is actually like.
Today, there is an increasing demand to know about the laws of other countries in a cross-border network environment. The means to meet this demand also has to be applicable to a networked environment[23].

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22 Immanuel Kant (1724-1804); Cf. Zum Ewigen Frieden

23 Legitimacy for international trading can be obtained only by correctly researching for legal information in foreign countries. This information includes not only codes, statutes, regulations or ordinances, but also practical operations

In paying attention to the legal database's function as an administrative tool for society, the role that only academic legal database systems or commercial legal information database systems can successfully play will become self-evident.

### 5. Function as an economic strategy tool

The fact that law has a function as an administrative tool for society also means that it has a function as an economic strategy tool.
Legal information that indicates what kind of legal system a certain country has is a significant factor in assessing the effect and result of international investment on the country and calculating the risks contingent to the investment.
Here, legal information includes not only business transaction law, tax law and other related administrative legislation, but also information related to crime rate, average trial period and trial efficiency. Such information may not have been understood as legal information in the traditional legal world. But since law is a social function in itself, which works under a certain social system, the limited idea that only provisions of positive law constitute legal information is clearly wrong. It is nothing but the idea of those who do not know the essence of law.
The total amount of legal information that functions as an assessment factor in economy can be used as an indicator of the trade risk in each country, when taken into consideration with the level of its quality,. In this aspect, law is functioning as such.
Since international trade between countries is rapidly increasing in modern society, it is difficult to decide whether to make a deal or not, or whether to increase or decrease the amount of trade, without calculating the trade risk accurately. If one does not know beforehand what kind of legal system will be handling potential trouble arising in trade, one cannot make wise decisions.
Thus, it is necessary that people involved in international trade understand the legal information of the country of their business counterpart. But some countries have legal information that is easy to understand and other countries do not. In a country where legal information is provided in an articulate manner by a database through network, one can conduct a more precise calculation of risks. Even if a trade deal involves considerable risk, it is beneficial to traders to have the information available.
Then it is up to the individual trader whether or not to take the high risk. What is significant here is not whether the risk involved is high or low, but whether there is enough information available to assess the degree of risks?
I think it is important that legal systems and legal information be highly lucid as determining factors in such assessments. If a country fails to provide a lucid legal system or legal information, one cannot assess the risk involved. There would be no investment where risk assessment cannot be conducted. Such a country should not be considered a feasible investment ground for traders.
Therefore, it can be argued that to present legal information in a more accurate and prevailing way, as well as in a large quantity, is crucial to the survival of a country. I

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of them. How inform such information towards the other countries is just a critical matter as a basic strategy for the country.

believe all of the above mentioned points are essential functions of legal information database.
So, it can safely be assumed that the degree of freedom of legal information would greatly influence the future of a country. In particular, this will be actualized to a larger degree in a network environment, in which examination employing a method of comparative law is feasible as parallel processing.
In this sense, legal information database in a networked environment has begun to have a function as an economic strategy tool.

## IV. Future Roles of Academic Legal Database System

Taking the above arguments into consideration, I will now discuss the future roles of academic legal database systems.

### 1. Policy making

Academic legal database systems can be an important source of materials for policy decisions.
This is because academic legal database systems are not created for enforcing a specific policy. A database that exists for the sake of policy decision embodies a certain bias by its very nature. It is impossible to make a right decision based on biased information. Only unbiased information can enable us to make a correct decision. I think this is a very significant factor to consider.

### 2. Rulebooks

Academic legal database systems can serve as a rulebook[24].
This is because academic legal database is not subject to conditions that only positive law and judgments should be treated as legal information.
For example, the role of Diet database systems are to provide bills and statute laws that were passed in the Diet, and the role of court database systems are to provide correct data of rulings. Other kinds of information are handled by other database systems in different fields.
In contrast, there is no such limitation imposed upon academic legal database, which can take in everything pertinent.
Thus, it can also take in all the information necessary in order to find "the true rule."
The related information necessary to understand this "true legal information" includes examples of how a law was actually operated, how a judgment was delivered, how a compulsory execution was conducted and how an arrest took place. Many such things cannot, by their very nature, be handled in official databases managed by government agencies or courts.

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24 I would like to say of rulebook as one of the social functions in this context. There are many types of rule books, but they are all local rule books. Only legal database system, especially academic database systems, can provided total and good integrated rule book in each areas or countries, I believe.

However, academic legal database has no limitation in its approach to such things; rather, it should deal with these things beyond the scope of official database. Another advantage of academic legal database is that it is open to social interaction. A court is like a large but isolated island in the ocean, and so is an assembly. They have to be self-complete entities. But academic legal database systems are not obliged to be self-complete.

3. Social interactions

Academic legal database systems can have various social interactions.
This is because any academic legal database systems can relatively easily harmonize with other academic databases systems while being part of another big, distributed database.
In our SHIP project [25], what we are making is not just a legal database but databases for other related fields such as political science and business administration. For example, among the data we have collected so far is a database indicating remuneration for Diet members. The data itself is nothing but a batch of information.
But with the research system that Assistant Professor Wada developed, one can, for example, retrieve data showing how much was paid to Diet members on any given day. By using this research system, political scientists can assess the workload of Diet members, the amount of remuneration paid for the work and the appropriateness of the amount. They can even evaluate if Diet members are working hard or not.
Though it is originally a legal information database, it also provides a very effective tool for political scientists. It can be used in various ways. Although we are lawyers, we can interact with databases in the fields related to us, like political science and economics. For example, in order to be familiar with tax law, one needs to have knowledge in accounting and other specialized fields. We can obtain such knowledge through database.

4. Neutrality

Academic database systems alone can maintain true neutrality.
Administrative database operated by a government is controlled by policy objects, which imposes restriction on its operation. Meanwhile, commercial database cannot exist without taking commercial profits into consideration.
Since academic database systems can freely connect with other database systems, it can be made with great ease and freedom. What I would like to emphasize is that academic legal database alone can remain neutrality and maintain public purposes.
In any country, a government exists in order to enforce polices made by one party, as in the United States and in Japan. In Japan, the Liberal Democratic Party has been in charge of the government for a long time. A government must necessarily have a certain orientation. So database which has been made to go along with a line of policy naturally has some kind of orientation from the beginning.

25 http://ship.mind.meiji.ac.jp/

As for commercial database systems, profits are the first priority, because without making enough profits, such database will not survive. Its content must be marketable; if it is not, it cannot exist as a commercial database. Eventually, unmarketable databases will disappear while marketable ones will thrive. This is natural; otherwise, it would not be healthy for corporations operating such databases. But academic databases in principle can remain unaffected by such market rules.
Of course, many academic database systems are somehow related to business. For example, in the Untied States, quite a few databases of law schools are allied with WESTLAW and Lexis-Nexis, operating like branches of such commercial systems.
As for academic database systems in Japan, some professors are proudly announcing on their Web page that their database is "powered by Yahoo!" or "powered by AOL." It may be right if they are funded by these corporations.
If not, an academic database should basically be proud of its neutrality. As long as it keeps on striving to keep its neutrality,
I believe it can do so. This can only be achieved by academic database.

## V. What do we have to do?

Those who will deal with issues of legal information will have to face technological factors, both in positive and negative aspects.
Let us have a look at the positive aspect first. XML and other new document processing technologies have a great potential.
XML, which belongs to an artificial computer language group called markup language, can, by tags, control various elements in a document. As natural language processing technology improves, there may come a time in the future when tags are no longer needed. But noting that the essence of social context exists only in the brain of a reader, we can easily assume that such a time will come only after free will, which we in the modern world believe in, is denied. Thus, the use of tags will not die out for quite some time; rather it will increase. And an environment which can be controlled by tags might be called a kind of data-driven type of computing environment. It will not be until such an environment is established that we can create an encyclopedia, in its true sense of the word, on the Web. In addition, control by style sheets will provide many clues in solving problems of human rights, as I will discuss later. In this field, Mr. Komatsu, lawyer and a member of our SHIP project, has carried out various attempts[26].
On the other hand, technological development can cause totally new problems because it ensures much freer access to legal information. Many such problems will derive from the expansion of storage space as well as from the extraordinary progress in the speed of data processing. In those days when eight-inch, 2D magnetic disks were popular, the amount of information stored on the medium was not that much. But now, we can obtain a 100-gigabyte hard drive for only tens of thousands of yen. When a memory chip that employs nanotechnology is put into practice in the near future, it is said that the whole contents of the books stored in Japan's National Diet Library (NDL)[27] could

26 http://icrouton.as.wakwak.ne.jp/xml/

27 http://www.ndl.go.jp/e/index.html

be recorded in a tiny storage device as small as a cube of sugar. This means that a person can have a bigger world than ever imagined on his/her own palm.
Meanwhile, the technology of communications will further advance, enabling much more data to be transmitted in a much shorter time. This also implies that one will be able to infringe on human rights, to a greater degree, with less effort. Violation of privacy will be one such example.
The same thing can be said about intellectual property rights. It might become possible to copy any currently practicable copyright protection system, along with its whole surrounding environment without illegal circumvention[28], entirely into a nano-memory chip. As the surrounding environment is also included in the same nano-memory chip, the copyright protection system will not work, allowing the protected contents to be read out without limitation. If storage of information increases in density, those who formerly had nothing to do with an invasion of privacy or other violations of human rights, might, in the digital world, become victims or perpetrators of such violations. In short, it is likely that intellectual property rights for digital contents will be subject to more violations as technology advances.
Looking further into problems of human rights, in a modern world where legal information was provided only through paper media, casebooks were also contingent on paper media. Since the amount of data storable in casebooks was quite limited, the judgments recorded there had to be well selected. In Western countries, it is customary to print the names of the plaintiff and the defendant (or the name of an organization) on a sentence for identification; e.g. "*State vs. Strange-man*". Such a custom meets the demand for open trial or for "right to know," which indicates that everybody in the society should know of a certain trial. However, this seems to be a product of the times when data of a certain trial ended up as a matter of interest for people in the same age and in a comparatively small area. Does the conventional theory fully function in today's environment in which case information is distributed worldwide and stored and accumulated almost infinitely?
In recent years, we are facing a problem regarding the protection of personal data (privacy) in case information. The same problem can also occur in relation to other moral rights. As part of the SHIP project, we discussed this problem in the first subcommittee meeting held at the Surugadai campus of Meiji University in the summer of 2000.
The theme discussed there was "case information and technology for protecting privacy." Academic legal database, which should serve citizens' right to know by providing legal information, must not neglect other significant interests, as a result of focusing too much on fully performing its function. Traditional rules regarding citation of judgments or presentation of judgments were effective in a world where information was limited.
Now such rules must be reconsidered, in a world where every trivial piece of information, like the information that somebody was questioned by the police, can be accommodated in a small memory chip as big as a cube of sugar.
If a revision of rules is not enough to deal with the problem, we will have to adopt

28 Cf. U.S.C title 17 chapter 12 section 1210; Japan Copyright Act also has similar articles as in U.S.C.

technological solutions. Our SHIP project is now considering how to cope with this problem by using the control technology of XML style sheets by Mr. Komatsu[29]. This technology may make us to resolve present hard questions, I expect.

## VI. Conclusion

In conclusion, in building an academic legal database, we should actively employ new technology and strive to develop a system that is easier to use and capable of serving the general citizen, in order to secure access to legal information as well as to contribute to academic studies and education.
At the same time, we should promote such development as a synthetic study, and pay careful attention to a new type of violation of human rights, as well as its related peripheral problems.
I believe that the ideal of academic database systems, which arises as the result of such development, should, as much as possible, be open to the public at no charge because of its unique advantages. Then, ideally, such database systems will be reasonably applied in both administrative database systems and commercial database systems.

Thank you.

29 See Appendix 3 in this review.

# The Library's Function in the Legal Information Environment

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## 1. Introduction

Today, I'd like to talk to you on the theme of "The library's function in the field of legal information" to present a somewhat different viewpoint in this field.
I would like to reconsider legal research and legal information, about which Professor Natsui talked previously, from the viewpoint of library and information science, one of my fields of study. I once wrote about this topic in a magazine called "Law Seminar" at the request of the Nihon Hyoronsha publisher. The main issue here is what significance literature information has in legal research. We need to understand that, from the standpoint of library and information science, legal literature has slightly different characteristics from other studies and academic research.

In the process of legal research, the initial but most time-consuming task is to search through large varieties of books in the pursuit of substantial law itself. In short, a researcher of law must, in the first place, seek statutes and case laws. Previously, printed media was used as a tool for the search. In the early 20th century, it was sufficient to review several hundred volumes, but today, we need to include not only printed media but also electronic media and other various kinds of media in our research, as Professor Natsui pointed out before. It used to be said that "books are a lawyer's working tools." Basically, one only had to examine a collection of laws and regulations called *Roppo* in Japanese, along with casebooks in legal research, but currently, a much wider range of materials need to be handled.
Now, let us consider the kinds of legal information used in legal research. There is a difference in the classification of information between legal research and general library and information science, or what we know as an ordinary method of handling literature information. For the latter, primary source refers to "raw" information attributed to originality. So, case laws can be considered a primary source in the field of legal research. Also, theses printed in law journals can be called primary source. Meanwhile, "secondary source" in library and information science refers to something unoriginal, which was created as a result of compiling, summarizing or processing such raw, primary information. Thus, *Roppo* and case books comprised of individual case laws, which just contain statute laws, are called secondary source or secondary materials. I do not mean to deny the importance of originality in compiled works, but works which lack originality are called secondary source. In library and information science, secondary source generally refers to encyclopedias, dictionaries and bibliography.
However, in the field of jurisprudence, the terms "primary source" and "secondary source" have a different meaning. In law librarianship, which is a field of library and information science specializing in legal research, the primary source refers to what composes the basis of legal research; that is, compiled works such as statute books and casebooks. They are called primary source because they are a basic tool in legal

research. Meanwhile, secondary source in law librarianship refers to information quoted or used as a reference in legal research. That includes theses of legal research, which is categorized as primary source in general librarianship, and other information such as textbooks, law journals, legal dictionaries, bibliography, indexes, research papers and so on. The category here differs from the one based on an orthodox theory of traditional library science.

Some of the legal researchers of the new generation in Japan, such as Professor Natsui, are now establishing a new field called legal informatics. In my understanding, the core of legal information in legal informatics is comprised of various information related to law, in the form of electronic or digital data. The information employed there is no longer limited to printed media, as Professor Natsui stated in the handling of animation graphics. In legal informatics, the source of law is understood to be legal data in multimedia format encompassing characters, images and animation graphics. Also, legal informatics seems to deal with knowledge and techniques of how to research legal information in diverse cyber spaces, as Professor Natsui mentioned in relation to university education. From another aspect, legal informatics is perceived to be a legal theory established as a result of an attempt to reconstruct a jurisprudence that will be suitable to the 21st century, while making use of new technological development.

We have seen so far that legal research is developed using such legal information as material. Now, I'd like to think about the style in which legal researchers conduct their research. In Japan, there seems to be two types of legal scholars. The Type I scholar seeks an immense amount of law information by himself to build his own world of academic study. These people used to look for information in the printed media, but recently, they are also seeking in cyber space for necessary legal information. When we consider the lifestyle of this kind of scholar, say, those living in Tokyo and environs, they are most likely to live in an apartment house as land prices in the metropolitan area are quite high. Those respectable, great legal scholars in Japan often rent an apartment room to live with their families, and in addition rent one more to use as their own library in the same condominium. That is to say, many of such scholars have their own study room to do their legal research, apart from their private residence. Alternatively, some of the scholars of this type own a two-story house in the suburbs, where they stack books around, even on the stairs. In recent years, most of scholars of this type have added computers to their personal libraries.

On the other hand, Type II scholars – I personally hope that I belong to this group – have to utilize academic public libraries heavily in order to pursue legal information, because they are too poor to purchase the necessary literature for their study. When we come to think of it, however, there are very few books that we read twice in our lifetime. If anything, we tend to read a bit of what seems interesting to our
own study. Actually, we hardly read a book from the first page through to the last. Then, as it does not seem wise to lay in books that will be bothersome when we move to a new house, we are encouraged to make the best use of public libraries. In fact, the concept of a library is, as I will elaborate later, not about a concept in terms of its building, but a concept in terms of its function. I will talk about that in a moment. Anyway, those who conduct their legal research through academic public libraries can be categorized as Type II.

Regardless of Type I or Type II, those who are successful in their study have a lot of

fellow researchers, as in any field of study other than the field of law. More often than not, they find themselves bombarded with unsolicited e-mail from their fellows when they get home. Researchers who have a similar interest of study often exchange information – not necessarily the state-of-the-art information – within that group, which is called "invisible college" in the term of library science. Such networking is another way that Type II scholars utilize in their research. What I wanted to emphasize here is that Type II is the more rational type of scholar, preferable to Type I.

2. The Function of Libraries

Now, let us reexamine the concept of "library."

The Library Act of 1950 in Japan was not included in the common *Roppo* sold at general bookstores. But recently, the situation has been changed, as a complete book of *Roppo* published by a major publisher of legal books, called Yuhikaku includes the Library Act, which makes me feel that people have begun appreciate libraries for their own worth. The first provision of Section 2 provides that "libraries shall mean facilities, the purpose of which are to collect, arrange and preserve books, archives and other necessary data and materials for the intent of making them serviceable, by offering them for the utilization of the general public for education, research, study, recreation and other purposes." In other words, a library can perform its intended function only when it systemizes or organizes "library materials," which means books, records and necessary materials. It needs more than just collecting, arranging and storing a lot of materials. What I'd like to emphasize here is that the significant aspect of a library is its utilization function rather than its storage function.

Libraries used to mainly collect materials of printed media such as books, journals and magazines. In the 20th century, it became common for a library to have collections of audio-visual materials including movies, videos, records and compact discs. In the United States, many also have collections of coins, stamps, paintings and other art works. Then, with the spread of the Internet and the age of digitalization, many libraries are now moving towards the Digital Library, or what was once called an Electronic Library.

As I pointed out before, a library is not a facility intended just to store materials; it can perform its intended function when it is fully utilized and helps to bear successful fruits in researchers. In short, a library functions as a place that ensures a free access to the information stored in the building. Currently, diverse legal information exists on the Internet or in cyber space in various forms. So, there needs to be some means to efficiently provide such information to users and scholars. Since the Internet is filled with information of various kinds in a hopeless jumble, some of which is not necessarily trustworthy, a new responsibility of libraries is to pick up academically meaningful information, categorize it and offer it to users.

I do not mean to throw a cold blanket on Professor Natsui's vision of cyber space as it does have a great potential, but there are some problems with this new space. Previously, researchers were able to get hold of most of the academically significant information available. In Japan, for example, one could select information through book previews such as "Books to be Published" or publication announcements issued by publishers. Researchers who purchase a lot of books as well as libraries were building up their collections with the help of announcements of forthcoming books and

publication advertisement. So it was enough to check the information provided by thousands of publishers, most of them, in the case of Japan, located in Tokyo. In other words, it was easier to obtain necessary information. However, in a digitalized, network environment, it is impossible to get hold of all the information generated there. Much of the information, including that with academic significance, is generated in such a way as to bypass libraries and individuals willing to study. Moreover, such digital information is quite unstable. I often find information on the Net and then discover it has disappeared, only a short time later.

As one of the missions of libraries is to raise successful scholars, present-day libraries need to provide users with objects that are no longer easy to grasp, while making a good selection of obtained information. For example, the library of Tokyo University has set up a Web page entitled "Index to Resources on the Internet" which picks up other academically significant Web sites and introduces them as a collection of links. In the field of jurisprudence for example, a site managed by Professor Martin is also included there, though indirectly.

As I said before, it was enough for traditional libraries to collect mainly materials of printed media in the form of books and magazines. However, libraries of today need to additionally take on materials of electronic media. It can be said that they are now presenting themselves as "hybrid libraries," which offer two different types of information materials. Not only that, there is a pressure to set up an environment in which users can obtain information on a certain theme or subject in a continuous way, without being inconvenienced by the gap between the two different media. But as I mentioned before, materials of the electronic media are rather difficult to collect and organize. How can we establish order with all of this chaotic electronic information? If we are to provide a neutral environment of legal information, as Professor Natsui mentioned in his conclusion, we have to devote considerable efforts to this cause.As for the use of libraries, I often tell my students not to go to the National Diet Library. I say so not just because the service is poor, but I do not think it meaningful to actually visit it, unless one goes there for sightseeing or on an educational trip. Rather, I advise them to make the best of nearby libraries. (Generally, most of the "precious" materials that undergraduate students and graduates doing their master's degree chanced upon in the National Diet Library are owned by their university libraries.) For examples, I will advise students of Meiji University not to go to the National Diet Library in the Nagata-cho area, which is located near their university. Why? Because they have an access to materials in the national library on interlibrary loan through their university library. Many universities in the provinces that have doctoral courses have this interlibrary loan agreement with the National Diet Library that allows them to lend books in thousands from the metropolitan library.

In regards to this issue, I'd like to explain the concept of "library network." It is necessary to understand that libraries form a network, and that in the state of the law. Paragraph 4 of Section 3 of Library Act, which regulates public libraries, provides that "(public libraries) shall maintain close contact and cooperation with other libraries, the National Diet Library, and libraries instituted in local public bodies and schools, as well as engage in interlibrary loan." This is an interlibrary loan provision, which confirms in a legal sense that libraries should function in cooperation with one another, rather than operate as a single, separate entity. While the provision regulates "library

network" for public libraries, the National Diet Library, which plays a role of a "library of libraries" in Japan, has its own provision in regard to such network. An annotation of Section 21 of National Diet Library Act provides that "the National Diet Library shall allow the Japanese people to take full advantage of their services and collected materials directly or through public and other libraries."

Herein lies the reason I advise students of Meiji University not to go to the National Diet Library. We, Japanese, have access to the national library, which is supposed, in principle, to collect all the materials published in the nation, and make them available to us via the nearest public or other libraries. So, faculty members and students of Meiji University can make use of the collection of the National Diet Library via the Meiji University Library. If one insists, "I want to use this and that book for my dissertation," at the lending section of the university library, a good librarian will say, "If our nearby libraries do not own this book, I will ask the National Diet Library to loan the book to us." The book in question will then be made available to the student through the interlibrary loan provision.

I believe that by now, it is clear to you that an efficient way of study, leading to successful achievement depends on how you make the most of our libraries, rather than how many books you possess personally.

The topic I have discussed here has dealt with what is called "law librarianship," a field of study that examines the rules of law libraries as a means of supporting legal research.

In Japan, law libraries such as the National Diet Library, the Supreme Court Library and libraries attached to the law department of universities, form the Association of Law Libraries (*Horitsu-Toshokan Renrakukai.*). I expect that organizations like this work hard to promote "law librarianship," but unfortunately, they have yet to come up to our expectations.

Ideally, law libraries, which are expected to provide information in both printed and digital media, should have professional "law librarians." In the United States, the term "law librarian" is fairly well-recognized. I know some of them and such professionals are supporting the study of law. In Japan, however, there are very few such professional librarians. I think this is highly problematic, as it is difficult to produce distinguished legal studies without law librarians. I will talk about this next.

In order for law libraries to fully perform their function, certain requirements must be fulfilled. As I mentioned before, libraries form a network. Each law library has to build up its own collection based on core journals and reference materials that are frequently used while taking the characteristics of its user group into consideration. That is what a library network is based upon. In this situation, digitalization is now in progress.

Then, in addition to materials of traditional printed media, libraries need to deal with what is called digital law information. I will list some of the points needed for law libraries in Japan to cope with this new situation. First, law libraries should work on archiving digital law information. I think that the professors from the United States and Australia will touch upon this issue in our afternoon program. Libraries need to be committed to collecting law information, and whether it should be stored in a centralized way or distributional way is another issue to be discussed. Moreover, the stored information should be efficiently organized so that users can easily find the information they are looking for under certain categories, such as criminal law or

administrative law.
Also, I sometimes observe on the Web pages run by the Japanese government, that information disadvantageous to the government tends to disappear soon after it first appears. It is rather an unstable place to keep information. But of course, significant information should be stored, and in this age of social specialization, it is libraries that should undertake such unstable, electronic academic information. Not only that, libraries are expected to collect trustworthy information. It goes without saying that libraries can be of worth only when their collection is put to use; it is ridiculous of them to just squirrel away materials. So, they should promote the use of their facilities, by encouraging users, researchers and students to make the most of them. I believe these are the tasks imposed on law libraries as the digitalization of information progresses. With my presentation so far, I hope you have understood the important but rather unseen role libraries have been playing, up to the present.

3. More Attention to Law Libraries!
How are law libraries operated? First, let us look at those in the United States. I will cite data from an old magazine entitled "Law Librarian." Since the data was collected in 1986 to 1987, it may be a bit old, but I think the general trend is still the same. An average law library in the United States usually is operated by seven professional law librarians and about 10 assistants, who are working full time. The size of its collection is 275,000 volumes of legal materials. The settled accounts for collecting materials is around 417,000 dollars. As the data is from about 10 years ago, the cost may have changed a little bit, but the change should be small considering the situation surrounding university libraries.
On the other hand, what is the situation of law libraries in Japan? The law library of Tokyo University is far ahead of the rest in its settled accounts for collecting materials to the tune of 149.44 million yen. This data of 1999 was listed in a book entitled *Libraries in Japan 2000*. As it has 15 full-timers, 3 part-timers and 550,000 volumes, its scale is exceptionally large. Next, one of excellent law libraries, the law library of Tohoku University has three full-time employees and houses a collection of 236,000 pieces. It expended 50,048,000 yen for its collection. Most of the national universities located in cities with a high court have a school of law, but the law library of Tokyo University surpasses all others by far. Private universities, including Meiji University, have their own law departments, but there is no separate data for their law libraries. Here, I want to point out how poor the environment surrounding the study of law is, in Japan.
In addition, the law library of Tokyo University has some problems in terms of accessibility for legal researchers in Japan and those from abroad. It seems the library fails to meet the principle of "library network" that I mentioned before. The principle respects the availability and convenience of off-campus users who are unable to visit the university library. However, the law library of Tokyo University seems to be negligent in this regard, as it offers service only to those who come all the way to visit the library. I believe that the largest law library in Japan is obliged to lend materials to off-campus users or accept copying requests, as done by the National Diet Library. Those who are involved in operating the Tokyo University's law library claim that it is impossible to do so, for reasons of man power, as the number of public officials is now

being slashed. Of course, as one of the persons in the field, I fully understand their argument. But if those people are willing to take a democratic stance and to promote the study of law in Japan beyond the current conservative state of jurisprudence, they should try to guarantee free access to their rich resource of legal information while providing more convenient service to off-campus users.

This is the present situation for law libraries in Japan and the United States. But libraries as research aid facilities need more than just a vast collection of books. In fact, a "good library" is defined in the first few pages of most textbooks of library and information science. A large and rich collection accounts for only 20 percent of what makes a "good library." Grand facilities account for 5 percent. The key to a good library is the quality of its librarians; it is said that the quality and the number of librarians account for 75 percent of what constitutes a good library. It explicitly shows how important a role librarians play in a library offering satisfactory service to its users and researchers.

In the Untied States, there is an association of law librarians called the American Association of Law Libraries, which was established in 1906. This 100-year-old organization has about 5,000 members, which means that there are 5,000 professionals supporting legal research. Of them, 37 percent are working for the libraries of law schools, such as the law schools of Harvard University and Cornell University. Interestingly, another 37 percent are working for law firms. As the United States is often called a litigious society, becoming a lawyer is one of the most popular future ambitions for American children. I guess that it is partly because lawyers can earn a lot of money, which also means that the hourly wage of lawyers is fairly high. And lawyers can increase their productivity if they have someone else to research the information necessary for their work, rather than doing it by themselves. They have to wrest victory in a seemingly difficult case by maximizing legal information that someone else has obtained for them. I want you to know that in the United States, nearly 40 percent of law librarians, people who provide apt legal information, are working in law firms as professional assistants to lawyers.

Turning to the situation in Japan, we sometimes see want ads looking for filers, on the homepages of major law offices in metropolitan areas. Such positions typically have a four-day working week and do not require any specialized academic background. This example highlights the gap in the recognition of the importance of legal information between Japan and the United States. I personally believe that if the law community in Japan wants to foster a legal practice that also excels in theory, or to form universally valuable legal principles which will be cited in legal dissertations in developed countries, at least a certain number of major law offices, if not as many as in the United States, should hire skilled and qualified staffers who specialize in law librarianship. I also wish to educate students who can work as such law librarians, but unfortunately, there is not enough demand in Japan.

I said that filers in Japanese law firms are not required to have particular academic background. By contrast, 85 percent of the 5,000 law librarians belonging to the American Association of Law Libraries have a master's degree called either "Master in Library Science (MLS)" or "Master in Library and information science (MLIS)." Moreover, 30 percent of them have a degree in law, and 20 percent have both degrees.

You can see from this data that the academic status of law librarians is quite high in the United States.

Now, I'd like to explain the situation surrounding library and information science in Japan. One of the main research bases in Japan is the University of Library and Information Science that I am working for, which is probably the world's biggest university specializing in this field. It has nearly 900 students including graduates, and about 70 faculty members. As a typical course of library science in the United States, usually a master's course, has about 40 to 50 students and 10 full-time faculty members, my university is exceptionally large by comparison. Among other universities in Japan, Keio University has an old traditional library and information course in its department of literature along with graduate programs, and Aichi Shukutoku University recently established a doctoral course in this field. Also, Tokyo University and Kyoto University have courses with one or two full-time professors, doing educational research in this field. Such being the case, Japan is far from being able to provide an appropriate working field for future law librarians. The lack of demand for such professional law librarians on the part of jurisprudence and legal practice is part of the reason Japan has no researchers or potential researchers of library and information science with educational backgrounds in law.

Many of the law librarians in the Untied States take two or three courses in law librarianship while studying library and information science in a master's course. In Japan, there is no such system for developing law librarians.

Not only that, the status of law librarians is quite different in the two countries. In the United States, it is not rare that law librarians have faculty membership at some law schools. Professional librarians are titled "professor" and treated with respect. As I mentioned before, they are treated as professionals, supporting research and practice at law firms. Their salary is not so high as a lawyer's, but they are well paid.

In Japan, by contrast, librarians in law libraries are looked upon as clerical workers. Even in the nation's biggest law library of Tokyo University, the treatment of the staff is just the same as that of those in the general administrative affairs, although they are hired as second-class national public officials in library science. The employment requirement makes it sound as if their work is something professional, but their salary is based on the same payment system as other non-professional positions. In private universities in general, there are actually no professional librarians; those who work at university libraries are clerical workers, who get transferred to some other department after a couple of years. This is true, not only in jurisprudence, there is no system of developing librarians as professionals in general in Japan.

It is also surprising that some Japanese researchers have a very superficial understanding of the research-aid function of libraries, regarding them as something like a free rental library. It baffles me that libraries are treated so badly by this Japanese society, which claims to have founded the state on the basis of science and technology, and is trying to consolidate this basis with academic activities.

To put it briefly, a typical law library in Japan has a few staff members treated as clerical workers, half of whom are part-timers. There are neither professionals nor any system for fostering professional law librarians. The average size of its collection is about 30 or 40 thousand books. Such is an average law library in Japan.

4. Future Image of Research, Education and Related Librarianship in Japan

Currently, the idea of establishing a Japanese-style law school has been under hot debate among those involved in law education and schools of law in Japan. As my last point, I would like to suggest how we should consider the development of law librarianship in this new trend.

In Japan, there exists no specialized education for law librarians, and the system of developing professionals who support legal research or practice has not been established. Most of the conventional doctoral courses of graduate school of law have mainly concentrated on educating researchers, but in a law school, accommodating a large number of students, not all of them will become researchers. Then, as has been discussed, it will probably produce practitioners of law with a high-level of expertise. In order for them to display their full abilities we need to strengthen backup forces.

As the number of law practitioners increases, the competition in the law business will become intense and shift to an international arena. In such a situation, it will be essential to offer differentiated services in legal practice, especially in the handling of legal information. For instance, lawyers in Japan, most of whom are busy moving from one place to another, will need professional help in seeking legal information in order to improve their productivity, rather than sitting in front of a computer doing research for themselves. (Of course, using a reliable computer system is another step to increasing productivity for lawyers who have no time to spare.) I believe that it is time for us to focus more on the supporting role of law librarians in legal practice.

5. Conclusion

I'd like to conclude my presentation with some critical opinions regarding legal research in Japan. It seems that researchers of law in Japan tend to be like a lion at home and a mouse outside, talking big only among themselves. I sometimes visit law libraries abroad and see a lot of American or British law journals and legal literature, but I rarely find legal literature from Japan. I think this is not just a problem of language. If excellent, and democratic legal principles that would lead the new era were to be established, Japan would attract more attention with its study of law. I personally doubt whether academic studies that are appreciated only within a domestic circle can be real academic studies, and I sincerely hope that Japanese legal research will develop into a globally respected genre.

As I mentioned before, legal scholars of foresight, such as Professor Natsui and Professor Ibusuki, are and will be working hard to improve the current situation. But my personal opinion is that legal scholars and practitioners in Japan are more backward than the Liberal Democratic Party, although they are constantly criticizing the conventional nature of the party. I believe that legal research exists in order to realize human rights in society, and in the process of building a better democratic society, the legal research, as a foundation of this process, must be democratic as well.

I will recapitulate what I have mentioned here. With the spread of the Internet, complicated legal conflict will be likely to arise in a borderless environment, as Professor Natsui referred to in the last part of his presentation. Then, in the field of conflict of laws as well as legal informatics, jurisprudence in Japan has to be well-established so that it can cope with such international dispute. Jurisprudence should be a way of finding a more appropriate and rational solution, while making

pertinent legal information accessible to anybody, whether living in Hokkaido or Okinawa. The utilization of cyber space will also be an important factor.
The ideal form of jurisprudence appears to be legal informatics as the core of legal practice and legal research, with law librarianship playing a supportive role. I strongly look forward to seeing this SHIP project perform further substantial activities in the future.

## Questions and Answers

Q: (Mr. Tanaka of Osaka University): This is a technical question about the distinction between primary and secondary sources. As for legal information, casebooks are certainly called primary source, but as Professor Natsui mentioned, a very original judgment is indeed kept on a shelf of a court building. How do you call such material in library and information science? Zeroth source?
A: Essentially, primary source recognized in library and information science refers to raw, original work with a certain degree of originality, which an author has created, using his/her own sense, logic and thinking. In short, what is called someone's writing. When such work is summarized, edited or compiled, then it is referred to as secondary source in the sense that it underwent a secondary process. Dictionaries, cyclopedia, bibliography and indexes are secondary source. When such secondary sources are again processed, like a cyclopedia of a cyclopedia, or a bibliography of a bibliography, they are sometimes called "tertiary source" in Japan. (In the United States, there is no such expression.)
In library and information science, the presence of originality decides whether a material is categorized as primary, secondary or tertiary sources.
Q. Then, a ruling itself is a primary source?
A. Yes, in library and information science, it is considered a primary source.
Q. How about a casebook? Can a casebook that compiles rulings be called a secondary source?
A. A casebook is categorized as secondary source in library and information science, and handled as a primary source in law librarianship.
Q. From the standpoint of library and information science, I think it more accurate to say that legal researchers are employing secondary source, rather than to say they are using primary source. In short, we are doing research without referring to the very original text in the current situation of jurisprudence. But that isn't bad. I see originality in the act of establishing one's own hypothesis based upon someone else's work. I would like to argue that we should recognize such method of research as a creative academic study, acknowledging its own value.
A. You are right.

Q. (Mr. Bennett of Nagoya University): This is a comment rather than a question. I strongly agree with you about the necessity of developing law librarians in Japan. There is a mailing list of law librarians, so I suggest that anyone in the audience who is interested in examining the practical work of law librarians join the mailing list and take a look at the discussion and views there. I am sure it will be of great help.
A. Thank you very much.
(End of the Q&A session)

# The Legal Information Institute (LII) - Providing Catalysis, Innovation, and Integration in a Complex Legal Information Environment

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## I. The LII - From First (1992) to One Among Many (2001)

For over eight years, the Cornell Legal Information Institute (LII) has been engaged in the electronic dissemination of legal information – on disk and via the Internet. Over those years, no more than a brief moment in the history of a university, the scale, complexity and ambition of our activities have expanded beyond anything we imagined in 1992 when my collaborator, Thomas Bruce, and I founded the institute. Dramatic though those changes have been, they are small compared to the total transformation of the legal information environment that has taken place in the United States and elsewhere during the same period of time. We have been, I believe, and will continue to be a key player in that transformation. However, we are hardly its most important feature. Consequently, this paper is not only about the Legal Information Institute but also about the larger context. It seeks to trace the understandings we have gained about the importance of broad and effective access to legal information from our distinctive vantage point.

A core founding and sustaining principle of our institute is that a university-based, non-commercial activity has an important role to play both in exploring new modes of education and in extending public access to legal information. Central to that role is a sustained program of applied research on how digital technology can be used to achieve those closely related aims.

At the beginning, we stood alone. Our institute ran the first Net server focusing on a discipline outside the physical sciences (initially a gopher). We created and released as freeware the first Web browser to run under Windows (Cello) – a necessary step in those early days toward providing effective hypertext access to law via the Internet. It is startling to realize how different those times were. In 1993 the LII's original Web server held a hypertext version of the U.S. Constitution, an HTML front-end to one hundred or so Supreme Court decisions at another university's ftp site, the Uniform Commercial Code and a few federal statutes – all created in HTML 1.0 by hand mark-up. More a proof of concept undertaking than a resource for serious researchers the LII site responded to a few hundred data requests a week. At that time our disk-based publications for law students drew far more attention and use. They contained the core codes for a number of important law school courses in a rich hyper-linked and searchable form and were appreciated by computer savvy law students, although only rarely by those who taught them.

Flash forward to today. At present, Cornell's Legal Information Institute runs the most heavily used non-commercial, comprehensive law site in the United States. We operate an array of servers that respond to far more than a million data requests a day, representing tens of thousands, sometimes hundreds of thousands of user sessions. (And neither figure accounts for the traffic at our mirror site in Europe.) On days when the Supreme Court releases decisions, summaries linked to the opinions in full text are dispatched via e-mail to over 20,000 initial recipients of our free electronic bulletin. Since we encourage redistribution, we have no idea how many individuals are, in the end, reached by this free service. Needless to say, the audience is much larger than and quite different from that reached by the Cornell Law Review and the other two print journals published by our law school.

The institute also produces CD-ROMs and downloadable course materials and has, for five years, offered law courses over the Internet to students at a growing number of other U.S. law schools.
Pioneers do not necessarily survive; being first has as many hazards as advantages. A year ago some didn't believe this to be true of the Internet. Today, they know otherwise. I am convinced that the Legal Information Institute continues to thrive and grow because of important strategic decisions made initially and in the years since 1992. As those years have seen enormous changes in the environment surrounding our activity, the key decisions have been subject to frequent revisiting.
Let me list a few of the more important ones:

**That the institute should remain non-commercial and based at Cornell University**

Our institute and its principals have faced and resisted numerous opportunities to exchange the commitment to research and non-commercial public access for economic gain. While other Internet projects that began in American universities have, during the Internet explosion, moved to some commercial form, often with large profit to their founders, we have held to our original non-commercial path. We have also taken pains to avoid individual or institutional partnerships with commercial publishers that posed serious risk of compromising our commercial neutrality. In our setting that meant rejecting special relationships with Westlaw and LEXIS. On the other hand, we have been quite willing to draw revenue from the commercial sector through data and software licensing or consulting. Our institutional setting has given us access to a wide range of expertise, linked our program to deeply held values of discovery and public service, and insulated our work from the direct effects of political and market forces.

**That a centralized comprehensive collection was, in the U.S. environment, not an attainable goal**

Our founding vision went well beyond a shift in the law school's support for publication (an activity in which it had long engaged) to a new, digital form. We intended for our institute to become itself a center of serious research on how digital technology might be used to improve access to legal information and education. Our research in this area has, from the start, been applied or experimental, rather than purely theoretical. We have built a succession of new products and services designed to be useful to a variety of constituencies, both familiar and new. That led to early confusion about our aims. Commercial publishers imagined us to be a competitor, when instead we were simply providing an advance look at technology applications and forms of information diffusion that were destined to become widespread.
While our research has conspicuously involved several high use, test-bed collections (notably the decisions of the U.S. Supreme Court, decisions of New York's highest court, the procedural rules of the federal courts, and the compilation of federal legislation known as the U.S. Code), we have never imagined ourselves building or sustaining a comprehensive collection of federal law materials, let alone the legal materials from all fifty states. A portal site - "yes." A comprehensive law data warehouse - "no."
The evident scale and decentralization of the U.S. legal system, combined with the firmly established market presence of commercial legal information vendors saved us from any delusion that we might be a non-commercial LEXIS or Westlaw. We have been extremely careful not to undertake more than we could maintain and continue to develop.
Our aim has been to influence not own or control. Consequently, we find gratifying evidence of our success in the numerous legal Web sites, of all kinds that embody elements of format and functionality that we originated. Since the available technologies and the reachable user base have been changing at unprecedented speeds, our efforts to work effectively with law content at their intersection have been stimulating, influential, and some days overwhelming.

**That the explosion of legal information sources of all types on the Internet represented fresh opportunity rather than a diminished role**

We have held to the view that there is an important role for academically-based activities like ours, even as the Internet has become the dominant delivery path for all commercial legal information providers in the U.S., old and new, and as public bodies have begun in growing numbers to use the Internet to provide free public access to the law for which they are responsible. While Westlaw and LEXIS have brought their comprehensive and integrated collections to the Net, where they compete with LOISLAW, recently acquired by Wolters Kluwer, all are surrounded by fee or other barriers that cut off large and important segments of the public and severely limit innovation in both information delivery and education.

The proliferation of public sites – hosted by or working with courts, legislatures, administrative agencies, state and city governments – has at the same time created the potential for a truly open, distributed, public information system. But this remains a potential, not an actuality. It is an essential but not a sufficient condition for free and widely accessible legal information.

Although we now operate in a crowded field, that means more to do not less and more difficult choices about priorities than when we stood alone.

**That the distinct contribution an activity like the LII can make in the complex U.S. legal information environment is as catalyst (innovating, leading through example) and integrator**

Several years ago, a public spirited group of American law school librarians, technology people, and others gathered at the Georgetown Law Center to explore ways of bringing the decisions of the U.S. Court of Appeals to the Internet. This court, which is divided into thirteen different units, called "circuits," resolves all appeals that arise in the American federal court system, that are not subsequently dealt with by the Supreme Court. As the Supreme Court takes very few cases a year, the final interpretation on many important points of law falls to the Court of Appeals.

At the time of the Georgetown meeting, two schools, the University of Texas and Emory University, had already begun to distribute the decisions of the circuits for their regions on the Internet. Other schools at this meeting quickly volunteered to distribute the rest. Our institute was not tempted either by the entire project or any of its obvious pieces. First, we were certain the scale exceeded anything we needed for research. We were already working with the 75-80 decisions a year of the U.S. Supreme Court and the 200 or so of New York's highest court. Indeed, the scale and lack of data consistency across the thirteen circuits placed any such ambition beyond our reach. The annual output of the entire court exceeds 25,000 decisions and while all of the circuits must interpret and apply the same national law, each jealously guards its autonomy on such matters as data systems, decision format, court procedures, and schedule.

Observing, however, that this distributed federal law collection would need integration the LII built a cross-site full text index – to enable users to search for decisions dealing with particular topics of federal law without having to visit multiple sites and master the idiosyncrasies of diverse search engines.

The good news is that in the years since we undertook this project all but one of these federal courts have established their own servers (leading a number of the original law school intermediaries to drop this service). Regrettably, though predictably, these public sites have not been designed to facilitate cross-site linking or indexing and in that respect they are less useful than their academic precursors. These units of the same court, which cannot coordinate their schedules for recruiting law clerks or any of numerous other details of carrying out their parallel tasks, have each contracted for decision database services with little regard for the interests of those seeking to access and read their decisions, let alone those seeking to integrate their work product with that of other circuits. As a

result, the LII's role as example and integrator has become more important rather than less.
There is in the U.S. no public body with the responsibility of coordinating the distribution of judgments from the full range of federal courts. The judges themselves and their clerks all use commercially distributed legal information and so have little personal stake or insight into the serious limitations in the manner in which their respective courts have implemented the public access ideal in this new digital environment. Our institute's search engine, rebuilt only a month ago to deal with the idiosyncrasies of some of the new public sites, is the only means by which these separate collections which collectively reach back over 5 years, exists as a single resource on such key legal topics as copyright, civil rights, labor law and federal securities and banking law. Integrated with the decisions of the Supreme Court on one side and the U.S. Code on the other, both resources we maintain, they become part of a strong federal law library.
**And finally, that key to future leadership in these ways is the collection of human and information resources assembled at our university and our deep experience with education**
We established our institute in 1992 with the conviction that digital technology should facilitate a quantum shift in the distribution of legal information and also make it possible for a university law school to become a serious electronic publisher of its own research. To explain the venture to colleagues and alumni we analogized its aims to those that prompted Cornell to establish its first law journal in 1915 and two additional ones in later years. Journals like these, we pointed out, were costly. In light of the school's purposes for producing them they would be free if they could be free. All whose work they contain seek the widest possible readership and expect no financial return. But with print, the incremental costs of production and distribution prevent "giving copies away" without limit. The Net, we argued, removed that frustrating constraint.
In the years since that insight has moved along several related paths. We have worked with several other U.S. law schools to create a new distributed system for the digital distribution of formal legal scholarship produced by faculty and students. Perhaps, I should remind you that in the United States every law school publishes at least one law journal, many like Cornell produce several. More remarkable still, those publications are edited by students. Our institute has succeeded in redirecting some of that student energy and talent on which the print journals depend to the production of shorter legal commentary of greater immediate value to lawyers and judges. Working under faculty supervision, the Legal Information Institute student editors produce an electronic bulletin reporting on the important decisions of New York's highest court within days not months of those rulings. Students and faculty members are also deeply involved in the production and review of the editorial content of our Web and disc publications. Finally, as I shall explain in greater detail toward the end of this paper, our faculty's experience in teaching law figures prominently in the LII's future plans.

## II. Compelling Reasons for Legal Information to be Free, Accessible, and Interoperable

Supporting and informing the Legal Information Institute's activities and strategic decisions through this period has been a steadily growing recognition of the tight, enduring connection between free and effective access to legal information and justice, between its unchecked flow and effective, transparent government.
From earliest times "communication" has been central to law. As the technology of communication has changed, the impact of those changes on law and the central actors in the law process (law-makers, law-appliers, lawyers, and citizens) has been profound. The introduction of the technology of writing, then the printing press, then widespread literacy and the growth of organized libraries each transformed the law activity.

Better access to and improved communication of law have been consistent goals for reformers throughout recent history. In the early 19th century statutes were passed in several American states that required judges to write out their decisions rather than simply speak them so that accurate copies might be distributed in print. America's late 19th century codification and restatement movements were premised significantly on a view that law derived from the mosaic of judicial opinions was too inaccessible. In the 20th century enactment of a federal Administrative Procedure Act and subsequent mandates that governmental regulations be written in non-technical language illustrate the same reformist thrust toward improving the legal system through better access, including better understanding of law.

Since many legal norms do not operate through citizen self application, the quality of communication within the structure of government is equally important to the law's performance. In areas like tax and social security, law operates through vast government agencies, which intersect the lives and activities of large numbers of citizens. Key qualities of government performance such as accuracy, timeliness, consistency, efficiency, and equity (like cases treated like, different cases, with appropriate difference) are strongly influenced by how communication of governing legal norms is accomplished within these agency structures. In areas of the law where judges or judges and law enforcement officials are essential elements of the law application process, the concerns are quite similar even as the means of communication have traditionally been different. Public bodies and those who do their work are among the most important users of legal information.

In some instances, concern that people and enterprises be able to know the grounds of their accountability, "ignorance of the law being no excuse," captures the rationale for these pre-digital reforms, but in others the aims are better understood affirmatively. That is to say whatever goals the law is pursuing and through whatever intermediate means, the prime instrument is communication. Efforts to make law more accessible, more understandable, more clearly expressed are ultimately efforts to make law more effective and in a democracy, more accountable and responsive.

In New York and some other states legislation provides for publication and placement of reported appellate court decisions in county and public law libraries – as a means of providing free access to the state's law. A similar provision for free distribution of statutes exists in nearly all states that publish their own.

Liberated by digital technology from the marginal costs of printing, shipping, and storing which force hard choices about how many copies to print, where to place them, and for whom, law-making bodies might be expected to embrace free distribution of their output by entities like ours and indeed to undertake it themselves. Our experience teaches that there are many reasons they may fail to do so, at least in any way that effectively promotes accessibility and interoperability.

In this failure public bodies are often aided and abetted by others who benefit from controlled access to law. Where there are legal information "haves" and legal information "have nots", significant power resides with the "haves". To the extent that direct access to legal information at the source is difficult or costly, those who can acquire it and can control its subsequent distribution can reap a large profit. Add in such elements as inertia, the force of existing working patterns and relationships, limited resources, and preoccupation with other demanding tasks and what is surprising is not how uneven progress has been toward broad, free access to legal information in the U.S. but rather how widespread and steady it has been.

Where the conditions have been particularly favorable the results have demonstrated in very clear ways what social gains can be realized from free and uninhibited public access to important legal information. I should like to provide examples from four different sources of American law making and administration.

The most conspicuous examples of public access to law at the federal level in the U.S. are those government agencies whose responsibilities require that they interact with large numbers of the public directly within a complicated legal framework. The two most heavily used government Web sites are not those maintained by the White House, the U.S. Congress, the Supreme Court, or the Attorney General. They are, in order of use, the sites of the Internal Revenue Service and the Social Security Administration. Both these agencies have assembled quite comprehensive collections of the legal information within their respective areas of programmatic responsibility – the first dealing with federal tax liability, the second with entitlement to retirement, disability and death benefits. Both collections are relatively easy to use and include all relevant statutes, regulations, and less formal agency manuals and guides. Both also provide a full set of forms, along with complete instructions for their completion. Indeed, the Social Security Administration now offers an on-line benefit application process as well as a deep parallel collection of information in America's second language, Spanish. As recently as three years ago a commercial publisher was marketing a comparable collection of Social Security legal materials for over USD 1,000.

My second example comes from one of America's smaller states. I remind you that my country's fifty states all have their own law and legal institutions – legislatures, administrative agencies, and courts. It is the law that they make and apply that bears most directly on the key areas of domestic life – employment, education, family responsibilities, crime, death transfers, and even commercial transactions. As is often true at points of dramatic change, those least well served by the old regime can more readily see and seize the full advantages of the new. This is such a case. A strong example of what can be accomplished by a publicly run judicial Web site has first arisen in a state with fewer than a million residents, North Dakota.

North Dakota is one of many states too small to warrant their own set of printed law reports; it is not a commercially attractive legal information market. For most of the last century, decisions of its Supreme Court and an annual handful of selected decisions of the state's intermediate court of appeals were published by the major commercial law publisher in the U.S. in a regional compilation with those of six other states.

In 1997, the North Dakota Supreme Court adopted its own "media-neutral" case citation system (in full conformance with the recommendations of several national bodies). The day an opinion is released it is assigned its permanent official citation. Fox versus Fox decided on May 4, 2001 appeared on the court's Web site that day as 2001 ND 88. During the period the court rules allow the parties to seek a rehearing, it will carry a warning of that possibility in red. When the period has passed, that will be removed. References to specific portions of that opinion need not await its appearance in print for the system includes paragraph numbers. Here you see paragraph 17. Under court's 1997 citation rule, a citing reference to a particular passage in a 1997 decision is as you see it Zuger v. Zuger, 1997 ND 97, ¶ 13 or Zuger v. Zuger, 1997 ND 97, ¶ 13, 563 N.W. 2d 804. (Zuger v. Zuger being the 97th decision of the North Dakota Supreme court in 1997 and the referenced passage being in paragraph 13.)

The Court also established an official web site to which decisions are released in final, official, citable form – released and archived. The following year, 1998, the site added decisions of the North Dakota Court of Appeals in the same final and official form. Today, lawyers, judges, businesses and citizens of the state have unprecedented access to judicial opinions.

My third example comes from a neighboring state, Minnesota. Among state legislature sites, Minnesota's currently sets the standard. In countless ways it is superior to either of the federal government sites offering the U.S. Code. Like other top legislative sites it offers an up-to-date version of the full state code. The database is structured so that users can find relevant provisions by

following the logical structure of the compilation (selecting first the relevant title, then chapter, then sections). And the data architecture allows anyone else placing legal material on the Net to create direct links to individual sections as well as to larger units. This legal database shares an important trait with North Dakota's judicial site. Both were constructed to serve government workers, as well as the public. They were designed for serious use, rather than mere public relations.

My final example is drawn from the level of law-making and application that may well have the greatest day-to-day impact on small businesses and the lives of citizens – namely municipal codes. In countless communities, including surprisingly large ones, the collected laws are poorly maintained and inefficiently distributed. Here is an account prompted by a young lawyer's recent attempt to secure the dog ordinances of the City of Binghamton, New York – a city quite close to Cornell. The lawyer told me: "Believe it or not, the city clerk told me that no complete copy of the Binghamton Code is available to the public anywhere, even the public library. The only way to get an up-to-date version is to go to (or call) the clerk's office."

In a growing number of U.S. cities digital technology and the Internet have enabled officials to do what Binghamton has not. In such places as Rochester, New York; Cincinnati, Ohio; Boone County, Kentucky; Fitchburg, Massachusetts; and Yuma City, Arizona, citizens troubled by barking dogs, interested in establishing an ambulance service or restaurant, or curious about how close the road they can build a garage or place a sign can find the pertinent law on-line.

As these diverse public bodies have discovered and now demonstrate to others, law data in this form is cheap to produce, transmit, and store. Users don't need to own or be close to a dedicated "library" space. Because the cost threshold is so low, many public bodies – courts, legislatures, and administrative agencies – are discovering that they need not depend on commercial intermediaries for dissemination of their work product. Those gathering law in this form, around a particular problem or issue can readily separate out, transport, file and work with the material they judge most relevant. And when done right – like good computer code – it is interoperable, that is, capable of being link to or combined in other ways with related information from other sources.

These examples, when compared with others, also demonstrate that digital distribution alone is not enough.

My early enthusiasm over the growing number of public bodies releasing law in digital form, thrust me into a public exchange with Vance Opperman, then President of the West Publishing Company. He dismissed these sources as offering only "raw data," uttering the phrase in a pejorative tone that suggested sewage. It was a deft rhetorical move, and suggested an important truth: "not all data are of equal value."

Let us begin with the now obvious difference between furnishing data in print and offering it in digital format. Moving content from print to digital format is costly, running currently at two to three dollars per page for printed English language legal documents. This is a burden we have not shouldered. Everything our institute has done has begun with digital material – in most cases digital material acquired from a public source. The Supreme Court of the United States began releasing its decisions in electronic format in May of 1990, a full decade before it established its own Web site. The New York Court of Appeals established a dial-up bulletin board at around the same time. By the nineties courts, legislative bodies, and agencies were preparing their output with computers. While print was still their formal or official distribution medium, digital release posed minimal incremental costs. Both the U.S. Supreme Court and New York Court of Appeals financed these incremental costs by charging subscription fees. The former set up a system limited to information brokers or resellers and priced it accordingly. The New York Court set a much lower annual fee of $30. Even with the added long distances charges for those outside the Albany area this put the resource directly

in the hands of lawyers and small newspapers.

In working with digital data from these two sources over the years we have learned that while less costly than conversion from print, digital data can carry its own considerable costs. These courts like many public bodies in the U.S. have not yet recognized that digital data can be delivered "free" but configured in ways that severely reduce accessibility, resulting in heavy burdens, both for re-distributors whether non-commercial like our institute or profit-driven entities like West Group or LEXIS, and for ultimate users.

In January 1997, when the Legal Information Institute first undertook programmatic conversion of U.S. Supreme Court decisions to HTML, the Court was releasing its decisions in word-processing format -- Wordperfect 5.1. In the summer of that same year, the Court shifted internally to Microsoft Word. Rather than release opinions as Word documents, the Court began with the October 1997 term to release its decisions in the proprietary PDF format. The change came with little warning and insufficient time to allow us to build and fully test what had to be totally new conversion software. West, LEXIS, and the New York Times also had to contend with this same inattention to the needs of subscribers to the Court's electronic distribution service, though with far greater resources. Fortunately, somewhat later in the same term the Court added an SGML-like format – a hybrid of structural and presentational markup. Unfortunately, this came too late to save the LII the effort of creating software to convert PDF.

Why go into these technical details? It is precisely in such technical details lies the difference between effective, free and costly, limited public access. Too many public law-making bodies that have undertaken digital distribution of law data have done so without any thought to facilitating redistribution with added value. Distributing only in PDF is a telltale sign. PDF is not friendly to subsequent machine processing. Those who want a court opinion to "look like a court opinion" on the screen or upon being sent to a laser printer are very fond of the format. But for those who would link the references within a document to the cited material, add key words and other metadata, create sophisticated full-text indices, and integrate a document's content with other related law materials PDF is a major barrier.

Subtler barriers lie in format changes and inconsistencies produced by simple inattention. Bodies that exercise great care to assure the quality and consistency of their output in print can wreak havoc on the data systems of others that build on their opinions, enactments, or rules because they will release data that will print handsomely on a page but be utterly confusing to text processing software or search engines. Our work with the opinions of the New York Court of Appeals has given us repeated painful lessons in the many different ways that a majority opinion can be joined with a dissent, the variety of ways to set off main headings within an opinion or the date of the decision – all the while printing quite handsomely. Until public bodies take digital distribution as seriously as they do print, this will remain a problem.

There is a related way in which too many public bodies in the U.S. undercut the value of their digital distribution of legal information. By declaration and reinforcing practices they withhold full recognition from this version of their law so that both those who know and care enough to be risk averse and those who are easily persuaded by official warnings are pushed toward other final and official (and expensive) versions.

This is what the U.S. Supreme Court says about the decisions it releases in digital format.

> **Caution:** These electronic opinions may contain computer-generated errors or other deviations from the official printed slip opinion pamphlets. Moreover, a slip opinion is replaced within a few months by a paginated version of the case in the preliminary print, and–one year after the issuance of that print–by the final version of the case in a U. S.

Reports bound volume. In case of discrepancies between the print and electronic versions of a slip opinion, the print version controls. In case of discrepancies between the slip opinion and any later official version of the opinion, the later version controls.

Finally, too few public legal information sites are built with an open architecture. Large numbers reinforce jurisdictional boundaries with data system barriers that frustrate efforts to connect with closely related legal material held on other sites, public or private. This public site distributing decisions of one of the U.S. Court of Appeals circuits is surrounded by several such barriers. It archives decisions in zip files by date. There are no tools for search or retrieval of individual opinions. And the site's structure blocks others from adding such value directly on top of its archive.

Primary legal texts are peculiarly fragmentary or recombinant. At least that is true of the American legal system. Although units of the U.S. Code are called chapters, they are not like the chapters in a novel, written to be read from start to finish, one after another. Those working with the law must gather relevant provisions around a problem or issue, following cross references in one section that link it to others that sharpen or qualify its effect, tracing back to determine if any of the operative words or phrases are defined elsewhere. Individual appellate decisions rarely can be understood without reference to numerous others, including later ones. And since decisions cannot themselves refer to later opinions that overrule, disapprove or qualify their holdings data systems must do that work. This high degree of textual interconnection is why such large gains can be realized by placing legal materials in a searchable, hypertext environment. Much of our institute's research has concerned techniques, both automated and editorial, that aid the gathering of related legal materials from multiple sources.

### III. Some Salient Forces of Resistance Within the U.S. Legal Information Ecology

Despite the apparent promise in the number of public law sites, our experience has taught us not to be surprised when government agencies, courts and legislatures fail to embrace or aid free distribution of their output, let alone implement effective digital distribution themselves. Here are some of the reasons for such response.

The first is the power of settled practice – the inertial resistance flowing from patterns of work and strong relationships formed during the long history of print distribution. Often these forces work through or express themselves in attitudes about control, important constituencies, or responsibility.

In many European countries, including those unencumbered by doctrines of government copyright in law, free distribution has nonetheless been frustrated by tight control on the terms of access to official systems of digital distribution. Comfortable with uncontrolled private sector print publication and conditioned by Westlaw and LEXIS to view digital law as no less suitable for competitive, multiple source redistribution, U.S. courts and legislatures have been far quicker to release digital take-offs from their law-making activities than their counterparts in some other countries and to do so without attempting to impose conditions. But that does not mean that the U.S. is not troubled by what I might call the "it is our law and critically important to us and our prime constituencies with whom we already have appropriate arrangements" mindset. Government bodies that have a tight affiliation with a particular business sector may not welcome the transparency and consequent reduction in control that free distribution of their documents could bring.

Courts are susceptible to a very different mindset limitation. I think of it as the "that is not our responsibility as judges" posture. It amounts to a view that the tasks of making law or ruling on cases are separate from dissemination. Individually, judges find it quite easy to see their dominant or even exclusive responsibility as deciding cases. Unless the distribution of those judgments in a useful,

official format, is clearly lodged in a well organized judiciary, it will be left to others – those others being commercial publishers in the U.S. setting.

A distribution process that includes substantial time between official act and final official publication may allow some measure of revision during that period. Many appellate courts, for example, have grown comfortable with, indeed, reliant upon the lag between initial release of their opinions and their appearance in "official law reports," using that time for reference checking and editorial review. In some jurisdictions those functions are actually performed by a separate office, the office of court reporter. Judges write opinions that are released in "slip form" but then readied by a court reporter for publication in archival form. When reporters add summaries and key words to decisions that commonly occurs after rather than before initial release. Nearly all courts delay the attachment of full citation information to decisions until their appearance in print.

All of the above features are reflected in the current practice of New York's highest court. Decisions handed down (and placed on the Internet) by the New York Court of Appeals are not published in "official form" for several months.

It is an overstatement to say that the version of a decision the court releases in digital format is a draft, but each file at the court's site carries the warning: "This opinion is uncorrected and subject to revision before publication in the New York Reports." Having worked with the court's decisions for six years, we can assure you that is not just a formality. If that is so, why doesn't the court subsequently release the final version at its Web site? The reason lies in yet another factor cutting against free and uninhibited access.

Courts (and legislatures) in large market jurisdictions like New York are able to and therefore tempted to reap some return from their output. Since these bodies are not only a source of law but also heavy users of legal information the contractual arrangements surrounding the production of "official" court reports or an "official" state code can provide a way to finance government operations. The commercial entity undertaking the responsibility of doing official publication in print and now electronic format commonly contracts to furnish the issuing public body and other designated recipients with significant quantities of its information products and services.

The addition of editorial content by a state court reporter or legislative staff creates a composite that is copyrightable. That allows the public body to assure a measure of exclusivity to any potential private sector partner, or to secure a revenue stream from any competitor, or both. Court rules requiring attorneys to cite to the official reports reinforce the exclusive arrangement.

This recipe has worked in New York and California, though not in small population states like North Dakota. Indeed, historically large states have been able to generate competition over these contracts. The current New York contract, let to West Group last year, runs for a term of five years. Its provisions are constrained by both established practice and statute. The contract requires the commercial publisher to provide numerous copies of the published reports to state offices ranging from the state library, through all the state judiciary, to each county and public library in the state. The publisher's price for the sale of the reports to the public – both print volumes and other media or formats – is controlled. Finally, the contractor agrees to provide the hardware, software, and training necessary to enable the staff of the reporter's office to enter decisions into the contractor's data system driving both print and electronic publication.

Several cycles ago local printers vied for this contract. In view of the scale of the undertaking and the current shape of the legal information marketplace that no longer occurs. My principal point in opening up this entrenched practice is to reveal how one state's judicial system trades the legal information it produces for a wide range of legal information and technology services. That exchange would collapse were decisions released unrestricted and free in final and official form,

complete with necessary citation information. Since the New York courts have a direct stake in the value received by the "official publisher" the free versions of decisions of decisions at Court of Appeals site or the site run for the New York State Law Reporter by the "official publisher" are offered only temporarily. The Reporter's site does subsequently offer the official version, but for a fee without rights to redistribute – through a transaction directly with the "official publisher".

A similar pattern exists in California where the publisher of official reports is also West Group. As in New York, the judiciary has a Web site. It holds only "slip opinions." Initially it held them for only 100 days. It has now begun to archive beyond that period. However, the court site instructs users both that the archive collection is not "provided for purposes of legal research" and that:

> Cases beyond the Web site's retention period are available at Westlaw.com in the CA-ORCS database or individually in WestDoc. Westlaw.com is a fee-based online research service of the publisher of the California Official Reports.

**IV. Forms of Leadership and Leverage Uniquely Possible with an Academically-Based Center**

Relationships and settled patterns of work and thought like these are not easily escaped. Having no direct stake in the benefits received by either party, centers like the Legal Information Institute are able to demonstrate by example the public value lost as a consequence. We continue to distribute and archive the decisions of the New York Court of Appeals to which we add official citation information in hopes that that may speed the day when the state court reporter is charged with doing so.

Although the LII's on-line U.S. Code was once a Net "exclusive" it has long since become one of many. The House of Representatives itself offers a searchable version. Nonetheless, this LII resource continues to draw over 3 million hits a week. The explanation lies not in unique content but distinctive features of format and functionality. While this collection's content is drawn from the government, it has been reformatted and given navigation and finding aids not available elsewhere on the Net.

We continue to add new features that have increase the value of this resource and significantly several of them draw together information services provided by different offices of the federal government. We have, for example, created links between the Code and related portions of the Code of Federal Regulations, and built an updating feature that integrates separate services offered by the LII, the House of Representatives, and the Library of Congress.

Even public law-making bodies that recognize their obligation to provide effective public access to their law still need a lot of help in coming to understand that a handsome, free, up-to-date collection of PDF files can fail to deliver on that obligation and can actually frustrate it by making it difficult for other public bodies and independent value-adders like the LII from integrating their work with other relevant material. "Open," "modular," and "interoperable" are qualities as important to the value of legal data as they are with computer code. The on-line opinions of the North Dakota Supreme Court can and do link to cited earlier decisions of the court, but references to the North Dakota Century Code, also on-line, are not linked because the legislature's site, built from a database used for bill drafting has not been structured with such use in mind. The LII's on-line U.S. Code, by contrast, has from the start been set up to welcome links – whether from Supreme Court decisions at our own site or the sites of thousands of others, ranging from U.S. government agencies to numerous special interest newsletters.

For free law content on the Internet to approach its potential value new analogs must be developed for some very old devices that make particular texts locatable – devices for organizing, finding, and

sorting whose print predecessors have become so ubiquitous and familiar as to be invisible. The recombinant nature of law data and very public and decentralized nature of the Net underscore the need for interoperability between collections. Interoperability calls for a set of common approaches permit cross-referencing between documents in separate collections and that act to create integrated functionality among them. Our full text index to the decisions of the thirteen circuits of the U.S. Court of Appeals integrates a distributed collection. In doing so it puts pressure on the respective courts to improve the quality and consistency of their digital distribution of decisions.

The Legal Information Institute aims to be more than a non-commercial distributor of law content. Through example, white papers, workshops, and technical exchanges with peers we have worked to set and spread standards for interoperability, markup, and resource location. Last July we sponsored an international invitational workshop on these technical matters which can have such important consequences. Participants came from all of the major English-speaking jurisdictions, including importantly our colleagues from AustLII, from important U.S. Government web publishers, from the highest quality state sites offering legal information in the United States, as well as from important sites in Norway, South Africa, and elsewhere. We firmly believe that these discussions which have taken place in multiple venues, including today Meiji, represent an important means of improving the cooperative relationships and interoperable technologies shared between non-commercial legal information centers worldwide.

Like these peers and others putting law content on the Net, the LII has encountered a vastly larger and more diverse audience for legal materials than the commercial publishers and on-line providers previously perceived or dealt with. Often, it is an audience that is highly sophisticated in its needs even though it is not an audience of lawyers. Professionals of all kinds in many countries make use of the legal information we host and organize. This new and important audience is largely ignorant of the idiosyncrasies of legal research and is, in effect, asking why legal research can't be done in ways that are closer to other forms of on-line research. It is a good question. While there are doubtless sound reasons why legal research *must* be different there is also little doubt that commercial publishers serving specialist audiences have little reason to innovate or to make things easier for non-specialists.

An important target of the LII's research has involved designing and building systems that seek to serve these nontraditional audiences more effectively. We do so in the belief that finding and organizing legal information is not all that easy for lawyers either, and that improvements in the information environment for a broader audience will improve things for legal professionals as well.

Our present and planned future work in this area concerns: mark-up standards and document structuring, metadata and metadata description, and the coordination of this standards work with other public legal information providers. We shall continue to maintain and further develop key collections of primary material as test-beds for this work, with the twin goals of determining that contemplated standards actually work in practice and of demonstrating that the work involved in conforming pre-existing collections can result in worthwhile improvements in functionality.

I have largely described our work in relation to public bodies. Let me turn now to the other side. Neither our current work nor long-term strategy imagines the withering away of private sector legal information vendors. That will not happen within any future I can foresee. The evidence is strongly to the contrary.

In January Wolters Kluwer, the multinational information services company based in the Netherlands acquired a U.S. legal information start-up called Loislaw for USD 95 million, which it combined with a previous acquisition, Aspen Publishers a source of legal commentary in diverse formats. The following month Thomson, owner of what is now called the West Group, paid USD 37 million for

FindLaw.com – a commercial site that had explored a non-fee business model, drawing revenue instead from advertising aimed at the audience collected by free legal information. Findlaw will become a magnet for Westlaw similar to the Lexis-One site now run by Reed Elsevier. Thomson's Legal and Regulatory Group posted a 12% increase in revenue during 2000 for a total of USD 2.6 billion. The Westlaw piece of this group experienced 14% growth. Throughout, Thomson has aggressively shifting from its old print business to electronic products and services. And only last week, Reed Elsevier announced that it was consolidating its worldwide legal information products under a single master brand - LexisNexis.

These three enormous enterprises exhibit several important characteristics which they have confidence, backed by huge investment, will assure a strong presence in a growing market. To begin, in the U.S. alone they have the reach and resources, as no single governmental body has, to assemble and configure a fully functional federal and state legal information collection, reaching back in time before the 1990s. Assuming an ever more complete and consistent implementation of the public responsibility for free and effective release of law data, integration of that data across jurisdictions and back across time, packaged with a single interface, format, and search engine will hold large value for those with comprehensive information needs. In addition, all these commercial law data distributors have assembled deep and broad commentary collections – treatises, journals, specialty update services. Finally, I need not tell this audience that these information companies are transnational. They all see a global market for legal information linked to a global market for business, investment, and trade information.

In information markets where one of these major competitors has an advantage it will, understandably, seek a special relationship with any or all of the public bodies that generate law – offering expertise, attractive prices on information services, and trusted band names. During this critical period of transformation, public bodies and their constituencies need the strong persistent pressure of counter examples, examples that demonstrate the value to both of the release of free, accessible, and interoperable law data, in final, official, citable form. At minimum this will promote robust competition in the commercial sector. But it should do more by enabling smaller entities including non-profit research centers like ours to create integrated collections of public resources, specially focused clusters of commentary and primary law, and education services.

### V. The Blurring of the Boundary Separating Information and Education

From the very start, the Legal Information Institute has woven educational themes and activities with the provision of legal information. We have continually prepared core documents for important law school courses and provided guidance to law school faculty members and others interested in incorporating elements of the LII collection in teaching materials. We realized very quickly that important education about law occurred outside U.S. law schools and we, therefore, prepared a CD-ROM collection of historic Supreme Court decisions that we offer to high schools and colleges. Because many users of our Internet-based resources were not U.S. lawyers and judges we added commentary to our Web site that provides basic overview to over one hundred topics of U.S. law linked both to relevant primary material and to other commentary sources providing greater depth. And for the past five years we have used the Internet as a virtual classroom – offering courses to law students at scattered law school sites.

During the academic year just finished, the Legal Information Institute conducted two on-line law courses for students enrolled at seven other American law schools. Both courses employ distance learning methodologies that break loose of fixed schedules, time zones, and expensive fixed

facilities – namely, streaming audio linked to Web-based multi-media content, interactive exercises, on-line submission of student written work, faculty-student exchange carried on by means of asynchronous conferencing software, plus administrative systems supporting and managing all of the above.

Inescapably, technology shapes the categories we use to discuss and think about human activity. The set of activities people associated with the word "education" and those they refer to as "research or information gathering" will likely grow far less distinct they converge on the same set of digital technologies.

The successful providers of continuing professional legal education in America have increasingly become publishers of print materials, audio and video tapes to the point that most provide more "education" in this form than through live programs. These materials share the characteristic that they allow the learner to choose the time, place, and topic. Long term, we think it probable that the LII web publications and LII-developed distance learning approaches will interweave. We envision integrating introductory "learning" modules with the LII's overview pages and its deeper faculty-organized libraries (the American Legal Ethics Library and Social Security Library). At the topmost level these learning modules would involve no teacher-student interaction or evaluation. They would also, however, provide a pathway to richer levels of content and interactivity – distance learning options, if you will – available to those with a need or the desire to go further.

## VI. What We Can and Cannot Learn from One Another

I have learned from my colleagues who work in the field of comparative law and from numerous Japanese graduate students at Cornell how remarkably different our legal systems are. Despite superficial similarities, the institutions, practices, culture, professional and governmental categories of our respective countries cause law to operate in ways that frustrate any straightforward one to one translation of important doctrines, procedures, or programs of legal education. Due to differences in techniques of writing and therefore the process of converting legal documents to digital format and indexing or otherwise manipulating them, comparative legal informatics confronts additional challenges.

At a higher level of generality, however, we have solid common ground and exciting prospects for future collaboration. Despite differences of doctrine and detail all legal systems run on information and communication and perform more effectively if that exchange is free and open. No matter how the public and private sectors have handled the transition to digital exchange, the active involvement of academic centers like those represented here can be a tremendously important force – both within the national setting and as collaborators facilitating international information exchange and education. Drawing upon the very differences of our respective environments, we can help each other gain better perspective on the large and exciting challenges we share.

# Philosophy, Practice and Future of Free Access to Law: An Explanation of AustLII

**Prof. Graham Greenleaf**
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Co-Director, Australasian Legal Information Institute (AustLII)

[Note - This transcript has been edited so as to include links to the web pages and search results used in the presentation, and also to include other contextual information. The web pages are found at <http://www2.austlii.edu.au/~graham/Slides/Tokyo2001/>. A number of headings have also been added for ease of reading.]

Good afternoon, ladies and gentlemen.

It is a great pleasure for me to be here at Meiji University and quite a privilege. Before I start I would like to introduce to you my colleague, Takao Hasuike, a project officer at the Australasian Legal Information Institute, whose work at AustLII I will describe a little later. I would like to thank, Professor Natsui, who has been so kind and generous as to invite Mr. Hasuike and me to this symposium. His SHIP project is involved in fascinating research it has been a pleasure to learn about. I'd also like to thank my friend, Professor Makoto Ibusuki who's been instrumental in introducing me to the developments and challenges in providing computerized access to Japanese law.

Professor Peter Martin is always an extremely hard act to follow, particularly, when you agree with almost everything that he's had to say. As you will hear, AustLII has adopted a different strategy, in some respects, from the approach Cornell has taken. In order not to repeat the arguments that he has put so well, I'm going to take a somewhat different approach in this presentation. It will be partly a demonstration and partly an explanation of why we've taken certain approaches at AustLII.

## A Legal Information Institute

Web page: AustLII - a public legal information institute
<http://www2.austlii.edu.au/~graham/Slides/Tokyo2001/plii.html>

The AustLII system is what we call a "public Legal Information Institute." I think we were the first organization to shamelessly steal the name "Legal Information Institute" from Cornell and just put "Australasian" in front of it.

The basis of AustLII, from our very first grant in 1994, has been free access to what we call "public legal information". There are details of our mission and objectives on our website that set that out. But as Professor Martin says, "Pioneers don't necessarily survive." One of my tasks this afternoon is to try to explain to you why and how AustLII has survived over the last six years.

To start with, we're an independent facility. I think we have that neutrality that Professor Natsui was referring to this morning. AustLII is a joint facility of my law school, The University of New South Wales (UNSW), and the University of Technology Sydney (UTS) Law Faculty. My Co-Director, Andrew Mowbray is an associate professor at UTS and is the technical driving force behind much of what AustLII has achieved together with our Executive Director, Philip Chung.

Our basis has always been free access and non-profit. We're funded by a number of stakeholders (I will discuss that in detail later), rather than user charges or advertising on site. AustLII is characterized by trying to do things on a fairly large scale. We have over 130 databases of case law, legislation, law journals, treaties, etc; well over 150,000 decisions of courts and tribunals in full text; and well over 1,000,000 pages of legislation. Our usage is fairly large scale, up to about 400,000 hits a day. I think Professor Martin was too modest to tell you the gargantuan number of hits they get on the Cornell site. Australia is a country only one-tenth the size of the USA, so we don't have to achieve quite the same amount of usage.

Despite the large databases and large usage, we manage on a relatively small staff and fairly small budget. Our staff is 8.5 full time positions, not including Andrew and myself as co directors. We operate AustLII on a budget that is a little bit over 500,000 Australian dollars, which is on my calculations about 30 million yen per year, so it's a rather low budget.

The reason this has been able to be achieved is that almost everything on AustLII is done on an automated or semi-automated basis by use of our own software. We don't have or ever could have the teams of editors doing hand mark-up of data that characterizes the products of commercial legal publishers. That's not the way that we could go. I don't think that's the way that any publicly funded body could ever go.

Like Cornell we combine a public access system and research and education functions. We consider ourselves to be one of the family of public Legal Information Institutes of which Cornell was the original and others like AustLII have followed. Another LII that we are very involved in is BAILII, (the British and Irish Legal Information Institute) which we have built and still maintain. CanLII (the Canadian Legal Information Institute,) established last year, uses our search engine and does many things in a way that is similar to the approach that we have tried to take. It does some of them better than we do. So that is a snapshot of what AustLII is about.

## AustLII's Collections and Coverage

Web page: Australasian Databases

<http://www2.austlii.edu.au/~graham/Slides/Tokyo2001/databases.html>

Many members of this audience would not be familiar with the AustLII system, so I will explain a little of what we have on the system. We have what we call our "National Law Collection" which is our centrepiece. It comprises all of the legislation from all nine jurisdictions in Australia, both acts and regulations. Australia only has one-fifth the number of jurisdictions that the United States has, so the task that Professor Martin rightly referred to as being impossible in the USA was not quite so impossible in a somewhat smaller country like Australia. Of course when you have nine jurisdictions it's still a non-trivial task to try to assemble a comprehensive national collection. As well as the legislation listed on the right-hand side of the screen here from each jurisdiction in the country, over on the left hand-side of the screen, you can see from the number of entries that roll

past that we have a very large number of case law databases from every jurisdiction. We have the decisions of all of the courts at our federal level and the decisions of every Supreme Court of each state. Then we have, in addition, from all jurisdictions another forty-five or so courts and tribunals, down to very small tribunals in various states. We think that we are about two-thirds of the way now toward providing the decisions of every significant court and tribunal in Australia. We are attempting to provide a comprehensive collection of the decisions of those courts and tribunals. We leave some minor ones aside for privacy reasons; we wouldn't want to publish all their decisions.

In many cases with those minor courts and tribunals, no leading commercial publishers publish their decisions and the decisions are not conveniently available in any other form from any source, except by going directly to the court registry and asking if there are decisions on the point. So, even though these are decisions that don't have a huge audience, practitioners and concerned community organizations (in particular) are interested in those decisions, which might be for example from anti discrimination tribunals or mental disability tribunals or the planning and environmental law tribunals for a small jurisdiction. If you practice in those areas, then access to those decisions is of very great importance to you and very difficult to get otherwise. That fits into part of our mission to provide legal information which is socially needed, but otherwise not available from commercial sources.

In order to achieve this in relation to case law, almost all of those courts and tribunals now automatically email their decisions to us in an increasingly standardized format that we have worked out with courts and tribunals. When the decisions reach a certain mail box on the AustLII system designated for that court, they are automatically transformed into HTML and in most cases automatically placed on the system, sometimes with some checking by staff at AustLII depending on the reliability of the data feed. In some cases, like the decisions of Australia's High Court, the decisions go up on the AustLII system fully marked up in hypertext with links to legislation and other cases within hours of a decision being handed down.

Web site: Recent High Court of Australia Decisions
<http://www.austlii.edu.au/au/cases/cth/high_ct/recent-cases.html>

Now I have just gone to the recent High Court of Australia decisions and it looks like there hasn't been any decisions from our High Court handed down from the 3rd of May. But if there had been one handed down yesterday, it would be appearing there in that list of new decisions. So that is the core of the AustLII system and our attempt at national comprehensiveness has been an important part of what we do.

We are also, to a certain extent, providing access to regional databases. We have the New Zealand Court of Appeals, the highest court in New Zealand's decisions, and we have decisions that are increasing from Pacific island nations.

We are also providing a significant number of common law databases that come from the United Kingdom and Ireland and are of course still of importance to Australian and New Zealand and Pacific lawyers. That's on the BAILII System that my colleague, Andrew Mowbray, has been almost been single handedly responsible for developing. On BAILII, using the same search engine and the same approach as AustLII, you can find about 20,000 decisions from the Court of Appeals of

England and Wales. You can find the decisions of the Irish Supreme Court and the courts of other jurisdictions in the UK. You can find the decisions of the Privy Council, which used to be the final court of appeals for Australia and still is for many countries in the British Commonwealth, and whose decisions still have significant precedent value for Australian courts and other courts in the Common Law world. BAILII illustrates the extensive databases that we have been able to provide and also the attempt to assist two other countries to provide a national free access legal system on the Internet.

In addition to those core primary materials of case law and legislation, AustLII also provides numerous special collections of secondary legal materials in areas such of human rights, cyber space, and, in particular, indigenous law, on which we have one of the world's largest collections of indigenous law materials. We also provide some extensive additional primary materials collections, such as the Australian Treaties Library, which contains the full text of every treaty, bilateral or multilateral, to which Australia has been a party since the formation of the Australian Commonwealth in1900. We have a complete comprehensive collection of Australian treaties and, in addition, information about proposed treaty actions, for example, the Statement of Purpose by the government in relation to all treaties that Australia is contemplating entering into at the moment. They are "treaty impact statements" if you like. Our Department of Foreign Affairs and Trade chose AustLII some years ago as the vehicle for making treaty information more accessible to the Australian public as an important part, the fifth pillar, of the reform of the Australian Treaty System. That relationship of AustLII providing important legal information paid for by key government agencies that want to get their legal information out to the public, but don't want to do it themselves, has been one of the things that have characterized AustLII's development. We also have the text of the Australian Law Reform Commission reports back to its inception, and a growing range of law journals and the like. That's the scope AustLII's databases.

## Technical Foundations and Innovations

Web page: Technical foundations of AustLII
<http://www2.austlii.edu.au/~graham/Slides/Tokyo2001/technical.html>

What I would like to move onto now is the technical foundations of how this has been achieved - essentially, automated value adding to the raw data. All key AustLII software is written in-house. In particular, our search engine and our hypertext mark up software are developed largely by our co-Director, Andrew Mowbray. That has enabled us to provide quite tight integration between the various tools we use, because we're in control of them. It has also enabled us to customized them to make them work better with legal information. We have some reasonably serious hardware but I won't go into that.

Web page: A tour of AustLII's features for users
<http://www2.austlii.edu.au/~graham/Slides/Tokyo2001/tour.html>

What I'd like to do instead is to give you an illustration of some of the things this enables us to do. Our SINO search engine has the full range of Boolean and proximity operators. At a simple level what it is mainly used for is to search over all these 130 or so databases simultaneously. As an illustration I'll do a Boolean search to find information about the law of intestacy, which is where

someone dies without a will, how their property is distributed and its interconnection with family provision law in Australia.

So I'll search for "intest*" for 'intestate', 'intestacy', or any version of that expression, "near" which mean within fifty words, and then the phrase "family provision," which is the key term used in all Australian legislation. I am searching over AustLII databases but I could broaden the search to cover other non-AustLII material we can search but I won't mention that for the moment. We will just do a search over all of the AustLII databases, about 15 gigabytes of data.

Web page: Display of search results for 'intest* near family provision' search (Note: results may now differ due to extra data since May 2001)

We have found 38 items that satisfy that search including the first one from a royal commission report about the distribution of property in aboriginal families. As I said, searches are not only over primary materials, but important secondary materials such as law reform or royal commission reports. Then we come to a piece of legislation, then a case, then more cases. They are ranked in order of their likely relevance according to a relevance ranking algorithm system. If I go to the first listed section, the interpretation section of the act, you can see that on AustLII legislation is presented with each section being able to be separately displayed, separately hypertext linked from other sources (not just to a whole piece of legislation,) and separately searched so searches give you the exact item. I think that Professor Martin was describing this as the ideal way to present legislation. That's a simple illustration of the search engine.

Web page: AustLII Search Form <http://www.austlii.edu.au/forms/search1.html>

The search engine, at a more sophisticated level, also allows a users to customize their search much more. You could search for all Commonwealth primary materials if you're only interested in that jurisdiction or alternatively you could search over all case law but not legislation irrespective of what jurisdiction it came from, or you could choose a particular court or tribunal. You can mix and match various databases by selecting 1, 2, 3, 4, or 5 or more special databases in order to select all the industrial law courts in the country and you can then search only those courts.

You can do all those things, but the example we will use is a search only over legislation for all legislation that deals with the subject of adoption. And I will just search via legislation name so as not to get every separate section of every act this time, but just the title section of each particular act for each jurisdiction dealing with adoption. And there you can see that... No, I think that I must have done something wrong because I am not getting every jurisdiction, I suspect I've got Queensland... Yes, I still had Queensland legislation highlighted so it only searched Queensland legislation. An inadvertent demonstration of what I wanted to show you about a limited search.

Now here is a search over all jurisdictions, but just legislation. The result starts with all the Australian capital territory pieces of legislation that have adoption in their title, going on towards Victoria, Western Australia, New South Wales, etc.

This is one of the main attractions to users of the AustLII system: to have the option of comprehensively searching over uniform data all of the material we have been able to assemble for

all jurisdictions, courts, tribunals, etc., in Australia, in a completely uniform way; and also the option to narrow their search down to whatever specialized combinations of databases they wish to use.

Web page: Example from South Australian Consolidated Acts
<http://www.austlii.edu.au/au/legis/sa/consol_act/ipa1972304/s6.html>

The other thing that is more unusual in the AustLII system than in most others is the richness of the hypertext mark up that we are able to achieve, partly through consolidating all this data and partly through the research based software that my colleagues have developed. If we go to a typical section of an Act, you will see that various words in the act are highlighted and if we click on one of them, "child," it takes us to the definition or interpretation section of the Act and where we find the definition of the word "child," in that act. In order to understand that definition, we would also need to look at another section of the Act but that's also hypertext cross-linked, so you can go to related acts.

There are about 28 million hypertext links like that on the system, but it changes all the time as new material and data is added in. It will come to no surprise that none of those are added by hand. They are all put in by heuristically-based mark-up scripts that go through all of the data looking for certain types of identifiable textual regularities that can be linked to other material. Certain styles of definitions like that word "spouse," which was defined with inverted commas around it are sufficiently identifiable so that wherever we see the word "spouse" in that Act, we can link back to that definition. It's not fool-proof but it works with a high degree of reliability, high enough to be well and truly useful.

Web page: Re Colina; Ex parte Torney [1999] HCA 57
<http://www.austlii.edu.au/au/cases/cth/high_ct/1999/57.html#para14>

Similarly, in our case law, there are links from cases to statutes and other cases. Here's just one example, a High Court decision called *Re Colina* where you'll see we've immediately jumped into paragraph fourteen of that decision. So as Professor Martin was saying with North Dakota case law, it is a considerable advantage if we can get our courts to apply paragraph numbering to their decisions because we can then have pinpoint hypertext links and pinpoint citations by paragraph number.

You can see in this example the automatically inserted hypertext links that go in within a couple of hours of the High Court handing down this decision that we have links to Acts that the Court refers to and to specific sections of Acts that the Court refers to once again in the Family Law Act. There's a footnote to a case and that takes us to the other High Court decision that the court has referred to. We would like to be able to generalize the hypertext linking to decisions of a lot of other courts.

Web site: UserMark - The AustLII Automated Legal Markup Tool
<http://www.austlii.edu.au/techlib/usermark/>

To show you that the automated hypertext mark up does works, I am going to a live demonstration of putting in a little text and marking up hypertext links in it. Let's assume Professor Martin was

writing in one of his web pages for teaching purposes a discussion of Australian indigenous law. He might mention *Mabo*, which is the leading case in this area as follows: "In Mabo (1992) 175 CLR 1, the High Court referred to section 7 of the Racial Discrimination Act 1975." That is text that might occur in a court judgment or an essay or teaching materials. [*After typing in text in the 'Paste the text to be processed here:' box and pressing 'MarkUp Now'*] Okay, there are the links to the *Mabo* decision, to section 7 of the Racial Discrimination Act, and to the front page of the Racial Discrimination Act. So that is the sort of techniques that much of the system is based on. This illustrates how open a system we have created, because anyone in this room could write up a web page that has references to Australian legal material in it, and put the URL on our form, and replace their page with the marked up page with links into Australian law.

Web page: Copyright Act 1968 s35
<http://beta.austlii.edu.au/au/legis/cth/consol%5fact/ca1968133/s35.html>

The last point I want illustrate is what we call our "Noteups" where we've used all these techniques in combination to do something that is often only found on systems like WestLaw and Lexis. It enables you to do a note-up of a section of an Act to find all the cases referred to it. Here we are looking at section 35 of the Copyright Act about ownership of copyright in original works. Let us say what we would like to do is to find any case law on that section of the Act that deals with architects and copyright in architectural works. All that we have to do is go to that '[Noteup]' button at the top of the page. Every section of every act in the AustLII system has a '[Noteup]' button. Click on that and it does an automated search of the whole of the system to find all cases, all other sections of Acts that refer to s35 of the Act.

If we then wish to limit the search to cases about architects or architectural works or something similar to that, we just add "near architect*" and in a sense, leverage off the automated search, and we find two items only, dealing with s35 in relation to architecture. As you can see from the catchwords here the first one is indeed about copyright in architectural drawings.

I hope that is enough to give you an idea of the types of technical innovations that AustLII has tried to achieve, and how they are different from what Peter Martin and Tom Bruce and their team have achieved at Cornell.

### Public Policy Agenda

Web page: A policy for public legal information
<http://www2.austlii.edu.au/~graham/Slides/Tokyo2001/policy.html>

Now I would like to move on to the public policy aspects of creating and maintaining a system like AustLII.

We refer to "public legal information" by which we mean primary materials like case law, legislation and treaties and some official secondary materials that public bodies create but should be made available to the public, like law reform commission reports and similar items of that nature. Our approach has been that public policy should maximize access to this public legal information. Putting it bluntly, we take the approach that courts and tribunals and public bodies are the custodians of the public's information, but with a duty to make it available to the public as effectively as they

can. It's not their information. We have argued that this type of public policy supports access to justice and the rule of law and democratic institutions, and that it also assists business efficiency and international transparency of a county's legal system.

We have tried to articulate the specific obligations that we think these public bodies should have in order to most effectively provide public legal information. We put it in six propositions.

Web page: Six obligations of public bodies
<http://www2.austlii.edu.au/~graham/Slides/Tokyo2001/obligations.html>

First, we say that they should provide information to those who wish to use it in a completed form. In Australia, where this argument has been reasonably successful, all of our offices of Parliamentary Counsel provide consolidated legislation to those who wish to republish it. They incorporate all the amendments into the legislation themselves and then provide it to those who wish to republish. In the best example, the state of New South Wales, they do that overnight whenever Parliament passes amendments.

Our second proposition is that sources of data should provide it in an authoritative form so that it can be effectively cited. Professor Martin gave some good examples of where that doesn't happen and why it's so important. He mentioned that North Dakota gave court-designated citations at the moment the decision was being handed down. Courts in Australia have adopted a national standard for court-designated citations. Here is an example in a High Court decision: ' [1997] HCA 57'. When you get down to that paragraph 14 that I was looking at earlier in this decision, the pinpoint citation will be '[1997] HCA 57 at [14]'. That's the standard that all of Australia's superior courts have now adopted, and they all hand down their decisions with citations of that standard attached. They have agreed on a series of Court designators for all of the Courts in the country.

Most of the tribunals in the country are also adopting the designators, in many cases those assigned to them by AustLII after discussion. Every case on the AustLII system now has these court designated citations and it has become a national standard. That is the type of cooperation from the courts that is needed if we are to get information in a form sufficiently authoritative to enable other courts and tribunals to cite it accurately and in order for people to find it. We're also having quite a bit of success with the major courts and gradually down through the lower levels of the hierarchy, in getting them to adopt paragraph numbering so we can have pinpoint citations as well.

Our third proposition is that provision should be in the best form to enable or to facilitate dissemination. What that means changes over time as technical capacity and what's reasonable technically to expect from a public body changes. When we started, the best that we could expect was to get decisions on floppy disk from some Courts. That was the only standard of obligation that was reasonable, but now it's accepted by every Court, perhaps except one, that they will provide their decisions to us by email and they will do it in a way that has standard headers which enable us to identify the case number and citation so that we can put it properly into its proper place in the system. Quite a few of them are using our decision production templates. In some cases the legislators and offices of Parliamentary Counsel allow us to download the legislation from their websites by use of our web spider as the most effective way to obtain dissemination.

Soon I think we will be at the point in relation to both authoritative and effective dissemination that we will be asking courts to consider providing their decisions signed with the court's own digital signature so that we can provide a digitally signed copy of the court's decision in addition to the HTML version. The HTML version can never be digitally signed by the Court. But people will be able to get a copy of the decision that they know is exactly the way the Court sent it out.

Our last few propositions are briefly stated. Fourth, data should be provided on a marginal cost recovery basis to anyone who wished to use it. That's been pretty much accepted. Fifth, it should be provided with no reused restrictions or license fees, at least to free access providers. That has been accepted. And finally that the information should be preserved by the public authority in some archival form. AustLII can't be the publicly responsible archive. The courts should have a responsibility to keep this data, but many courts in the past have not in the United States, the UK and elsewhere. It was only last year that the floppy disks on which the last ten years of Privy Council decisions were held, were junked in some office clean up just a few months before we managed to get our hands on them to put them on the BAILII system. Tragedies of loss of public information like that happen all the time.

We have had a reasonable amount of success in Australia pursuing that agenda over the last four or five years, but now (as in the USA, as Professor Martin has explained), there a proliferation of government and other court websites that provide a lot of the information that is being provided on AustLII's. You can often get the information from multiple sources. Is that a reason for us to abandon what we've done in terms of those databases, and just leave it to the public sources and concentrate on other things? We don't think so. Our view is that an independent source of public legal information is needed and continues to be needed, not just free access from official sources.

Web page: An independent source is needed
<http://www2.austlii.edu.au/~graham/Slides/Tokyo2001/independent.html>

And some of the reasons are set out here. One of them is just very practical, the benefits of searching all sources with one search and particularly searching over data that has a common format. In the long run we might get some standards being adhered to by the public bodies that put up their own websites, but we are nowhere remotely near that now. They have every different type of proprietary format including the PDF files that I dislike with the same vehemence as Professor Martin does, but seems to be the favorites of many organizations putting up their own data. There is greater dissemination, greater public access to the data on a combined, consolidated site like AustLII. Many people, many searches, for example, who are looking perhaps for a particular area of industrial law might never think that the state and federal anti-discrimination tribunals might be an important source of that legal information. If they do a search over AustLII thinking that they're searching for industrial law but what in fact comes up in their search results is a series of results from anti discrimination tribunals that they just wouldn't have contemplated looking at otherwise.

In another of my favorite examples, we have a little database on AustLII, not yet finished, of decisions of the New South Wales Supreme Court from 1825, when the first court in Australia was set up, to 1832. Once when I was doing a demonstration asking for an audience question, a tricky question of tort law was suggested as a topic. I did a search and lo and behold the first item in the search results was a case of New South Wales Supreme Court in 1831 that was right on the point.

Who would have thought of looking at that source of data if they hadn't come across it be sheer serendipity.

In addition, as I have demonstrated, AustLII provides different forms of value adding from what any official sites are likely to provide in such things as our "note ups" and in the dense hypertext linking that is only really feasible at the moment with consolidated sources of data. Different classes of users need different quality data. People in the legal profession might need data that has a very high element of value adding provided to it before it is useful to them. Students doing research or members of the public doing research may have their needs quite adequately satisfied by a lower standard of value adding that can reasonably be provided on a public access site. So there are different standards needed for different categories of users. Government sites, commercial sites and independent sites can differently satisfy different user needs.

Perhaps the most important thing is that its only competition that can ensure increasing quality in the type of value that is added to legal information to make it most useful. I think Professor Martin said something similar. If government sites put up data, they may think their job is done simply by putting it up and won't really consider all the ways that data can be enhanced. Commercial providers won't really have the incentive to do a lot of the things that we try to do with our semi-automated approach. But if that data is made freely available from the public sources to anyone who wishes to add value in different ways to it and publish it, then that will give any country the best mix and the best result in the provision of legal information.

There are other dangers as well. An independent source of legal information helps guarantee that free access continues to be available, even after the information is available from government websites. Free access is never a given, certainly not in Australia. Even in jurisdictions where we publish legislation we still find that there's resistance to giving us the information in the best form because the government agency thinks it can sell that to make a profit. So we can provide west Australian legislation only in HTML form at the moment, but not the RTF form that set the legislation out properly, because they think that can still sell that. There is a constant battle to stop governments backsliding even after they have provided the information in some form for free. We need to ensure that free access is not second rate access.

While this helps ensure that commercial publishers also obtain free access to legal information and that helps lower the costs of the published product to the public, we need to continue to ensure that commercial publishers are kept out of special relationships with the courts, tribunals, and other government bodies that so easily corrupt the legal information process as Professor Martin's illustrations have shown. My conclusion is that official provision of free access to legal information is highly desirable, but it is not enough. As Peter Martin summed it up, free and public does not necessarily mean effective, and we have to keep that in mind.

That's our public policy agenda, as we call it, and I hope you share some of those goals with us.

## Sustainability and Impact

Web page: Access, impact and efficiency

<http://www2.austlii.edu.au/~graham/Slides/Tokyo2001/statistics.html>

I should mention a few things about sustainability and impact before finishing. As I mentioned at

the outset, AustLII has a high level of usage for a small country of up to 400,000 hits per working day. At least that is what we record. We don't actually know how much larger it is because we can't measure the hits that come from proxy servers that we never see. But just on those figures with the budget we have, it costs AustLII to provide access to the full text of the case or to a section of legislation is considerable lower than one Australian cent. We think that's good efficiency in the provision of legal information to the public. I am sure the costs are even lower at Cornell with the level of accesses that they get. We can also add a new case or tribunal database to the AustLII system for about A$5,000 per item and maintain it there at a similar annual cost.

Our system is not only used by lawyers. We have other statistics than this to show us that 55% of our usage comes from business and lawyers combined. And where our estimate is from other surveys we've done that something up to about 15-20% of our usage is from member of the general public, who are not accessing for business or sort of commercial reasons. About 20% of our usage comes from educational domain. One of AustLII's main functions is to give law students and academics all over the country very substantial access to legal information without the substantial cost that might have otherwise been involved. We never had, before AustLII started, the free access to LEXIS and other commercial systems that was common in the USA, but one of the functions of AustLII has been to convince the legal publishers that if they are going to get a market they had better provide some free access to law students, otherwise they just keep on using AustLII. So I think we have helped at least to keep the costs of access to legal information down for the education sector. And we get about 15% of our usage from overseas.

Web page: Sustainability - AustLII's 'stakeholder' funding
<http://www2.austlii.edu.au/~graham/Slides/Tokyo2001/stakeholder.html>

How do we sustain all of this? Our budget is over A$500,000 per annum, about 30 million Yen. It's probably closer to 600,000 now. We have a full time staff equivalent to about nine. Our funding comes from a variety of what we call "stakeholders." Diversity of stakeholders is the key to sustainability of a system like this. There are organizations that want their legal information or the legal information that they produced published efficiently. I mentioned the Department of Foreign Affairs and Trade, with the Australia treaties collection. Similarly our Intellectual Properties Office, (IPO) in Australia, pays us about A$30,000 a year to publish the decisions of that office and the intellectual property and examiner's manuals and similar things on the web. There have been a variety of other government agencies that have done that over the past and still do. The most recent one is our Defence department, that wants to put up large databases of military law and peace keeping law and to use our World Law indexing system to enable them to access information about the legal systems of countries where Australia might possibly be involved in piece keeping operations, because it is so difficult to obtain that sort of information when in the field. There are a variety of government agencies that can be attracted to provide funds that simply provide public legal information and they are willing to pay for it.

There are organizations representing categories of users. For example, Australian Business Limited, is a major employer organization funds us to about A$80,000 a year for us to publish the decisions of industrial law tribunals, because businesses have found it so difficult and expensive to get access to the workplace and employment law that they needed to find. So their employer organization funds us to provide employment law information to anyone who wishes to access it. Their

members get a free ride on all the other information that is on AustLII and in return they're happy for everyone else, trade unions included, to get a free ride on all of the industrial law information that we are able to provide with their funding.

Our biggest source of funding at the moment, is the Australian Research Council (our equivalent of the National Science Foundation) where we have been successful over the years in various applications for the support of particular research projects in computerization of law, and also simply for the provision of research infrastructure to the academic community and other researches through AustLII.

Web page: World Law and DIAL <http://www2.austlii.edu.au/~graham/World_Law/Slides/>

The Asian Development Bank funds the one major part of AustLII that I haven't shown to you (but about which you have a brochure) is our World Law / Project DIAL which enables you to find legal information on the web from every country in the world, and on which Mr. Hasuike is one of the Project Officers. The Asian Development Band funds us to do that so that lawyers in developing countries, particularly government draftspeople, have better access to legal information.

Some of our international efforts are also producing funding such as the development of BAILII in the UK and Ireland, where the BAILII Trust is now paying us about $40,000 per year.

So you can see there are variety of types of organizations that are willing to support public access to legal information. We haven't done a very good job yet of tapping the legal professionals or the courts, and we have a lot to learn from Cornell about asking our own users to voluntarily contribute to keep this type of enterprise alive. There are many strategies that can be used and I think the key thing is diversity so as not to be tied to any one type of support, particularly if it comes from anything like commercial publishers that might fall away at any time.

Another key thing, which I think it is true of both AustLII and Cornell, is not to try to be too fancy and to do all sorts of whiz-bang things by way of presentation that are not sustainable. Keep it simple and stay away from frames and other types of approaches that are more difficult to maintain in the long run. Keep what you present simple, fast, and useful without too many fancy bells and whistles: that makes it more sustainable.

### A wish list for access to Japanese law

Web page: A foreign lawyer's "wish list" for access to Japanese law
<http://www2.austlii.edu.au/~graham/Slides/Tokyo2001/wishlist.html>

I would like to finish by referring to something that perhaps I shouldn't: reflections on the little I know about access to Japanese legal information. I have called this a foreign lawyer's wish list for access to Japanese law because foreign lawyers do have a considerable interest in access to Japanese law. Our work on Project Dial for the Asian Development Bank has shown us that many of the government lawyers in the counties where we're doing training - Mongolia, Vietnam, China and Indonesia - are extremely interested in Japanese legislation as a model for how they should reform some of their legislation because of the common roots in civil code systems. They're very anxious to get that information but haven't been able to do so very effectively from the web. The

information is also, of course, in demand by anyone interested in foreign investments or joint ventures with Japanese companies and for the purposes of legal education in Japanese law, and more generally for education in overseas institutions about Japanese society. There is considerable interest in obtaining through the web access to Japanese legal information. So there's a lot of interest in rest of the world in your legal system, not just from within the country. That's my excuse for saying something about Japanese law: foreigners are interested in it.

What would they like to find on the net? They would probably like to find at least one independent free access site where they can find a consistent, easy way to use Japanese legal information from all sorts of sectors. When I did this web page, I was looking at what we had in our World Law system about all the little fragments of Japanese legislation both in English and Japanese that were available: so many websites, one act there, and a few acts there. All of this great cataloguing work has been done by my colleague Takao Hasuike in collaboration with Professor Makoto Ibusuki - you can see the logo of Kagoshima University as the contributor to the Japanese pages of our world law index. Since this was done, there has come into existence, I now understand, a rather comprehensive legislation site provided by the government. It will not surprise you after what I have said that while that's a very welcome development, I suggest that it is not enough. Having that information provided solely on the government's site should not cause everyone to walk away and say "you don't need to worry about Japanese legislation on the web any more." As I understand it, it is available only through an interface that doesn't allow linking to individual sections. It would have additional value if that data that has been so painstakingly and well assembled by the government could be provided to others who wish to republish it with different forms of added value. This would make Japan an even more leading example of the provision of legislation in Asia.

When it comes to courts, from my understanding, there is only a very small amount of case law currently available on the web, mainly from the Supreme Court and scattered examples from other courts. Those interested in setting up an independent site here, such as Professor Natsui and his colleagues, have every reason to go to the courts of Japan and say, "Could you please give us your decisions. They should be available to the general public. The other courts than the Supreme Court have not provided information on the web. We want to provide it. Please give us the data and set up a data feed to maintain it." I understand it, that the Supreme Courts decisions are not searchable, so although is good that the Supreme Court makes them available; they don't have the maximum utility that they could have. That is a reason to go to the Supreme Court and say "Thank you very much. We appreciate the efforts you made to put your decisions on the web, but we wish to republish them as well in a free access, independent site linked to legislation and the like."

I would encourage everyone interested in this area to think adventurously. Realize that there are good examples around the world at Cornell, AustLII, Canada and elsewhere that show that on very modest budget very effective results can be obtained. There is a real need for good examples in Asia. There is hardly a single jurisdiction in Asia that is providing comprehensive free access to legal information on the web. I think Hong Kong comes closer than anywhere else. In Singapore, and Malaysia it's all locked up in the hands of commercial or government pay for use organizations. In countries like Indonesia and Vietnam they are teetering on the edge not knowing which way to go. In countries like Mongolia they've tried to do it commercially and it failed. The example of Japan will always be a leader in this field in Asia, and if there can be a convincing Japanese example that

shows that this information can and should be made available for free to the general public in a way that adds value to it, that would be an extremely influential thing throughout the rest of Asia.

Thank you very much ladies and gentlemen. It has been a pleasure talking to you.

# Panel Discussion

Pannell: Professor Peter Martin (Cornell Law School)
Professor Graham Greenleaf (University of New South Wales)
Mr. Takao Hasuike (Officer of the Australasian Legal Information Institute)
Professor Jun-ichi Yamamoto (University of Library and Information Science)
Professor Takahito Natsui (Meiji University)
Chair: Professor Makoto Ibusuki (Kagoshima University)

Professor Ibusuki:
We have an hour and 10 minutes, and I would like to propose a few points for discussion. First, supposing that LII or AustLII did not exist, what would have happened in Australia and in the U.S.A.? I would like to kick off the panel discussion with this question. Second, there is a set of three topics on which I'd like to hear panelists' opinions. To start with, what is our mission? In the morning Professor Natsui gave us some inspiring proposals concerning the setting of policy and the creation of rule books, and spoke of common benefits. LII and AustLII have already set out to tackle these issues, and I would like to exchange ideas concerning them. What are the barriers to promoting these missions, from an educational perspective, an economic perspective, a political perspective, and also from a technical perspective? I'd like to look into these barriers. Ultimately, what is our dream, what is our goal? What should we be aiming at? Following these questions, I would like to conclude our discussions with the question of whether we should start up a JaLII, Japanese Legal Information Institute? There is no such institute now, but should we start a JaLII or not?
On the first point, then, I would like to turn first to Professor Martin. Suppose Cornell had not realized the LII, what would have happened in the United States? What would have happened to, for example, the citizens, law school students, and the lawyers of small law firms? I am afraid that it is a hypothetical question, but I would like to start discussion here.

Professor Martin:
Well, I suppose the simplest answer to what would have happened if there had been no LII is that there would very likely have been some other institution in the United States which would have undertaken the same mission. That is to say, with a legal information, or legal education system as decentralized and as open to innovation as that of the United States, the odds are very strong that, had the circumstances at Cornell had not been right, the lightning would have struck some other institution within the country. But let's imagine that that didn't happen, and that there was in fact not only no LII, but no academically based center for exploration of what digital technology meant for law and legal education. Then I am quite confident that, number one, there would have been a much slower and less effective move by public bodies toward distributing their own information in an effective way. One of the key things that our institute did was to demonstrate early and effectively what it meant to do that job, and to do it well. We demonstrated the relatively slim resources with

which this could be done by a public body, and also what it meant to legal professionals and members of the public to have that kind of information available in a timely fashion and in a usable format. So I think that we had a major impact on both the pace and the quality of the take-up of this new possibility by public bodies. And a related point is that we kept the private sector honest in the following sense: we made it more difficult for the private sector to continue to co-opt the public bodies. And we made the kind of tight relationship, which as I mentioned existed in states like New York and California, less tenable in those states and completely untenable in some others.---

Professor Ibusuki:
Thank you very much, Professor Martin. Professor Greenleaf, what about the Australian situation?

Professor Greenleaf:
Well, I think the situation in Australia was somewhat different from what Peter described in the United States, although I agree with him that it is quite possible that if we hadn't created AustLII, then someone in another academic institution in Australia might have done something similar. But assuming that didn't happen, the situation would have been considerably more dire in Australia. For this reason: just at the time that we obtained our first grant to create AustLII, all Australian computerized legal information was in the hands of a monopoly. The holder was a government-sanctioned monopoly, a commercial provider at that stage --- now a part of Lexis, although it wasn't at that time. It was actually a duopoly because the rest of the information was in the hands of a commonwealth government agency, the Attorney General's department that provided a fee-for-use service not via Internet, but via a dial-up system. The commonwealth body had plans afoot to turn their service into a full-scale Internet based pay-for-use system that offered the largest body of legal information in public hands. One of our most urgent early tasks with AustLII was to totally destroy the commercial possibility of that system succeeding, because otherwise we were sunk. It's a long story, but we accomplished that in part by getting a hold of some of the information they were going to publish and putting it up on the Internet before they were able to do so. We also had various courts from the High Court down instruct the Attorney General's department to hand over the court's data to AustLII, thereby knocking the legs out from under the commercial possibility of their system. But if that hadn't happened, things could have taken a very different course. Most of our state governments at that time were also very interested and starting to pursue the commercial potential of selling cases and legislation. Unlike the USA, we don't have statutory or other guarantees of public access to that class of information, and we have the "crown copyright" problem. Basically we had to find a way to make "crown copyright" unacceptable in Australia even if it was there in law. We had to make it perfectly unacceptable that any court, any legislature, any government could try to charge for legal information and get away with it. So to answer the question, I think the situation in Australia would have been much worse if we or someone else like us hadn't knocked the commercial potential out of the government's hands. We have had a continuous battle to do this through much of AustLII's existence. I think that this is

one of the things that has to be taken into account when we look at the position in a lot of other countries in Asia and elsewhere; they are not in the situation that the USA has always been in. They are much closer to the position that Australia is in, where the information can be very easily locked up, and really taken out of public access as, for example, in Singapore.

Professor Ibusuki:
Some other countries have also launched publicly accessible legal databases over the Internet. Were you stimulated by other countries to provide, for example, the US Code or decisions of the Supreme Court over the Internet at Cornell? At the LII and at AustLII, what really stimulated you to do this type of work? Were you the ones that came up with the idea? I'd like to know where the original idea came from at the starting point for both institutions.

Professor Martin:
You want a date and a time and a place. Let me try to describe a process without pinning that down. It is fair to say that the commercial legal information providers in the United States viewed US legal education as the ground in which they would plant their seeds and fertilize them, and that they had a lot of help in that process, wittingly or unwittingly, from our law librarians. They were, after all, the people who taught our students how to do legal research. The first insight we had was that the new technology would make it possible for law schools to break that cycle. We saw that there was no reason why we shouldn't be furnishing our own students access to the kind of legal materials that they needed to do their learning of various bodies of law. And indeed, we ought to be teaching our students about the commercial systems from a critical rather than a gullible standpoint. So the first projects, that ended up becoming our institute, were efforts to provide high-end hypertext core materials, mostly codes, for various law school courses. These had very, very strong takeout from students; they generated relatively less interest among faculty. We tried to aim them at students in such a way that faculty members would not need to endorse them. Rather, students would discover simply that the version we were providing that deals with, say, civil procedure, would be more useful than the printed texts their teacher assigned. So we began by doing experiments with very high-end, PC-based hypertext, and then we moved from there to the discovery that much of what we had modeled was becoming possible on the Internet. That pushed us into hypertext on the net and our very first collections on the Internet were composed of material that we ported from a platform that worked on local PCs. And it was a process of discovering the power of the kind of distribution that was possible on the Net. And as we have learned the value that people find in legal information distributed by the Net, that awareness encouraged us to think more ambitiously about this project.

Professor Ibusuki:
Thank you very much.
Professor Greenleaf, I would like to elaborate the question a little further. Cornell started LII before you, and so I believe that there was a need for you to come up with a new mission. You came up with AustLII, which aims to establish a massively

comprehensive database. Why did you set out to embark on such a seemingly impossible, grand plan?

Professor Greenleaf:
That is an interesting question. The starting point is not quite right though, because we didn't see what Cornell was doing and then decide that that was something we could do. It's a bit different. Andrew Mowbray, my co-director and I had been working together for 10 years before AustLII was founded, from the mid-1980's. AustLII really comes out of that ten year history. Andrew had been developing various sorts of tools, including a search engine and hypertext mark up tools that we could use quite effectively. But we were frustrated in our work in two really important ways. The first thing was that we both wanted to teach computerized legal research to our students, but in various ways we found it very difficult to get adequate free access to the commercial legal materials that were available, and even when we could, we were very dissatisfied with the forms in which they were provided. So from a teaching perspective we were quite frustrated. But separately from that, in our own development work, like Peter and Tom we had been working on disk-based products combining hypertext and text retrieval, before the emergence of Cello and Mosaic and the Internet as a feasible delivery mechanism. We had been trying to do that in a commercial way in conjunction, in part, with commercial publishers. But we found that commercial publishers had a strangle hold on the legal information that we needed just to publish our own product. One commercial publisher in fact, pulled out on a project after we demonstrated how successful it was, and just denied us access to data to develop it with. On these two fronts, we were just completely frustrated in every way about the lack of access to legal information. So we decided to put in our first grant application for AustLII when we saw the potential of the Internet. I think it was before we saw what Cornell was doing. Then we had to wait for a year to see if it succeeded. We took the view that what really needed to be done was to try and use the Internet to create some sort of runaway truck that we could aim at Australian legal publishing. We wanted to see what degree of mayhem it could cause, and whether there might be something valuable that could somehow be picked up out of the exercise. So we didn't necessarily have sort as grand a plan as you might have thought, but right from the start we had to pitch what we were saying as a statement of principle that applied comprehensively to all courts, tribunals, all legislation, and try to make it a matter of policy that this would be done differently in Australia. We didn't necessarily think that we were going to be providing all that information. We just thought someone had to free up access to all this information, so that a myriad of parties could then pick it up and use it. It turns out we might have picked up more information than we might have thought at the outset.---

Professor Martin:
Can I pick up and add to a point that Graham has made?
The comments that I made earlier about the lack of innovation coming from the private sector; those comments come from painful personal experience. The thing that drove us to create the Institute, and to do so totally independently of the private publishers, was the failure of prior joint ventures with those publishers. Failures that were a

consequence of a failure of vision on their part, and in some cases uncertainty about what this all meant for them. Commercial publishers carry a huge anchor in the vested interest they have in old ways of doing business. The bottom line was that we simply needed to be free of that, to do the work we hoped to do for our students, and to demonstrate what is possible. So long as we were engaged in some sort of a partnership with private sector publishers we couldn't do that.

Professor Greenleaf:
That's exactly what I was trying to convey.

Professor Ibusuki:
Thank you very much. Now then, let's move on to the next issue I've mentioned. I would like Professor Natsui to start the discussion on this topic. Earlier, you mentioned in your presentation that the database for academic legal information could play many roles. Please give us your comments in response to or reflection upon the comments made by Professor Martin and Professor Greenleaf. Professor Natsui, please.

Professor Natsui:
Thank you. It is my understanding that what I proposed concerning the technical possibilities of a database of academic legal information has already been realized through LII and AustLII. However there are some features yet to be realized, and we must be careful not to go in the wrong direction. First of all, let me speak about what has not been realized. In spite of the low capability of HTML, both LII and AustLII now depend too much on HTML and the existing Internet protocols which are available at the moment. I think that this is a limiting factor. When I started the SHIP project, both LII and AustLII already existed. I thought that these were wonderful systems, but I think I also saw some of the limits entailed in them. I think it's a technical issue: the means of expression is an extremely important factor, and in setting boundaries on the scope of expression, we impose limits on what we are able to do. Of the available technologies, I believe XML has the largest potential, that's why I decided to establish a database that is based on XML. However, even if we overcome the technical limits, there are other limits. The sources of legal information are not always produced in XML. Some countries produce their information in SGML, and paper systems are based on paper. We need to consider these factors as we make proposals, even if we use XML, which would impose limitations of its own. Thus, we need to consider having better technologies available to bridge the two worlds of printed information and digital information. But there is something that is far more important than what has been said. As the academic legal information database serves bigger functions and social roles, then it would become so much similar to the commercial database. The larger the system, the more funds you need. This is fine as long as someone donates enough funding. But if grant funds are not available, you need to be self-supporting, and you might become similar to what the commercial providers are. Then you are going to end up going in a direction that I do not want to pursue. Thus, we need to continue to enlighten many people in the society to recognize the importance of academic and neutral databases to our society. Whatever

academic, religious, or political position each researcher might take, we need to have a strong determination to keep the database neutral in itself. I referred to the rulebook as a function of such a neutral database, because control over it resembles control over the enactment of bills. And at the same time, social functions similar to the court need to be fulfilled. In short, it needs to be fair and neutral. And that depends how you want to manage your system. The neutrality we keep at the moment does not assure that this would be maintained when we leave what we do and hand it over to others.

Professor Ibusuki:
Thank you very much. The technological limitations that Professor Natsui has commented on have, I believe, lead us to the next question; what are our barriers? But before that, there are two points I would like to raise. First of all, I would like Professor Natsui to define the difference between commercial and non-commercial databases. Second, in regard to HTML, you have said that there is a limitation to expression and that we are heavily dependent on the existing protocol. What barriers do this pose? I would like to invite you to respond to these two questions, Professor Natsui.

Professor Natsui:
I don't want to give the impression that I am denying commercial providers. But commercial providers are doing business. If they fail to do well, they will go bankrupt as a business. Somebody else may acquire the content of the database, but that does not necessarily mean that they will be able to continue to provide the same service. If you know technology, you know that to operate and manage a system you need staff and an administrative structure. Just having the database itself is not sufficient. Thus, to make an extreme argument, if the company goes bankrupt, then quite an amount of legal information would be lost.

Professor Ibusuki:
So are you pointing out the risk of independent organizations operating in the field of legal information?

Professor Natsui:
It is true that whether it is universities or independent institutions, we all face the same problem. However, commercial profit needs to be obtained in a shorter span of time. Let's say we have a subsidiary of a larger company that is providing the database. If they are not profitable, they will be shut down. That is what I meant.

Professor Ibusuki:
So, are you saying that the crux of the issue is not only whether information is provided free or not? Am I right?

Professor Natsui:
Yes. Even if a commercial provider provides the information free of charge, there has to be some other business in which they are making profits because it is business. As

for academic legal information databases, if no student were interested in their contents, the same issue would rise. But a University scheme is not a business, so it will not be judged by its profit and sentenced, as it were, right away. In that sense, I think the academic database would last longer.

Professor Ibusuki:
I see. We might come back to this issue of provision of legal information in discussing our dreams and goals. Let me move on to the second question, which is "to explore what missions are inhibited by the technological limitations."

Professor Natsui:
If English were the only language in the world, then Unicode would be sufficient and we wouldn't have many problems. However, we have many languages and we have many alphabets around the world. If we are to treat them in a fair and equitable manner, it's not possible for the existing HTML standard to control all of these characters. The limitation is in the ways of controlling them. Moreover, if legal information were originally produced in a digital font, that would not be a problem. But some pieces of information are historical documents of the past, so the form in itself might pose a problem. Let's say that a certain term appears in a certain portion of a page and that its position on the page is in itself important information. The PDF format offers one way to solve this problem; however, this is a proprietary product of Adobe Corporation. Why do we need to resort to the proprietary software of a single entity? I don't regard XML as a 100% solution to the problem of expression, but compared to HTML, it is better and more easily applicable to the control of a variety of character sets. At the same time, using HTML there are times when you may have to write everything on your own, or rewrite it to change the structure of expression. But with XML it is possible to use different style sheets to present it in different ways. These are some of the technical issues that show how XML would be better compared to HTML, based on the fact that the latter has more limitations.

Professor Ibusuki:
Excuse me, but what I would like to know is not whether there are technical limitations or not. You have recognition that there are technical limitations. Please tell us how you think these limitations actually impede our endeavor to establish legal information databases.

Professor Natsui:
It's related to the last question of whether it is possible to establish JaLII or not. I believe that all countries are on an equal footing, and that they should be equal members of the encyclopedia. I do not mean to oppose English as a language. It is a wonderful form of expression, and a wonderful international language. At the same time, we have the Japanese language, and Japanese characters, which are more familiar to us. We use these in order to think. Thus, our database needs to be able to express them accurately. And that's true whether it's Japanese or some other non-English language. Other languages must be accommodated in a fair manner.

Professor Ibusuki:
Thank you.
Now already we have been discussing missions and barriers in parallel. Perhaps we don't have to separate these two as we go along. Now turning to the floor, with respect to technical questions, is there anybody who wishes to say anything, especially for these technical issues, or our missions. Yes. Frank, please.

Frank Bennett:
I don't want to start a protracted discussion of technical matters, but in HTML there is provision for style sheets and for character set specifications.

Probably something that you can't do with HTML is vertical type setting, which may be one of the features of Japanese that Japanese readers do want to preserve in the on-line environment. Another thing that, as far as I know, is impossible to do in straight HTML is multi-column typesetting. So for multi-column and parallel text typesetting (i.e., for multilingual concordia) and for vertical typesetting, HTML clients have their limitations. Perhaps it is because I come to the language as a foreigner, but access to simple electronic text, which is searchable and modifiable, is a more pressing problem than the format of the data. That can be cured afterwards by grinding the text into some form of XML or whatever. As far as the PDF format goes, though, I also feel aversion to this format. The proprietary control over the format is one problem. But I also take exception to it because PDF documents cannot be easily indexed; I can't run any publicly available indexer over a set of PDF files and search the whole archive. Japan's official gazette, Kanpo, is available in PDF format, and it's almost completely useless in its on-line form because it is PDF, and encrypted PDF at that. Making this resource available in any more open format --- XML, HTML or even plain text --- would be a much greater service to the country.

Professor Ibusuki:
Yes, Dr. Martin, would you like to comment?

Professor Martin:
Let me say a word about XML because it is part of our future too. There are reasons apart from presentation to move your data to XML. For us they include the following. We have users who want our data in a variety of formats. They want it in smaller and larger chunks. We have set our data up for the US Code section by section, but we have people who want to take larger portions of the Code and print them out, or put them on their Palm Pilots. People want to do all sorts of things with the data that we store and organize. And we would like to facilitate that. One of the nice things about using a rich structural mark up like XML is that you can then provide a variety of takeoffs. Also, structural markup allows you to put a lot more intelligence into the data, so that you can distinguish between various parts of a document and use that kind of structure in your indexing. You can, as those in Tasmania have already demonstrated, do a lovely job of "point in time" codes so that you can have the dynamically constructed code, as it existed at a particular moment. And that moment is not just now; it could be three years ago in March. We will be doing that with the US Code as well, and there is similar work going on here at Meiji and at AustLII.

There are a variety of reasons why a structural and sophisticated mark up in the way of XML makes sense for all of us, I think.

Professor Ibusuki:
Thank you very much. Here in this room there are many people representing the legal information industry, I understand. Maybe some of you can share some of these specific issues that you face in designing data processing systems in which the content is in the Japanese language, such as coping with the range of Chinese or Japanese characters. It would be helpful if someone can comment on the main problems in this area. Yes, Professor Reich.

Professor Reich:
I wanted to hit several issues. First of all, I think we need to look at how to translate Japanese law into English. Just yesterday, for example, I heard about software called TRADOS. I'm not familiar with it, but I was told that it requires training to use and is used, I think, primarily in the business context. I think we have to think fundamentally also about who is the audience of Japanese legal information. As we heard earlier, Japan can be a good model to developing countries in Asia. Japanese teams are now going to places like Cambodia and other countries in Southeast Asia to build legal systems. And Japan does, I believe, have to look outward as well as inward; and to that end, we therefore have to look at the translation of Japanese law. It is very hard for people outside Japan to know about developments in Japanese law. There is so little posted, for example, about new cases relating to cyber-law in Japan. People outside Japan think that little is happening here because so little information is getting out, though we in this room know there is a lot going on. To make Japan a model for developing countries not only in Asia, but all over the world, we really need to communicate to those outside Japan. So I see the issue of translation --- the stance on whether there is to be a purely Japanese legal information institute or a more widely accessible bilingual institute --- as a fundamental one. My own preference would be to see a bilingual website, of course.

Professor Ibusuki:
Thank you. Professor Reich's comment touches on to the question of our dream. I would like to go back a little to where we were earlier. We have a number of barriers impeding our mission. Let me turn to Professor Yamamoto and ask him a question. Cyber space, which was brought about by the Internet, enables us to access the LII or AustLII from this room. But at the same time, Professor Yamamoto, you already mentioned some of the demerits of cyberspace. In the light of what other speakers have said, would you like to expand on those points?

Professor Yamamoto:
Looking back at the statements made by other speakers, there are a couple of things I just want to clarify. First of all, it is desirable that academic legal information systems be made available for free. For law firms and those who can be expected to subscribe on a pay-for-use service, this is not a concern. But at the Cornell LII and at AustLII, freely accessible systems seem to be indispensable tools for legal education.

Some of my students say that they can spend money to buy cosmetics but they don't want to spend any money for books and database access. They can spend 10,000 yen a month for mobile phone communication but they cannot afford to spend any money for a database subscription. These are the students that we must train as full-fledged researchers. We need to train future law librarians and other specialists in the field of library information and the like. So we must shape the educational environment taking this situation into consideration. Thus, information has to be free of charge. As an aside, we used to have a national information institute, known as the Gakujo center. They used to provide legal information in the category that they called "N-1." This service, which was run under the Ministry of Education, was meant to be self-funding on a pay-per-access basis. The Gakujo Center would project the expected volume of access, and factor the associated cost into their budget, passing the cost on to users in the form of access charges. But they discovered that the service was not used at all. This may have been because university professors do not study; but another reason may have been that their system was inconvenient to use. Systems such as the Web-based catalog information of the Library of Congress and also the Web Opac of the National Diet Library are widely used because they are made easy for us to use. Any legal information database must take into consideration both of these factors: they should be easy to use, and information should be free of charge. AustLII is a very well made system, and so is the system at Cornell, which I personally use very often. For general library information, there is an EC-funded Web link called BIBLink. In that system, library information is offered in a distributed environment. That is to say, publishers contributed to a database, and then there was automated conversion software for creating additional value in the form of meta-data. This is also the case with Dublin Core (a widely used standard for self-cataloging electronic documents.) The general concept is to set cataloging and other information in a standard form once, at source, and then to use information technology to make that information available to many people. In case of AustLII, too, the government delivers information in uniform format. Software at AustLII is then able to convert text into an immediately useable form. In this way, instead of depending on manpower, we should find a way to depend on technology and pursue the lowest possible cost. Professor Ibusuki asked what would have happened if there had been no LII or AustLII. Since they depend on technology, just as a digital library does, I regard both as bound to come, with advancements in information technology. And they do have their demerits. When we talk about legal information, the core is primary sources of law --- statutes, cases, ordinances and so on. The class of legal information also includes legislative reports, minutes of City Council meetings and other information from the government. And legal information is not limited even to these types of information. For instance, when we proceed with an environmental lawsuit, we need to get not only certain laws from the jurisdiction of the Environmental Ministry, but also many other types of information, such as information concerning, for instance, dioxin and its effects. So I must say that while there may be a core to legal information, the periphery is blurred. The LII and AustLII are important sources of legal information for law librarians, lawyers and researchers. It was said that PDF was not good. One disadvantage of PDF is that you cannot easily establish cross-links, and information without a hyperlink structure is meaningless. Hyperlinks permit an extensive amount of legal

information to be collected by researchers themselves, without the support of librarians. The role of librarians would be to provide legal information in a rich networked environment without any peripheral parts. Cyberspace is where we structure and evaluate information, and links are an important tool for that purpose; users become able to pick up what is useful among various sources of information. BIBLink is a good example of that approach. The aim is not to work with all the information available in cyberspace at once; instead, we throw into the BIBLink workspace what the publisher believes to be valuable. I think that a scheme of this kind is required.

Professor Ibusuki:
Both the first and the second half of this comment were very stimulating. I would like to pick up two early points made by Professor Yamamoto: that there are advantages to making a legal information database available free of charge; and that means should be sought to acquire the original data as inexpensively as possible. I would like to ask Professor Greenleaf, who is involved in BAILII and CanLII, the significance of having legal information free of charge. Can you elaborate on why it should be so?

Professor Greenleaf:
There are quite a few reasons, but I'll start with one of the reasons that perhaps people don't think about too often. When, as in Australia or the United Kingdom --- and I suspect as in Japan as well --- you don't have any fundamental guarantee that you can get access to legal information held by government, courts, or tribunals, then the strongest argument for having it released is what you might call the high moral ground position. You go to government and the courts and say, "we're going to do all hard work to provide free public access to legal information, and all YOU have to do is just give us the data that it's your public obligation to provide." But if you don't say "we'll make it available free of charge," but say instead, "we'll try to pass some of the costs on to law firms who use it," as soon you start talking about imposing any direct charges for use, then you are just another commercial legal publisher. You're really no different. You're just a commercial legal publisher in the academic sector that happens to be giving free access to some classes of users. But commercial legal publishers do that anyway, if they have any brains. So the immediate response of government agencies is to treat you like any other commercial legal publisher. If you have complicated the whole matter by asking for royalties to defray the costs of dissemination, as if you were selling the information, then why shouldn't the government defray some of its cost by claiming some percentage back from you? So our view at the start, when we created AustLII, was that there could be no question of charging anyone for anything. Getting the data out of the institutions that hold it is really the biggest hurdle, and only if we go to them on this basis can we take this sort of high moral ground position. The big problems are not in the choice of technical platform that you use to present the data. As Peter and everyone have said that there may be many good reasons for favoring XML over HTML, but that's not really where the crucial issues are. First, you have to have a very significant supply of legal information before questions of free access are meaningful at all. And my impression from what I have learned about the situation in Japan is that that's where there is a need to concentrate; and that is where the argument about free access is really

important.

Professor Ibusuki:
Thank you very much. In the United States Code, it is stated that the Code is published through a company called Brown. Am I right, Professor Martin?

Professor Martin:
I'm not aware of that. The United States code is published by the Government Printing Office in a full and final compilation. But the private publishers of printed text have long added value to the Government Printing Office version, to the point that no law firm could be content to relay solely on the government version. And the same situation now obtains in digital publishing. The United States Code that we put up is far more heavily used, even by government workers, than either of the two versions put up by the federal government, because of the various qualities and value we have been able to add to do it. One of the reasons to have an independent and research oriented center or institute is to be able to set standards that operate by way of example to improve the performance of the public sector. That is another reason for making information freely available, on top of those that Graham has mentioned. And if I could add to that a related point, our experience in the United States is that the commercial publishers know about "free" too. They have read all of the recent economics of information material that points out that one of the best ways to make money by selling information, is to offer free information that draws people into what it is that you sell. And that's why we see both West and Lexis now offering free US legal information sources on the Internet. But in contrast to the free collections that we operate, they all point into their "fee for service" information collection. That's a way to grab market and audience share and then to derive revenue from it. So this is a second reason for an operation like ours. In addition to the high moral ground basis that Graham mentioned, we assure that free provision of legal information is not conceded to the commercial sector.

Professor Ibusuki:
Next, I would like to put a question to Professor Natsui. In Japan, if a movement for the courts to disclose their decisions occurs, what problems would arise?

Professor Natsui:
Well, I mentioned this issue in the morning as well; we have to clarify what we mean by court decisions. Decisions are what judges sign. If all the decisions were to be disclosed, as I mention earlier, there would be a problem with various infringements of rights. So it is important for us to anticipate potential problems. In general legal professionals are very conservative and they don't much think about issues, which have not yet given rise to concrete problems. Future legal professionals will need creativity, just like a novelist, in order to address problems before they actually arise. Technology is advancing beyond our imagination these days. In the gap between real-world events and our lagging imagination, various infringements of rights occur. What is really problematic is the issue of privacy, as I mentioned in the morning. Another problem is that there is such a large amount of information being disclosed

that people might not notice when information is improperly manipulated. Where a small amount of information is involved, someone would notice if there were a typo, a mistake, or any manipulation. But with a large amount of information, manipulation of a small part might not be noticed. There is thus a potential for information control, and we have to pay attention to that possibility.

Professor Ibusuki:
At SHIP, the judicial decisions are recorded in XML format. What sort of privacy considerations do you have?

Professor Natsui:
My colleague Mr. Komatsu, who is here today in this hall, has come up with a wonderful technology, which he is now implementing. It is a markup tag that conceals proper nouns. The tag will automatically replace a proper noun with a letter A or B or whatever. This is possible with HTML, but controlling it would be very difficult and the application would be very big where as with XML it is very easy. The structured nature of XML tagging presses those who work with it to think clearly about the structure of legal information. The text of a legal decision can be thought of in a vague way as a mass of characters, but once you think in terms of tagging, you come to understand what structure it has, and what the functions of its parts are. Even if you are not a legal professional, looking at what kind of tags are being used in the XML source helps you understand the structure of legal documents. This is a productive learning experience. So if XML source is disclosed, this opens a new path to research and education, and fresh insights into the law. Even without external interpretation of the text, tags themselves can assist in interpretation, and help people understand the structure of law and court decisions.

Professor Ibusuki:
Then in the field of legal education it's necessary to set up a curriculum for the students to understand about these tags.

Professor Natsui:
Perhaps it is possible to replace tags with diagrams, such as a tree structure. In this way, you would be able to automatically generate and deliver structured information based on the tags, for the benefit of people who don't understand the tags themselves.

Professor Ibusuki:
Yes, thank you very much. Now I would like to move on to the last part of the panel discussion. The need for English translations of Japanese legal documents has been mentioned from the floor and this is one of the dreams that we may wish to pursue. Professor Greenleaf in his presentation gave a wish list from a non-Japanese lawyer's perspective. I would like to ask Professor Yamamoto for his response to these items on our wish list. Shall we take them on?

Professor Yamamoto:
I may not be the one best suited to answer your question, but I would like to address

the JaLII question as a legal information professional. And as for me, I would definitely like to have a Japanese system along the lines of the LII at Cornell or AustLII. Without such a system, legal study will not flourish as it ought. No matter how may law schools we establish in this country, unless the content improves, it is meaningless. Even if we increase the number of lawyers, it is no good without the information necessary to fuel the market. Unless law professionals produce results that are special and have a great value, neither of these initiatives means anything. To move this agenda forward, we need something like JaLII. When we establish such an institution, I don't think it is desirable to duplicate effort. We talked about vertical type setting. In Korea, too, they are developing some software that is working well. Putting aside the uniqueness of the Japanese language, both the computer-related technology and the "know how" involved in installing, managing, and operating the LII and AustLII systems will be valuable to us. Access to these aspects of these systems will hasten the establishment of a JaLII in Japan. Both their software and their "know how" would be a valuable guide to us.

Professor Ibusuki:
So you are suggesting that we should have an independent institution which provides legal document in Japan. But in the case of the LII, it's a Cornell project. And in the case of AustLII, New South Wales University and UTS are the core, with the participation of other stakeholders, as Professor Greenleaf mentioned. Which type of institution do you think is suitable for Japan?

Professor Yamamoto:
I think that it is a very difficult issue. I don't think it will work to establish a collaborative or joint university facility. I don't know if "grass roots" is the right word here, but I am hoping that the hard work of Professor Ibusuki and Professor Natsui will attract supporters, and that that might lead us somewhere. I think we should pursue a path that is independent of the Ministry of Education and other government organizations.

Professor Ibusuki:
Thank you very much. Is there anybody from the floor who has something to say about the possibility in realizing JaLII? Yes, Mr. Okamura, please.

Mr. Okamura:
My name is Okamura from Osaka Bar Association, and I am a member of SHIP. I'd like to express my appreciation for all the wonderful presentations made today, which have been very valuable. But let me make one or two comments in response to some of what has been said. Here in Japan we don't have the benefit of a law like the Paperwork Reduction Act in the United States. Thus, at the moment I think the most pressing problem is to have the government provide us with legislative and legal information. This data should be provided free of charge, because the preservation of democracy and the rule of law depend of it. The public does have a right to legislative and other information in Japan. However, the government has no obligation to make it public in electronic form. The present situation is that the government is taking

voluntary steps to disclose this type of information. Thus, prior to pursuing the translation of Japanese laws into English, we need to have the government provide us with the primary information itself. For example, as Professor Ibusuki has pointed our many times, the Supreme Court of Japan discloses only a limited number of decisions; we need to increase the number of decisions disclosed by the Supreme Court. I think that this is where our focus should be at the moment. Once we have primary source, then Japanese legal information can be and should be translated and made available to countries outside of Japan. I would like to see it happen soon.

Professor Ibusuki:
Thank you very much. Next, Mr. Fujita, please.

Professor Fujita:
My name is Fujita, and I am a lawyer. I would like to comment on the possibility for developing a non-commercial, academic database of legal information, and on the conditions necessary for its development. The panelists clearly have put much work into establishing non-commercial, academic databases. I am interested in what motivated them to start such projects. In the United States, students or professors at law schools have long been able to use Lexis or WestLaw, without bearing the economic burden of access. I would like particularly to know what made Professor Martin work so hard and spend so much time and money on the LII project under those conditions. What motivates Professor Greenleaf, Professor Ibusuki, and Professor Natsui to work so hard on their respective projects? I am asking this because we need to reproduce that driving force; otherwise it will be impossible to pass on this kind of work to the next generation. Is it the spirit to serve the public, is that your own academic interest in the field of legal information, or it your enthusiasm for teaching your students? I think that unless we can understand and reproduce your motivation, the academic database that we would all like to see will not develop.

Professor Ibusuki:
Rather than confessing how crazy professor Natsui and I am, I would like to ask Professor Greenleaf to answer, since he has already talked about sustainability in his presentation. Professor Greenleaf, do you think it's possible to sustain AustLII over a long span of time? To put it differently, is your son going to take over your work and inherit and sustain AustLII? How should we pass it on to the next generation?

Professor Greenleaf:
That's a good question. I think there is a need at the outset for a certain amount of craziness. That's definitely required. But to put it more sensibly, the people who found any organization like this must have a very strong desire to free up access to legal information and to make that information more effective, as Peter and I have both said. In both our cases, we were motivated somewhat by dissatisfaction with the existing publishing arrangements and with the sort of access to legal information that our students were getting, and somewhat by frustration of our desire to create a new system. But we also needed a strong desire to change the system around. Yes, I think there need to be a number of people who have a fairly strong public interest

motivation to get things going. But that alone can't sustain the development of any system beyond a few years. It will still be needed. But the slogan "Let's keep on freeing the law" loses its appeal as a sole motivating force. There have to be good institutional reasons behind these initiatives, whether one looks at government agencies, or bar associations, or the subscribers to the early system that Peter talked about. This is as important as the motivations of voluntary contributors. There have to be good arguments as to why this is an extremely efficient way to solve public needs, through the very low-cost production of information in a sort of no frills fashion. It can be very attractive to a lot of funding organizations and organizations whose members need access to some class of legal information. In effect these organizations are sort of buying in bulk for their membership, for their constituencies. After all, access to legal information would be much more expensive for them if they had to arrange for it via another route. Low cost efficiency comes partly from economies of scale in dealing with so many courts and tribunals. If you can deliver that, then you have something that's publicly sustainable, not just out of idealism, but on efficiency grounds, coupled with a certain amount of idealism.

Professor Ibusuki:
I am afraid that the time has come for our last comment. Professor Martin, I am afraid that this might be a rude question, but what do you think is going to happen to the LII? What are the hopes you have for the future of the LII? What do you think will happen to the institution distant future? After this question, I would like to close the discussion. Thank you.

Professor Martin:
Let me suggest the following three things. First of all, my hope is that the institution I have been so fortunate to be involved with over the last eight years will survive my retirement in two or three years. And the track record at my university of institutes or centers surviving the retirement of their founders is not that great. So a major project right now is to get the LII into a form that goes on without being pushed by the enthusiasm and the rest of the chemistry that got it started. My second and related observation is that, already, we have found that we have plenty of fuel for that continued flow of energy and innovation into the future in the feedback that very quickly came to us, as it has come to our colleagues at AustLII. You begin something out of a strong sentiment of service, combined with a set of aims. But as this is an interactive medium, people very quickly start telling you how valuable it has been to them. And that kind of testimony is not only rich as an incentive for those directly involved, but it also provides a lot of ammunition for generating broader support. The final point I would like to mention is that there are plenty of possibilities for collaboration. I will not begin to suggest what appropriate collaborations are possible, but as Graham has suggested, support from bar associations is something that has been important to us. Consortia of law schools have also been a valuable source of support. There is a consortium of law schools that supports computer-assisted legal instruction in the United States. They haven't been part of the LII, but indirectly they have been very much involved in some of our work. I see in our future the possibility of projects that are not just centered in our university, but which also

involve relationships with other law schools. This possibility is in a bit of tension with something that counts a lot with my colleagues and my dean: doing good work under the banner of Cornell. Because my school is in competition with every other law school in the United States for students, doing good work under the Cornell name has advantages to the school. For example, insofar as high school students come to associate law with Cornell, we're reaching a broad audience very early in the formative stage of their legal careers; and that counts for a lot with my colleagues and my dean.

Professor Greenleaf:
Could I just state there, Peter, that we have had a similar experience. Given the position that our law schools are in, there is a strategic value to having an intimate knowledge of the structure of very large sets of publicly accessible legal information. You're really utilizing that now with the development of educational resources built over the top of the Cornell data set. We are doing so similarly, to a lesser degree, with the AustLII data, but there is a strong institutional interest among law schools in getting involved in this sort of project. They position themselves to be in key positions in the future. And I think that would apply in Japan too, for any of the law schools that really did take a leading role in this sort of project. They'd position themselves very well for the future.

Professor Ibusuki:
Thank you very much. In Japan, we are now going through a stage of very heated discussion about the establishment of law schools, and I think the discussion we had on the panel was both fitting and timely in this respect. I see that we are already ten minutes beyond time, so unfortunately we need to close discussion now. I would like to ask the audience to join me in thanking the panel for a very stimulating discussion. Thank you ladies and gentlemen. This concludes the panel discussion.
(End)

Discussions at the Liberty Hall in Meiji University
(from the left) Prof. Ibusuki (chair), Mr.Hasuike (as assistant of Prof. Greenlief), Prof. Greenleaf (panel), Prof. Martin (panel), Prof. Yamamoto (panel), and Prof. Natsui (panel) (photo by Mr. R. Fukushima)

# Appendix 1

## 1st Joint Symposium at Meiji University on May 1999

### Programs with summary

#### Part I

**1: Case Study 1(USA): Zeran v. AOL Case**

**Noriko Sagara** (Attorney at Law)

This case study presents short examination on some problems around civil liability of Internet Service Providers. Zeran v. AOL Case may show us difficulties on resolution to damages caused by anonymous offenders.

**2: Case Study 2(France): French Altern.org Case**

**Yasutaka Machimura** (Asia University)

This case study also presents short examination on liability of ISP (Founisseur d'acces a l'Internet). Altern.org was an ISP in France. In this case, famous mannequin Estelle Holliday's private photo was uploaded at Web Site in Altern.org. In France, many people are discussing around this case.

**3: Case Study 3(England): Laurence Godfrey v. Demon Internet Limited Case**

**Ikuo Takahashi** (Attorney at Law)

This case study presents summary of a dispute that includes squalid and obscene message occurred in USENET, and the legal basis on any liability of ISP in England, especially 1996 Defamation Law.

**4: Case Study 4(Japan): Nifty Injunction Case**

**Hisamichi Okamura** (Attorney at Law)

This report presents an analysis of an injunction case that ordered at Urawa district court in March 1999. This case includes some important problems relating SPAM E-mails (unsolicited commercial E-mails) that had distributed through computer systems of Nifty (famous ISP in Japan).

**5: Civil Liability of ISP - Focusing upon Users' Defamation**

**Susumu Hirano** (Chuo and Meiji Universities)

This report presents an analysis about ISP's civil liability possibly caused especially by users' posting defamatory messages. The problem is that the zone of immunity given by CDA Sec.

230 has not been clear. The interest of the innocent injured (including Mr. Zeran and others who might become injured in future) should be taken into consideration.

### 6: Discussions – Internet and Liabilities

## Part II

### 1: Legal information and legal practice

**Yasuyuki, Fujita** (Attorney at Law)

This report presents an influence of information technology to legal practice in Japan, and some expectations to future activities of Legal Informatics Association with thinking about some image on legal environment in information era.

### 2: Patent Practice and Legal Information

**Hiroaki Takeyama** (Patent Attorney)

This report presents outline of the legal information on patent practice of Japan, and the usefulness of patent publication.

### 3: XML and its application to Legal Informatics

**Hiroshi, Komatsu** (Attorney at Law)

This report presents outline of the specifications and functionality of XML ("Extensible Markup Language"), which are expected to be useful from the view point of legal informatics, and envisages certain applications of XML in the legal domain.

### 4: On Web Resource Management

**Satoshi Wada** (Meiji University)

Collection of information by co-operation works must be important to justify legal information area that would be more developing in future. This report presents some examples to manage linking information by co-operation works, and some new ideas to apply XML technology into such management.

### 5: Outline of Social and Human Information Platform Project (SHIP Project)

**Takato Natsui** (Meiji University)

SHIP project was organized in 1999 to develop a practical platform system for information database systems in social science area. This project is funded by Meiji University and Japanese government. We are studying XML technology, and intend to apply this new technology to database engineering area, especially to legal information. Also we are examining many relating issues. For example, intellectual properties around database such as copyright, privacy protection of information included in legal information database systems, patents including business model patents for legal education, responsibilities of information service providers and so on. We would like to report our discussions and efforts publicly by paper reviews and Web

contents.

**6: Discussions – Main Problems around Legal Informatics**

# Appendix 2

## 2nd Joint Symposium at Osaka University on May 1999

### Programs with summary

#### Part I

**1: Protecting Personal Information in Network Societies - Observations on the United States Model**

**Fumio,Shinpo** (Adjunct Researcher)

This report presents outline of present situation, law and legal systems on privacy data in computer networks, and explains efforts and their characteristics to protect privacy data.

**2: EU Data Protection Directive and Globalization of Data Protection Law**

**Tsuneharu Yonemaru** (Ritsumeikan University)

This report presents outline of EU Data Protection Directive and its influence to Japanese Law and privacy protection systems.

**3: The protection of privacy in the information society: A consumer perspective**

**Toshiya Bando** (KYOTO-GAKUEN University)

This report presents main discussions that were argued in the 7th international conference of IACL (International Association for Consumer Law) 1999, and consumer protections in information network area related to EU Data Protection Directive.

**4: Status and Issues on Personal Data Protection in Japan - Focus on JIS Q 15001**

**Masatomo Suzuki** (Japan Information Service Industry Association)

This report presents how privacy data is protected in the course of computer data processing, and the circumstance around data protection, and JIS Q 15001 as one of the privacy protection standards.

**5: Discussions – Network and Privacy Protection**

#### Part II

**1: On the Research and Development of Legal XML in the U.S.A.**

**Hiroshi Komatsu** (Attorney at law)

To construct legal system reasonably in present era, it should be realized not only to be able to

retrieve legal information through Internet but also to be able to use any electronic records in any process of legal procedures. This report presents some of the newest and important examples relating application of XML technology to legal information processing (mainly in USA), and direction that should be adapted by us as a reasonable way.

### 2: Legal Informatics: Teaching and Research

**Noboru Kado** (Osaka University)

This report presents aims of computer learning in legal education. In Japan, most of educations in previous days were computer literacy educations mainly as same as ordinary computer educations. But now, it is important to educate as education for growing literacy to use legal information reasonably.

### 3: The Internet as a Medium to Freedom of Information: Disclosure, Mass Media, Request of Information

**Kohki Tachiyama** (Yamaguchi University)

This report presents some arguments relating disclosure of information through math-media. The information that had been disclosed includes privacy data and non-privacy data. These are mixed complexly, and unconsciously or intentionally. It is need to build a new discipline in media.

### 4: Can we give a name to shooting star? - Citation for internet materials

**Makoto Ibusuki** (Kagoshima University)

It is difficult to make good citation rules for Web contents, because Web contents and their URL are often moved, modified or deleted by owners of the contents. This report presents an analysis to elements of legal information, explanation by some examples of citation rules in foreign countries, and an overview for future development.

### 5: SHIP-Project and the Future of Legal Informatics

**Takato Natsui** (Meiji University)

This report presents aims and activities of SHIP project in 1999.

### 6: Discussions – Internet and Legal Informatics

# Appendix 3

## 3rd Joint Symposium at Meiji University on May 2000

### Programs with summary

#### Part I

**1: Religious Technology Center v. Netcom Case - Liability of ISP on Copyright Infringement caused by anyone of the Third Party**

**Rikihiro Fukushima** (Kumamoto University)

This case study presents comparative study of Netcom Case with Playboy Enterprises Case, Sega Enterprises Case and Central Point Software, Inc. Case, and standards adopted by US courts for responsibility of service providers.

**2: Protection and Management of Copyright by Technological Measures**

**Tatsuhiro Ueno** (International Institute for Advanced Studies)

This report presents copyright protection of digital contents by using copyright management system and copyright protection technology. And, this report notes an overriding and affects on copyright law by information technology relating digital contents.

**3: Conflicts between Protection and Use of Digital Information Technology**

**Kazuaki Hidaka** (Attorney at Law)

[Summary Omitted.]

**4: Protection of Database by Law – sui generis rights**

**Osamu WATANABE** (Niigata University)

It is one of very hard questions to decide whether database works without any originality should be protected by copyright law or fair competition law. This report presents a new legal right model (sui generis rights), limitation model (fair competition law), tort model and contracts model for protection of such database works, and shows some characteristics on sui generis right in German laws.

**5: Present Trends on the Intellectual Property Protection in Cyber Area**

**Kenji Naemura** (Keio University)

This report presents main trends around intellectual properties in present day, for example, copyright, database protection, and domain name protection. In addition these, this report refers NRC (National Research Council)'s new report "Digital Dilemma".

### 6: On Business Model Patents

**Hiroaki TAKEYAMA** (Patent Attorney)

This report presents about so-called Business Model Patent, its characteristics, its patentability, research of such patents, its affection to other legal area, and current correspondence to such patents by patent offices in USA, Europe and Japan.

### 7: SHIP project: Report of the year 1999 activities and Plan in the year 2000

**Takato Natsui** (Meiji University)

This report presents activities of SHIP project in 1999 and offers new plans in 2000.

### 8: Discussions: Intellectual Property in the Cyberspace

## Part II

### 1: Merits and Demerits of Legal Information as Network Contents

**Makoto Okamoto** (Web editor)

This report presents an outline of present situation on legal information as network contents on the basis of the Web research through a past year. Merits by legal information would proportion with levels of abilities of users and amity to such information. Merits of legal information may easily be able to be transformed into demerits. Merits and demerits have some close connections to each other.

### 2: Beyond the Barriers: The present and the future of the environment of legal information

**Makoto Ibusuki** (Kagoshima University)

This note presents some analysis on legal information in generation process, distribution process and editing process of legal information, and argues that there are 3 high walls against any legal information in Japan – accessibility, usability and reliability.

### 3: Amendment of Statutes and XML Based Legal Database System

**Satoshi Wada** (Meiji University)

To markup legal information, HTML language has only poor ability as markup language. If any legal documents are enough structured then XML language has great capability. SHIP project develops new history management system by XML technology for statutes and their amendments. This report presents a prototype of the system, its detailed explanations and its theoretical backbone.

## 4: Application of XSLT to Legal XML Documents for Privacy Protection

**Hiroshi Komatsu** (Attorney at Law)

This report presents a necessity to protect privacy data in any court order documents, and a prototype of an automatic masking system as an application of XML and XSLT technologies.

## 5: Presentations and Discussions: Legal Information Database

**Presentations:**

**Diichi-Hoki** as a legal publisher (Japan)
**Hanrei Times** as a court reports magazine publisher (Japan)
**TKC** as a legal database provider based on Internet (Japan)
**Lexis-Nexis** as a legal database provider based on Internet (USA)
**G-Search** as a patent database provider based on Internet (Japan)

# Members List of SHIP project

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