Information Law: From Discipline to Method

HERBERT BURKERT

THE DISCIPLINARY APPROACHES

Three Approaches
Discussions on information law have mainly been discipline oriented. Should "Information Law" be seen as a discipline or at least as a sub-discipline in its own right? Looking back at those discussions I see three different but interrelated approaches: (1) the "Information Technology Law" approach, (2) the self-reflective approach to Information Law, and (3) the "Information Law proper" approach.

(1) The "Information Technology Law" approach has seen changes caused by information technology as so far reaching that it proposed to collect the reactions of the legal system within the boundaries of a discipline. Such a collection of legal reactions (from no matter which established legal discipline – civil law, administrative law, criminal law, etc.) would – it was hoped – lead to insights into structural similarities of information technology induced change as well as of reactions to that change.

1 Elements of this paper are based on a lecture ("Verfassungsrecht als Informationsrecht") given by the author to the St. Gallen University Law School in October 2012.
(2) The “self-reflective approach” did not borrow doctrinal output from established legal disciplines, but concentrated on what information technology seemed to be doing to law as a social institution. Technological change not only affected the modification and new production of legal norms, but also – in a more fundamental way – the role of law itself: To what extent could the legal system be automated? What were the effects of an electronically enhanced institutional memory on the production of legal texts? Could we imagine “automated judges”? So impressive was the technology that its imagery had already started to impose itself on how we spoke about law and its functions. Law was “programming” society. Law itself was a program. Informatics (computer science) and law seemed united in addressing such and similar questions, with sometimes law and sometimes informatics (computer science) taking the lead. Computers and Law, Legal Informatics, Law and Informatics, “Rechtsinformatik” were academic terms for such reflections.

(3) The third approach, “Information Law proper” has been less visible because it did not directly relate to the visible changes occurring within information technology in as far as its new appearances were concerned. Rather this approach built on older cultural, semiotic and sociological reflections on more “ancient” forms such as the printing press, photographic and filmic reproduction and their amalgamation into (what are now traditional) mass media technologies. The approach sought to discover or rediscover the broader implications of writings not only by those well known to the legal community, such as Warren and Brandeis, but also by such authors such as Georg Simmel. It centered around topoi such as openness and secrecy, professional secrets, and privacy beyond

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their legal implications. It was information as a psychological, sociological and political phenomenon that mattered first and then its mastery by law. What mattered less were the various technological manifestations.

Towards a Method
With the banalization of information technology, “Information Technology Law” is losing its special appeal. Topics of “Information Technology Law” return into the arms of their mother disciplines: Civil Law embraces without much ado the law of electronic contracts. Administrative Law welcomes electronic government. Constitutional Law looks caringly into the ramifications of electronic voting. Cybercrime is a subject without which no Criminal Law lecture would be complete.

What I have called above technology-induced self-reflections on Information Law have given way to application-oriented technical engineering.

“Information Law proper”, however, seems to be gaining renewed attention. With that breathtaking revue of technological change that we are witnessing is it, indeed, not time to learn to make the difference between the essential and the accidental, to turn away from the phenomena of technology and to return to basic informational phenomena like, for example – as mentioned – openness and secrecy and re-analyze them across legal disciplines in the light of the experiences with information technology rather than speculating on how each technological change could best be answered by the legal system? Should we not – in order to come closer to the essential – reconsider the relationship between information and law as such, behind the ornaments of technical gadgetry?
INFORMATION LAW AS A METHOD

Such a re-vitalization of “Information Law proper” would not seek discipline status. It is a methodological exercise, it is about Information Law as a method. This exercise does not seek to substitute, it intends to complement other methods. Its method is shaped by its aims: To learn more about the role of law in regulating information; to understand what laws already do to information, to test the interpretations of such laws; to change laws and to make laws in order to arrive at a better use of information by society.

Law’s traditional methods are hermeneutical, aiming at an interpretation of text that convinces or is at least accepted while it guards itself against dogmatism by remaining open to repudiation. With law increasingly being seen as an instrument, the range of methodologies has become extended. Law as an instrument is open to evaluation: Its capabilities to perceive reality and its capacities to influence that reality are being tested and judged. For this purpose, for example, Economics and Social Sciences are supplementing traditional legal methods. The Information Law Method borrows from all these offerings, it is proudly eclectic. It takes from all those methods and uses them according to its own tasks: to provide for description and evaluation of the relationship between information and law.

DESCRIPTION

Description is achieved by looking for the underlying information model: Information flows are to be identified that are affected by the regulation. Legal mechanisms have to be re-read as information-steering mechanisms, the underlying information model has to be revealed.

In some cases this task seems easy because the regulation is “informationally explicit”, i.e., it has its information law character already spelled out in its title, like an access to government information law, for example. But even such explicit laws are rarely perceived in terms of information models. Prevailing perception prefers an inherently physical model: the force of one right (e.g., access) is juxtaposed with the
force of another right (an executive privilege, the right to secrecy of third parties, etc.), “forces” of specific circumstances are added, parallelograms of forces are established rhetorically with a then prevailing right as the resultant.

What is needed instead is a “thick description”\(^4\) of the release and transfer mechanisms of information triggered off and formed by – in that case – the access law in question, the directions of the flows, their timings and spatial distribution, the information characteristics involved, and the maintenance mechanisms of information quality at play.

A variety of techniques are available for such purposes: One might borrow from information flow analysis as used in various information management and system analysis approaches; one might apply Network Analysis methods to examine for example nodes of informational power aggregation.

Such descriptions would not only have to be achieved for explicit information law, however. Other legal norms and legal mechanisms also have implicit informational effects. Many procedure-oriented regulations, for example, can be read as time-sequenced information distribution mechanisms. If we intend to research into them, the problem of this non-explicit material is not so much finding an appropriate underlying information model. The problem lies in the relevance of the information law approach itself. Once started, there seems to be no limit to describe legal phenomena in informational terms. Everything turns into information. Even law itself can be described as a specific form of social information. So each time when deciding on implementing the method, its relevance needs to be argued as well: what question is asked, and what kind of new non-trivial insights are expected to be gained when using the method.

Collecting such descriptions, putting such descriptions side by side, would allow an understanding of structural and functional similarities among legal tools and their impact on information flows. On the basis

\(^4\) A term borrowed from anthropology (and mostly attributed to Clifford Geertz, “The Interpretation of Cultures”, London 1973, pp. 5-6, who, however, in turn (and explicitly so) had borrowed it from the philosopher Gilbert Ryle).
of such insights weighed typologies of legal mechanisms as information flow tools could be created. Such typologies could in turn prove to be helpful both analytically and syntactically at a time when legislators seem to prefer to deal with informational representations rather than directly intervening in underlying power struggles -- as for example in consumer protection law, when more information by the provider is supposed to address fundamental consumer dependencies on the goods and services provided.

EVALUATION
The Information Law Method, however, is not only about developing an ordered and well-structured legal arsenal for information interventions. It is also about evaluation. There are two distinct evaluations, the information-functional evaluation and the normative-functional evaluation.

THE INFORMATION-FUNCTIONAL EVALUATION
The information-functional analysis sees functionality from the information flow perspective and examines the actual impact of legal tools on information flows to assess the functionality of these tools. Such an assessment might be compared to Economics of Law assessments. Where Economics of Law approaches judge legal interventions according to the (narrowly defined) social welfare they achieve, the Information Law Method judges by the degree of effective information distribution that is accomplished.

How do we imagine “effective information distribution”? Who sets the criteria? Various approaches are possible: In a provider-oriented analysis (expressed) intentions may be compared to outcomes. A recipient-oriented view would compare (expressed) expectations to outco-

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mes. Expectations and outcomes may relate to quantity, complexity, timeliness, comprehensiveness, integrity, confidentiality, security, or other categories of information flows. We may look at aggregated intention/effect relations. We may return to the descriptive methods used and apply them to detect dysfunctions such as interruptions in information flows. With the more frequent use of such methods evaluation mechanisms are to be refined and enlarged.

It is also at this stage that information technology has to be considered: What are the implicit and explicit assumptions of the role of information technology for these distribution processes? Are, for example, technology-induced dependencies being observed? How do the legal tools address senders' and receivers' reactions to technology induced speed, quantity, and complexity?

As with Economics of Law evaluation, the outcome of an information-functional Information Law evaluation is not an absolute but a comparative value: It is not about A being x and B being y, it is about A being higher (lower) than B: We do not say one legal norm is providing for adequate social information flows while the other is not, we state which of the norms seems to be better suited to encourage adequate flows according to the criteria stated above. As in Economics of Law, the Information Law Method would be open to implement empirical methods to provide additional arguments.

THE NORMATIVE-FUNCTIONAL EVALUATION

While, because of setting criteria, the information-functional evaluation may also be seen as normative, it is the normative-functional analysis that emphasizes the framework of legally expressed values. Whatever the information-functional analysis produces, it has to fit into the framework set by the normative-functional evaluation. The normative-functional analysis still retains the label “functional” because the conformity with the legal value system is that other performance any solution has to provide. This is where the Information Law Method differs from Economics of Law approaches. The latter by their own definition do not go beyond an evaluation of the degree of social welfare
achieved. This is why we occasionally encounter abstractions that produce results of — to put it mildly — limited use, such as proposals for “baby markets” or certain proposals with regard to US immigration policy. In contrast, the Information Law Method sees itself to be still about Information Law and seeks to reintegrate its findings from an information functional analysis into the normative exigencies of the legal system.

What then are the legal-normative principles for the design of information flows, in particular those set by constitutional law requirements that would provide such a framework? For such an undertaking a similar re-reading might be necessary as on the descriptive level of the Information Law Method. What may be described in terms of fundamental rights, distributions of competences and powers, and procedures of interaction, may have to be re-read and re-understood as statements on information flows and information distribution which then form the normative framework for the findings of the information-functional analysis.

EXAMPLES

Two studies may serve as examples for the use of at least some of the elements of the Information Law Method presented here. Both studies concern the optimization of legal (explicitly information-related) norms or interpretations, one in the context of broadcasting law, the other in the context of genetic technology regulations. Both concern the legal situation in Switzerland.

THE BROADCASTING EXAMPLE

The question in the broadcasting case was who should be responsible for archiving broadcasting materials of national historical interest: the National Archive or the broadcasting institutions themselves?

The current regulations establish a duty for public and private broadcasters alike to maintain and manage such archives as part of their licensed duties. They do so by using each their own special service providers. These archives are then used by the broadcasters as a reservoir for programming, either repeating past programmes or using elements of the historical material for current programming. Future reusability and the assessment of the competition situation influence the decisions of the broadcasters as to which material to put into their archives. Third parties and the general public may demand access or copies. There is no right of access. If access is given, it is for a fee and with restrictions on re-usability. Broadcasters also actively market historical material based on their market assessments.

The National Archive had been arguing for a change in the regulations and to be given the right to demand and archive such material from the broadcasters. By archival law the National Archive is entitled to obtain, manage and make accessible historical material of national interest. Its decisions are based on international standards established by archival science and international peer institutions. It grants access to the general public limited only — and only so within a given time frame — by privacy and national security considerations; it provides access on the basis of costs of reproduction. It aims at providing archival material in a digital format for free.

The classical hermeneutical method did not provide any interpretation alternatives: The regulations on the competence (and duty) of the broadcasting providers for archiving did not leave margins of interpretation, nor did the law on the National Archive. The Information Law Method was used to provide arguments for a reform discussion addressing inherent dysfunctions in that regulation.

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On the descriptive level there were no specific problems: The underlying information flows and their points of control and filtering emerged clearly from the regulations in place. It was the evaluation that mattered.

From an information-functional perspective it was the decision making by the broadcasters that seemed sub-optimal. This was not necessarily an issue of technical archival expertise. Both the National Archive and the broadcasters were in a constant learning process of archiving such material in an appropriate and timely manner. Both had to use outside expert knowledge and were in practice probably using similar sources for that expertise. However, the decision-making process on what to archive provided structural problems: While the regulatory purpose of the archives was to contribute to an institutionalized national memory, it was more probable that media market rather than historical and cultural considerations became dominant. It was not excluded that broadcasters would consider cultural arguments, but there were no institutionalized information procedures in place by which, say, the National Archive or other cultural institutions could feed their reflections into the decision-making process. Furthermore, it could be assumed that broadcasters were not aware of the broader archival policies in which to fit the archiving of their audiovisual material. Such dysfunctions of the decision-making process could seemingly best be overcome by shifting the responsibility to the National Archive.

The normative-functional analysis, however, had to take into account the specific role assigned to mass media by the constitutional framework. In informational terms, The Swiss Constitution privileges certain information channels (mass media) to maintain the power dynamics in democratic systems in case of failures of the classical power triangle (executive, legislative and judicative powers). Such considerations had presumably led to broadcasters being assigned the archival function in the first place, though the legislative material provided no explicit clues for such an assumption.

Taking into account these observations, we suggested to leave the decision making with the broadcasters but to install a formal consultation procedure that would involve the National Archive.
REGULATING GENETIC TECHNOLOGY RELATING TO NON-HUMAN ORGANISMS

The challenge of the second example lay in providing a meaningful description of information flows and – on the level of information-functional evaluation – in identifying structural dysfunctions in those flows. The task had been to evaluate existing legislation on genetic technology relating to non-human organisms. The respective law and its ordinances provide a prime example of explicit information law. The regulated area is complex. Risk analysis is difficult to undertake. Knowledge is almost monopolized by those who are the subject of regulation. This knowledge is changing quickly. There is considerable political pressure "to do something about it", as there is pressure to preserve economic opportunities.

The Swiss lawmaker had answered these challenges by establishing a complex set of information channels between the industry, governmental oversight bodies, and the general public, with sets of information obligations, information rights, consultation, and publication duties. At the same time, many of these informational interactions – the regulated area being a special part of administrative law – had remained, either explicitly or implicitly, subjected to such information procedures as provided by general administrative procedure law.

According to our evaluation, this situation produced layers of information flows that were counterproductive to the transparency intentions of the lawmakers. The increasingly complex interaction between special and general legislation, a typical problem for applying law, saw itself mirrored here in information law. We also found that information channels to the general public remained weak in comparison to the information channels between the industry and the administration. The underlying information model had remained the traditional inside/outside-model, the inside being formed by the regulated industry and the public sector bodies, the outside being the general public. At the same time, strong filters were established for the communication to the outside, allegedly in order to encourage "inside" communication. In addition, contrary to already established information procedures, as
for example in urban and regional planning, information flows were primarily unidirectional rather than providing mechanisms for dialogue.

CONCLUDING OBSERVATIONS

Expectancies
A methodological approach has been suggested to rediscover information and information flows behind their technological appearances and to test how legal regulations affect them.

The method is eclectic and flexible: it adjusts to the questions that need to be answered, it considers its own relevance. It is supplementary and does not seek to substitute. It simply wants to introduce another perspective that might be helpful to evaluate legal approaches to information and, perhaps, occasionally help to optimize them. It seeks to be transparent as to its evaluation criteria, and it does not deny its character as a legal method. It might help to counterbalance approaches that are too much dependent on technologies of the day and still reminds us what those technologies are about. It is already forming the way law argues its decisions. Increasingly, for example, we come across information flow and distribution arguments. The legal discourse opens itself more to informational phenomena. Terms like "informational justice" are becoming more frequently used.\(^9\)

Challenges
The descriptive as well as the functional part of the Information Law Method borrow freely from disciplines and research undertakings outside the law. The reach and depths of such methods are context dependent; importing "foreign" contexts into the realm of legal

analysis may lead to misconceptions and misunderstandings. While the Information Law Method supplements the information-functional analysis by a normative-functional analysis, the latter is in danger of being outweighed by the former. Efficiency arguments—especially when they are technology supported—have proved to be highly persuasive, even if not always convincing. And finally the Information Law Method must be cautious neither to be nor to appear to be paraphrasing traditional legal method in “information language”, if it wants to maintain its supplementing value.

Mastering complexity, avoiding paraphrase and oversimplification, providing additional insights. All this can best be achieved by concentrating on discourses on method.

We have started this brief reflection by stating that discussions on information law have mainly been discipline oriented. We hope to have shown that in contrast discussions on method may be more fruitful for the current state of information law. If ever—it will be the method that may help disciplinary boundaries to realign themselves.