



COUR DE JUSTICE
DE L'UNION EUROPÉENNE

LES DÉFIS AUXQUELS SONT CONFRONTÉES LES BIBLIOTHÈQUES JURIDIQUES MODERNES

Actes de la journée d'étude du 4 octobre 2018



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Discours d'ouverture

Dear Guests, dear Colleagues,

I am delighted to welcome you to this conference and am particularly pleased to see so many of you here today.

In 1953, following the creation of the Court of Justice of the European Coal and Steel Community by the Treaty of Paris, a library was established to assist the Court's Members in their duties. Today, that library has a collection of roughly 245 000 volumes and more than 1 000 periodicals in 72 languages, occupying 10 000 metres of shelves. In addition, it has access to some 120 databases. Although the library is often perceived as focusing primarily on the law of the European Union and the activities of the European institutions, in fact 80% of the resources at our disposal relate to the national laws of the 28 Member States, as well as to international and comparative law.

For several years now, like many of its counterparts in other institutions and in the courts of the Member States, the Court's library has been working to increase access to resources in electronic form. 70% of the periodicals to which it subscribes are now accessible on screen.

The Court's library faces challenges of two kinds:

- firstly, as is the case with libraries everywhere, the diversity of available formats – paper and electronic books and periodicals – and the access to multiple databases and the world wide web, offer faster access to reliable, relevant and high-quality resources, but may also make it more difficult to identify the most useful resources quickly and efficiently in practice;
- secondly, the extension of the Court's jurisdiction into new and diverse fields of law, as well as the accession of new Member States to the European Union – seven successive enlargements have taken place since 1953 – have led to an extension of the scope of our library's collection but also, inevitably, to a substantial increase in its costs.

It is important to emphasise that the availability of new formats, in addition to the traditional paper format, has improved access to relevant information, since the available resources can be consulted directly from the user's office and by multiple users at the same time. New technology should therefore be celebrated, but it must also be managed well if it is to be harnessed effectively. One particular difficulty is that the method of carrying out a search differs depending on the format being used:

- tools such as catalogues and indexes enable the user to find all relevant books and other paper documents housed in the library, provided that cataloguing and indexation are carried out correctly and exhaustively;
- specialised electronic resources dedicated to legal research can be searched more easily thanks to the impressive speed and capacity of search engines, which are comparable to traditional catalogues and indexes, and thanks also to the wealth of metadata available;
- search engines on the Internet work differently and use algorithms to search and rank information which are often quite opaque, with results that may vary in their quality and usefulness.

What are the best ways of achieving optimal search results easily and at a reasonable cost, in terms of both time and financial resources? The Court is in the process of developing a 'discovery tool', a software system whose aim is to search documents of all kinds from different sources in a way that is already familiar to users of search engines on the Internet. That tool will certainly mark a significant improvement in access to information for those who work at the Court but it cannot be regarded as *panacea* for solving all the difficulties caused by the proliferation of document formats and sources.

In order to continue to improve access to information, we must ask ourselves what the needs of legal professionals actually are and, perhaps more importantly, what those needs will be in the decades to come. The traditional paper-based library was clearly identifiable as a physical place where the reference material belonging to an institution was kept. Nowadays, however, resources are no longer centralised in a given physical or even virtual space, but are rather dispersed across the globe, often on servers whose location is not even known to the user. Open source information, such as blogs available on the Internet, can be extremely valuable resources which should not be discarded *on principle*, although they must obviously be treated with caution since, unlike published academic work, they are not subject to editorial control, nor indeed to peer review.

Will new technologies, such as discovery tools, enable users to find the information that they are looking for on their own or will users continue to need assistance from librarians, and if so, what kind of assistance? More and more advertisements for posts in libraries include job descriptions requiring librarians – increasingly known as ‘information professionals’ – to provide value added services and conceiving their role as *brokers of information*, whose task is to help users to find their way through the labyrinth of available resources, including resources of whose existence those users may have been unaware!

In this context, one may ask to what extent traditional cataloguing and indexing activities will continue to form part of librarians’ tasks in the future and how traditional search tools such as the library catalogue will interact with, or complement, the new search technologies.

The digitalisation of legal information has also transformed the way in which it is marketed and consumed. In parallel to the traditional sale and purchase of books and subscriptions to periodicals, whether paper-based or electronic, *patron-driven* acquisition has appeared on the market. This model, where the library purchases materials online *only when a user specifically requests them*, gives users access to a broader range of resources, for which charges are made on the basis of actual consumption. Such services also affect the way in which librarians manage resources. The patron-driven model enables information professionals to monitor consumption more effectively and better to know the needs of their users.

These trends also raise the question whether in-house libraries, as physical places where reference works are stored, will continue to exist, at least in their present form, as bibliographical materials increasingly move online. Questions also need to be asked concerning the means by which materials will be stored and accessed in the long term.

Those are some of the questions the Court’s library would like to reflect upon today and your presence suggests to me that our concerns are shared by law librarians from institutions all over the world. In order to promote a dialogue on these topics of common interest, Director General Stotz, who has been in overall charge of the Court’s information and research resources for nearly ten years and has worked tirelessly to develop a high-quality library for the Court, has taken the welcome initiative of organising this conference and I thank him for doing so.

Exchanging views and sharing insights are not the only objectives of today’s programme, however. As I said at the beginning, the Court’s library, but also other institutions’ libraries, face the challenge of offering users a vast range of valuable resources at a reasonable cost.

Cooperation between libraries from different countries may be one answer, not only by sharing materials, but also by exchanging expertise on matters such as:

- cataloguing and indexing;
- technology assessment;
- training;
- the assessment of the quality of resources, including but not limited to, open source material and blogs.

Sharing material raises another question: that of copyright. To pool knowledge on the intricacies of licensing arrangements could also be a valuable subject for cooperation among the bodies represented here today. For my part, I am convinced that we all could take benefit from enhanced cooperation between our respective libraries.

On this note, I wish you a very fruitful and productive discussion that will, I hope, be of benefit not only to the Court's library, but also to your own libraries and thus to the users whom you all serve.

Thank you for your attention.

Part I

Le travail juridique dans les
prochaines décennies :
identification des futurs
besoins

Contribution from Mr. Poiares Maduro

1. Introduction

Let me thank Director General Stotz, also for this presentation, that puts the expectations so high that I am bound to disappoint you, but I'll do my best so that this disappointment will not be too big. I want to thank the library for the invitation to be here for two particular reasons: first, because it is always a great pleasure to be back in an institution and in a city where I was really happy and to have the opportunity to visit old friends, but also for the opportunity that you gave me to step back from what I do, as a legal academic, a legal scholar, and think about the future of the legal profession and its impact, particularly in law libraries. I have to say that to think about the future of the legal profession in the current permanently changing context always reminds me of a famous sentence in my country of a football player who, when asked what he thought would be the result of the match, said: "Predictions only at the end". And I think that the context in which we live should remind us of how bound we are in the present in trying to foresee the future, including with respect to what will be the future of the legal profession, or the legal professions, and its impact on a variety of aspects, including that of the role of law libraries and law librarians.

My view, the view that I'm going to present to you, is necessarily the view of an outsider, of someone who is not an expert in libraries and not even in law libraries. I engage with libraries in two ways: as a user - and as a user I've seen also how law libraries have changed throughout the years - and as an author, by what I publish and hopefully is available in libraries. But today I want to focus on what is the possible impact that current challenges to the law and legal developments may have on the legal profession and, in turn, then on the role of libraries. So, I'll focus on two things. The first is to identify the main challenges and possible future developments of the law with relevant impact on the legal profession and, in turn, law libraries. And, second, I'll focus on possible changes in the legal space and the impact this will have in terms of available resources and, particularly, changes in what I would call "the academic and public space of law". Particularly I will address briefly the changes in the format of legal scholarship and legal publications. For me, as an academic, I've seen, in recent years, first, an important shift from traditional law journals to legal blogs that are becoming increasingly relevant. And, second, the broader change from paper to digital that President Lenaerts has also mentioned before.

With regard to changes in the law, I am going to focus on four elements that seem to me the most relevant aspects with impacts on the future of the legal profession. The first one

is globalisation and the development of different forms of what is called “transnational law” or, even broader, the impact of transnational phenomena in law, including on domestic law (state law). The second is changes in the legal and judicial culture and the impact, the interaction, this has on changes in the legal profession. The third: developments in terms of artificial intelligence and the impact this may also have in the law and in the legal profession. And fourth: new areas of law and litigation, how the developments that we are witnessing in our societies, in our economy, also mean that new legal subjects are emerging and new legal questions are also emerging.

2. Globalisation and the Transnational Character of Law

Lawyers increasingly need to feel comfortable permanently traveling between different legal orders. Often they are even being required to travel between these legal orders without leaving their own legal order. This is a product of legal globalisation which, in turn, is a product of economic, social and cultural globalisation. This legal globalisation has different levels: from deeply integrated forms of law or supranational law, such as the EU, to weaker forms of international regulation and international law, or regional integration, or even simply a diverse set of forms through which different state legal orders interact between themselves. All these instances are different examples of the impact of what can be called “legal globalisation”.

We can identify at least four different sets of phenomena in this legal globalisation:

- The increased regulation (and “judicialisation”) of international relations. This is visible through the increased number of international rules and international legal regimes, through the multiplication of relevant legal sources, but also through the emergence of judicial or quasi-judicial bodies at different levels of the international arena. From supranational courts, such as the one we are in, to international courts, such as the International Criminal Court, to the multiplication of regional courts, from human rights to the regional economic arena.
- The second set of phenomena is the increased extra-territoriality of legal systems. Increasingly, a legal system often assumes, or can claim, jurisdiction in cases that impact also on other legal systems. And this creates what I define, or label, as “legal externalities”: the potential for a legal order to decide on a particular issue on which another legal order, and its institutions, can also claim to have jurisdiction. This is a product of the increased economic and social interdependence that in turn generates this legal interdependence, including the risk of mutual externalities between legal systems.

- The third element of this legal globalisation is the emergence of networks of legal actors at the international and regional level. These networks are composed of lawyers, judges, academics, public, including administrative, officials, who institute more less formal mechanisms of exchange, cooperation and coordination, leading in many instances not to formal harmonisation at the global, international level, but to informal harmonisation. This often occurs by transferring theories and concepts from one legal order to different other legal orders by communication and contamination and the development of common ideas within these networks.
- The fourth example of this phenomenon of legal globalisation is legal integration: regimes leading to forms of supranational law. And here European Union law is the primary example. All this assumes many different ways that should not be confused. It includes the emergence of common legal cultures that go beyond the states. It includes also the globalisation of law firms and it includes even the globalisation, in many respects, of legal education. The number of students who now study law, at least as a second degree, outside their own state is much higher than it was ten or even five years ago. So, law, even as a subject of education, is increasingly international. Now, this creates the context where all legal actors, but in particular judges and lawyers, must learn to operate in a complex web of legal rules and legal sources, arising from their own legal order but also from other national and supranational or international legal orders. As a consequence, a growing number of legal actors (in courts as outside courts and even in the legislative process) needs to operate in multiple jurisdictions and be comfortable “travelling” between different legal orders and legal sources, so as to avoid the perils of some form of legal jet-lag. Though this challenge is particularly visible and important at the level of European integration, it also takes place at a global level. Increased global economic and social integration will promote some of the same phenomena at the global level even if in a more mitigated form and without amounting to the formidable impact of a new legal order such as in the European Union.
- These processes have created powerful legal, social and economic challenges. They challenge many of the traditional paradigms of the law, including the State’s legal monopoly, the autonomy of national political communities and the traditional forms of participation and representation. They multiply the legal sources we need to know and master. They require profound changes in the way in which we think, teach and practice the law. Studies on the sociology and history of the legal profession have highlighted that the precise role of the legal profession is historically contingent and that that role impacts on everything, including the style of lawyering and judicial decision-making.

This is certainly the case with the role of law libraries and the profession of law librarians.

What to have and what importance to attribute to foreign legal sources (and related scholarship) impacts on:

- Acquisition policies
- Need for comparative notes and legal materials
- Language skills and translation services

Naturally, this all depends on what importance is given to the use of foreign legal sources and comparative law. This is more contested in some places than others.

Naturally in the EU and the CJEU the use of comparative national legal materials constitutes the core:

- Developing general principles of EU law depends on the common legal traditions.
- Interpretation of EU legal acts, and in multiple languages, requires looking at meaning of the same legal concepts in different Member States.
- Uniform interpretation and application of EU law requires horizontal “communication” between national courts and not simply vertical (CJEU vs national courts).

But, outside the EU, or on the relation between EU and foreign legal sources, I believe that there are three ways one can use of and make reference to foreign legal sources and foreign courts in our own legal order.

The first is rather consensual: when a foreign legal source is mostly a matter of fact in the decision of the court. This is the case of private international law, where a court might have to use international legal sources or the rules of another legal system as a matter of fact to reach a decision in a case.

The second model of using foreign legal sources is already more controversial: the use of foreign legal sources (including decisions of other courts) as an argument (but not an argument of authority) in the context of deliberation and/or the justification of a certain judicial decision. There are three possible reasons to use foreign legal sources in this way. The first one is intellectual persuasion, which is the same thing as scholarship. As a judge one may ask oneself: has that court solved a legal problem that is similar to the one I face in a manner that is convincing to me? If it has, then I will use it. And maybe the best way to do so is by including

in my justification reference to how that other court has decided: it flows from the requirement to fit the justification of the decision with its deliberation process. The second reason is as a form of communication between legal systems. This is even more controversial, but it is most likely justified when legal systems interpret the same rules or when their legal orders communicate or interlock between themselves. It corresponds to the instances of interpretative competition and legal externalities that I have already identified in the context of external pluralism. To a certain extent, looking at the jurisprudence of another court promotes some form of informal coherence between those legal orders where they jurisdictionally interact: this helps manage the legal externalities of the jurisprudence of one court in another court or in another legal order. A court may want to prevent such legal externalities because it is aware that it is equally subject to the externalities created by the other jurisdiction. By paying attention to the decisions of this jurisdiction, the court invites this jurisdiction to reciprocate and pay equal attention to its decisions. A good example is the mutual attention that the European Court of Justice, the European Court of Human Rights, and the European Free Trade Association (EFTA) Court give to one another's case law. Through this communication among legal systems, courts manage legal overlaps.

The third possible reason is what former Chief Justice Aharon Barak of Israel described, in a rather beautiful metaphor, as foreign law being a mirror of oneself. This is the idea that by looking at other courts you can better differentiate yourself or enter into a process akin to judicial introspection, an effort to better understand what you yourself are doing.

These are three reasons to use foreign legal sources as an argument of persuasion in judicial reasoning. Much more controversial and contestable is the use of foreign legal sources as legal authority, so as to argue that judges are, to a certain extent, bound by such foreign legal sources. This depends, in my view, on the instrument that the court is called on to interpret and on the normative preferences of the legal order in which it operates. The legitimacy of a court comes from a particular political community, and it is based on the values of that polity, values that are expressed in the legal document that the court is supposed to interpret. It is this that guarantees that we are subject to the rules for which we have participated in the process of adoption. Hence, to use a foreign legal source without reference to the domestic political community can be perceived as challenging the very ideal of democracy and the rule of law. At the same time, however, it may be that political community itself that requires courts to recognise a particular legal authority to foreign sources of the law. This might be so if the legal instrument the court is supposed to interpret and the normative preferences of its legal order adhere to a universal construction of their own legal values – in other words, if courts are instructed to interpret the rules of their legal order in light of the rules of another legal order.

All these reasons promote and require an expansion of the use of foreign legal sources and materials with impact on law libraries role and materials. Not only what they make available but also how they make it available (e.g.: expertise for comparative notes).

3. Changes in legal and judicial culture

Context and “politicisation” of the judicial system matter: for example, what should judges know and be informed about? Many of these changes have not taken place from night to day. They’ve been progressive, they’ve been gradual in many respects. But we can say that to a large extent it is increasingly clear that law is context-dependent in its interpretation and application. This is a product of changes in the way law is conceived but also of the pressure of that context itself. This is reflected in interpretation. Interpretation can perhaps be suggestively described as the software of courts. In a narrow sense, interpretation can be understood simply by reference to the methodologies to be employed in the interpretation of rules: the types of legal arguments used by courts, their techniques of exegesis of the text, and the rules of logic that make legal reasoning a form of practical reasoning. However, debates about legal interpretation often assume a broader dimension linked to the proper role of courts in a democratic society. In this broadest sense, interpretation is a function of hermeneutics but also of the institutional constraints and normative preferences that determine judicial outcomes in the light of an existing body of rules. Interpretation is here at the intersection of the debates, not only about different methods of interpretation (or forms of legal reasoning), but also about broader questions on the proper role of courts in a democratic society. The concrete interpretation to be given to legal rules is, therefore, a product of legal reasoning and of the institutional and contextual constraints and normative preferences that determine the role of courts in a given political community.

There is a constant interplay among the three dimensions. The scope of valid legal arguments and the weight to be given to them, for example, depends on the normative preferences of courts and on how they conceive their institutional position in a particular legal system. It should be stated that by normative preferences I am not referring to the subjective value judgments of judges, which, albeit to different degrees, will always be part of judicial decisions. I am referring to a systemic understanding of the legal order that is the product of a normative reconstruction of that legal order on the basis of its overall body of rules and judicial decisions so as to be conceived of as a coherent body of rules anchored in certain fundamental principles. There can certainly be disagreement as to the correct systemic understanding of a particular legal order. To that extent this also involves some degree of subjectivity. But it is important, in this respect, to make legal interpretation objective. This is promoted by the process of systemic reconstruction of the legal order and by the need to remain consistent and coherent with

the systemic conception the interpreter attributes to his or her particular legal order. In this way, even if the systemic understanding adopted by a particular interpreter may, in part, be perceived as subjective, the need to articulate it and remain faithful to it puts a constraint on judicial discretion and limits the scope of subjectivity. Furthermore, because agreement is frequently easier at the systemic level, such articulation of the normative preferences of a legal order at the systemic level may be more conducive to agreement. Finally, the necessary link between individual decisions and systemic preferences increases transparency regarding the reasons for disagreement, frequently allowing us to construct it in terms of first order choices.

The institutional dimension of the judicial role is another aspect that is closely dependent on the systemic understanding of the legal order in which courts operate. But, conversely, the institutional constraints of courts and the institutional context in which they operate also determine the systemic preferences they attribute to their particular legal order and the weight they will give to different legal arguments.

The blending of these different dimensions is not easy and it's increasingly being affected by the new forms of intersection between law and politics (that attain extreme cases such as the current confirmation proceedings for the US Supreme Court).

4. Context and politics

Increased legal and political pluralism and radicalism (a product of the legal interdependence and globalisation I already described and political polarisation) affect the law and legal actors in two different, and simultaneously contradictory and convergent, ways.

First, it leads the political process to increasingly delegate to courts decisions of high political and social sensitivity through the adoption of conflicting norms or very open-ended rules and principles. It transforms political conflicts into legal ones as a way to try to make them solvable. But, while doing it, it strains the limits and legitimacy of the law. Notably, it increases the contestability of judicial decisions while, paradoxically, rigidifying their legal outcomes (because the political process is less capable of overcoming them). This also contributes to a more or less gradual contamination of law by politics (radically visible in the confirmation proceedings just mentioned).

This is not an easy challenge for law and the courts in particular. It risks the foundations of its social legitimacy. The only way for law, and courts, to try to deal with such paradox is by upgrading their model of interpretation while remaining faithful to what is distinctive of legal reasoning. First, they must be open to arguments that are sensitive to the complex economic,

social, and political questions that are raised in such cases. This is also a consequence of the fact that such decisions of particular social and political visibility will be addressed by a larger community of actors and by the public opinion in general. But, as stated earlier, lawyers and judges should not simply recognise the limits of formalism and take notice of the economic, social, and political impact of some of their decisions. It is not even enough that they make use of such arguments in light of a particular normative theory. They must do so in a legal manner. In other words, they have to open up legal reasoning while remaining distinctively legal. This legal manner requires those arguments to be presented through a language familiar to the legal community (the cultural language of law) and fit to a particular systemic understanding of the legal order. It is this process that filters the subjective preferences of legal actors into an objective process of interpretation of the law, legitimating the use of those arguments.

Second, judicial reasoning, in particular, must not ignore the fact that law is interpreted in competition and/or cooperation with other institutions (notably, political processes and other jurisdictions). In this way, judicial decisions should take into account this discursive dimension with other institutions. For example, with respect to the political process, it is important for the democratic delegation to courts that I have mentioned not to become so extensive or systematic as to reduce the space for democratic deliberation. The answers to be given by courts, in this context, should be mindful of this concern and, as far as possible, should not pre-empt future democratic deliberation on those questions but, instead, help to promote and rationalise such deliberation. The same with respect to the relationship with competing legal jurisdictions. When courts consider that a proper understanding of their role requires them to engage with other jurisdictions, they must reason so as to present legal arguments that, as far as possible, can be understood beyond their unique context of application on those cases.

Courts, and legal actors, need to contextualise their reasoning emerges, therefore, from being immersed in broader communities of discourse and confronted with the increased normative ambiguity of the legal framework in which they are called on to operate.

This will also contribute to a further expansion of the scope of materials that law libraries would have to cover and treat.

In addition, this is bound to further reinforce the intersections between law and other disciplines. This is a challenge for practicing lawyers and judges but, in the first instance, for legal academics and law librarians.

This tension is easily perceived if one considers how lawyers have always dealt with legal education and research. On one hand, we don't "authorise" any other social scientists to research the study of law (the presumption being that legal education cannot be understood or questioned by non-lawyers); on the other hand, we tend to focus exclusively on how the

law operates and consider issues regarding legal education and research as unworthy the attention of lawyers. In other words, while we consider the study of legal education and research a subject outside the province of the law we do not recognise anyone else the right to address it. As a consequence, law as social discipline is a “no man’s land”; a subject that is practiced but not often reflected upon. Apart from the usual curricular disputes, centred on either the relative importance of our different legal subjects or on their disciplinary borders, there is not much attention being paid to how we teach and think the law and how legal studies and research ought to adapt themselves to the changing context of the law.

In the United States there is a more developed tradition in this regard due, in particular, to the impact and reverence which is given to the “Langdell revolution”. Langdell was the first non-judge made Professor and Dean at Harvard Law School in the late XIX century. He considered that a good law professor had first and foremost to be a good professor and his case-study method has forever shaped American legal education. For the present purposes, however, what is important is that the “Langdell revolution” has acquired such a central role in the narrative of the emergence of American law schools and their distinctiveness that it created a culture favourable to a constant questioning of the nature of legal education and of different legal methodologies: how one teaches is as important as what one teaches. Still, even in the United States, and in spite of some recent studies at top law schools on the impact of globalisation on legal education, the literature on the subject is not particularly rich.

To a large extent, the US and Europe have dealt in two rather different ways with the same problem: the relation between law and science. Americans have made a sharp distinction between teaching the law - a matter of practice and learning professional skills – and thinking and researching the law – a matter for science and often shaped by a totally external view to the law, including by other disciplines (such as law and economics). Europeans have made of legal science, the science of systematising the practice of law.

Both these views will be under challenge by the growing contextualisation of the law, where its intersection with other social and disciplinary fields becomes both deeper and clearer.

This is further made evident by the next topic.

5. The New Legal Disciplines and Instruments of the Law

The digital transformation of society is bound to have an even greater impact on law than felt so far.

Artificial intelligence systems are taking over a large array of human decisions. The first and usual thing that is noted with respect to law is how this will impact on the traditional legal criteria to establish responsibility, liability, free will etc. But in addition they will soon intervene in public decisions (projects to replace or base administrative licensing decisions...). Furthermore, in the US there are already artificial intelligence systems issuing judicial decisions, including of a criminal character (such as sentencing).

This will have a profound impact on law libraries and/or documentation centres: from how they will “feed” or support artificial intelligence systems to the legal materials and IT systems they will be required to have.

6. Changes in Legal Resources and Legal Academia

A first, and perhaps the most visible, of changes in legal resources, for legal academics, is how fast the move from law journals to legal blogs is taking place. Legal blogs are increasingly becoming relevant. For example, on EU law and on constitutional issues blogs are probably now more relevant and more important than many, if not all, law journals in the field. What is the reason for that?

- First, sadly, it is faster to publish there. This speed of publication is also linked to another potential advantage, that is the more flexible writing style and format that one can have in comparison to the writing style and format for traditional law articles.
- Secondly, it provides, whatever one writes, an easier and broader access; more people can read it and more people can access it.
- Third, it also allows often to write with impact on an ongoing case, particularly when there are appeals involved or, in the Court of Justice, when there are opinions of Advocates General involved. If one wants to try to have an impact on a case by influencing the discourse on the thinking about the case, including on the judicial decision, by reacting to an opinion of an Advocate General, it can only be done with legal blogs and not by writing a law journal article. This is changing profoundly the format of legal scholarship and legal publication.

Now academia, in terms of professional development, still does not value this to the same extent as traditional law articles. But this is bound to change in the light of the pressure and of the development of this process. But it is not without problems or challenges: how are peer review and scientific scrutiny guaranteed in this context? And how are law libraries to rate, index and make use of this new format? This is a question I leave to you, because I'm curious about it myself. Will this format circumvent law libraries or be integrated into law libraries?

Finally, this is part of a broader phenomenon, that is the shift from paper to digital. This shift to digital, as the President of the Court has already mentioned in his speech, increases exponentially the tools available, the scope and number of materials available. But this pulls into two different directions with respect to the role of libraries. One: making the role of libraries more important, and the other: challenging that role.

- As to the first: if, on the one hand, digital is allowing us a fabulous capacity to access materials as never before, to treat and analyse those materials as never before, to store and select information as never before, it also increases the importance of editing. Our focus, when I started as a law student, used to be on access to the best libraries: being able to get a book that we needed or to get to a law article that we needed. It was basically about being able to get what we wanted to read. In the future, our focus will be on selection: to be able to know what is important for us to read. This is a substantial change, also with respect to the role of libraries. In the future, where the scope and number and availability of materials is so high, to have the instruments, the knowledge, the capacity to identify what we actually should read from that large array of materials, will be much more crucial and it will make the role of law libraries and law librarians more relevant.
- On the other hand, this same digital transformation is making these information systems directly available, including in our laptops. Will it mean that, for example, artificial intelligence systems may also come to replace law librarians?
- But, most of all, and I want to conclude with that example, we risk losing what I call the "serendipity effect". When I was working on my Ph.D. thesis, something that I loved to do was to start walking around in the library, including in non-legal sections, looking into texts that had nothing to do with the topic of my thesis. Simply opening a journal or a book, because the title was captivating for me. And often, by reading something, randomly like that, I got some of my best ideas. I had insights that were extremely valuable for my thesis. I call this the "serendipity effect". My final question for you is the following: in this world where information is so easily accessible, so targeted and we can immediately get what we want, will it continue to be possible for us to get what we are not looking for but ends up being much more important for us?

Part II

Les défis liés à l'évolution
des outils

Contribution from Mrs. Jane Sanchez[†], Law Library of Congress

Hello, Luxembourg! Greetings from Washington, DC. My name is Jane Sanchez and I have the honour of serving as the 25th Law Librarian of Congress. I would like to start by thanking the Library Directorate of the Court of Justice of the European Union for hosting this conference and I'd like to thank Director-General Rüdiger Stotz and Director of Communications William Valasidis, for inviting me and giving me the opportunity to talk about the challenges confronting modern law libraries and the evolution of our profession. Also, please accept my sincere regrets from not being able to be with you in person.

Not long ago libraries were a place, a place that housed print collections and staff and providing workspace for research. A library without books was almost unthinkable. Now it's fairly common. In fact, libraries, including law libraries, are evolving right in front of our eyes. They are transforming from stacks and shelves full of books into vibrant information hubs, offering end users 24 seven access to timely, accurate and compelling information. That transformation results in a high-quality service, tailored to specific needs of clients, expert training in research skills and transformation of the library from a place to a service. The Library of Congress is currently undergoing the exciting development of a new and bold strategic plan. Our new plan is focused on our users, customers, patrons, creators, film-makers, authors, copyright registrants and anyone who can benefit from what the library has to offer. That change in focus, in and of itself, represents a huge shift for us. We're not looking outward but we're considering what our users and our potential users need from us. At the same time we recognise that these are big changes that are shifting libraries from largely paper-based processes and card catalogues and tangible collections to mainly digital ones. And we are focusing on how to better express that our curators, librarians and other experts from across the library are here to represent, find and interpret our collections for the United States Congress, the rest of America and the world.

Today I'd like to describe three ways that the law library is transforming how we do our work. First I will talk very briefly about a change in physical space. Second: revamping our resources and online collections to make them more accessible and useful to users. And third: expanding our collaboration with other US federal agencies and various cooperative agreements with external partners around the world.

1. Change in physical space

When I arrived at the law library in 2015, the Reading Room had just been renovated. Up to that time the room hadn't changed since 1981. That's right, 1981. Right around the time, the first digital natives, that generation of young adults, who'd always had computers, video games and the Internet in their lives, were born. It is no surprise then, that, after 33 years, the Law Library Reading Room needed a makeover. The redesigned space has more public computer terminals, many more electronic legal databases and digitised law collections. Study tables and walls have plenty of power outlets for users bringing their own laptops and computers. Print collections were consolidated in one area of thirty compact shelves. More inviting upholstered seating was installed for patrons to take a break and to collaborate. And we also created a permanent training area.

2. Revamping our resources and online collections to make them more accessible and useful to users

This physical change was the easiest one. No matter how nice and inviting our public spaces are, we know that not everyone can come to DC, on Capitol Hill. For example, in our 2017 annual report, the Library of Congress reported 1.9 million visitors to our physical facilities and reading rooms. However, that same year 110 million researchers came to the library's online properties. That's right, less than 2% of our visitors came in person. That's the biggest reason why building awareness of the library's offerings, improving their discoverability and increasing their usage through the provision of a suite of services, that meet or exceed users diverse needs, will help all Americans and anyone who needs this information feel connected to us. Looking inward and outward to engage users, partners and other stakeholders broadens our thinking and allows us to be more adaptive, efficient and responsive. Our goal is to expand access and hence services and optimise our resources. The notion of a modern law library is very different, shaped by the skills of specialised researchers and information managers rather than by bookshelves and bound volumes. Knowing where to locate any type of material allows us to be able to provide high quality research assistants to clients and refocuses the library as a resource with a strategic presence and customer-centric approach.

We live in an age of information overload, where we can access data from almost anywhere with a few clicks on a keyboard, tablet or smartphone. But just because it's on the internet doesn't make it's true. Or, as one of my fellow librarians once said, while a Google search will give you 5 million hits, a librarian will guide you to the correct answer. Our librarians are specially trained to locate the most accurate and up-to-date information available, whether

it's online or in a book. We have to be ahead of all demands in order to deliver our services and we have to be able to develop better ways to deliver; that is our challenge.

The Law Library of Congress collaborates closely with both of our next-door neighbours and they are the US Congress and the Supreme Court. We also have interagency agreements with executive branch agencies to provide foreign, comparative and international law research. One of our most important collaborations is congress.gov. Congress.gov is the official website for US federal legislative information providing accurate, timely and complete legislative information for members of Congress, executive agencies and the public. This is a joint project with a number of contributors: the Library of Congress, the Office of the Clerk of the US House of Representatives, the Office of the Secretary of the Senate, the Government Publishing Office, the Congressional Budget Office and the Congressional Research Service. The law library's role for congress.gov is to ensure good public access, via training, blog posts and regular announcements. Researchers sign up for congress.gov email alerts for changes and updates of current legislation and to track passage of bills. There is a new alert that's just been developed for nominations to track presidential nominees, including judicial nominees from nomination through Senate confirmation. We offer multiple webinars each year to train users on congress.gov. And if a group is unable to attend a scheduled training on-site and wants to learn about another digital collection at the library, we accommodate custom trainings for groups. We in the Law Library are definitely encouraging more training, both in person and via webinars.

Two of our newer innovations in the Law Library of Congress are a chatbot and the LibGuides. Our chatbot provides legal research assistants 24 hours a day, seven days a week, through a Facebook messenger. It has a clickable interface, that walks you through a basic reference interview. If a question triggers the default response, it directs questioners to our more in-depth research service: "Ask a Librarian". To give the chatbot a try, please head over to our Facebook page and click the blue "send message" button. LibGuides is a cloud-based web publishing and content generation platform for online research guides. To evaluate the effectiveness of LibGuides as a tool for the creation and maintenance of our online research guides, we engage in a six-month pilot project. It was organised with the goal of allowing our staff to evaluate LibGuides in the following areas.

Could we increase efficiencies in the creation of new guides? Could we simplify the customisation and overall use of the tool? And could we create opportunities to collaborate across the library and to connect with the wider research community? In this new world, we, librarians, prove our value by continuous participation in solving research requirements, not only library management. In the evolution of library from place to service, the role of law librarian is shifting to problem solver, consultant and expert researcher. Both the chatbot and LibGuides were created with that in mind.

The Law Library of Congress also currently offers multiple in-person classes: introductions to legal resources and research techniques. Let me name just some of them: orientation to legal research, orientation to Law Library collections, federal legislative and federal statutory research, using print and electronic resources, tracing federal regulations, Congressional legal instruction program and a number of others. And to foster projects of mutual benefit to scholars and the Law Library's mission, we have established a program for scholars and residents, scholarly exchanges and graduate internships.

In the near term, the Law Library intends to focus on critical, historical, US legal and legislative titles to ensure citizens, anytime, anywhere, have unimpeded access to governing activity and laws. Providing free access to US legal materials benefits a global public, serving as a model of transparency and democratic governance.

While law libraries are undergoing transformative changes in many different areas, the area in which the changes are probably most transformative is in collections. As law librarians I believe we share several ideals in common. Very importantly, we believe everyone should have timely access to relevant legal information. To that end we work to provide access and ensure the information we provide is accessible, up-to-date and relevant. As the world's largest collection of legal materials, with an expert staff of lawyers and librarians, trained in foreign, international and American law, the Law Library of Congress is a trusted analyst for Congress, for the courts, federal agencies and the public. Our primary mission is to provide Congress with timely innovative and high quality foreign, comparative, international and US legal advice and law research, prepared by our foreign and American legal experts. In addition, the Law Library is a steward for the world's largest collection of legal and legislative materials. While we do not have every law book, every treaty, or every gazette ever published, we strive to assemble the most comprehensive high-quality legal collection in the world. With nearly 3,000,000 volumes and almost 2,000,000 microformat items, the Law Library is in a unique position to support Congress, the Supreme Court, executive branch agencies, federal courts the practicing bar, state and local governments, American businesses and scholars with legal research and reference services. Our collection extends far beyond US federal, state and local law. It includes laws from all over 240 nations and legal systems around the world. To be precise, of our 2,961,667 volumes and approximately 2,000,000 microformat items, approximately 60% of the collection is foreign law. Often foreign researchers come to visit and find our collection for their country is more comprehensive than their own. Our staff of 20 foreign law specialists are legal practitioners with working knowledge of 44 languages and they provide legal advice for some 240 jurisdictions worldwide. When we write reports in response to a congressional request, if the requester agrees, we will then post the report on law.gov which is our website for public access. Our reports are often in-depth comparative analyses of a legal subject or topic across many countries. In this field our priorities are to

improve services for Congress and other federal clients, by providing the highest quality research products. We also work to improve systems for integrated workflow and content management and customer relationship management. We work hard to expend digitisation of law collections to better meet the demand for online access and we work to improve access to our law collection from an outdated classification system to the expanded K classification system. These initiatives signal a bright future. Just knowing that we are putting the country's laws into the hands of our citizens by digitisation thrills me no end.

3. Expanding our collaboration with other US federal agencies and various cooperative agreements with external partners around the world

Our unique positioning, as experts in foreign law, with the largest legal collection anywhere, also allows us to expand our assistance beyond the Capitol Hill campus to the world. And this brings me to my last but not least point: collaboration with other federal agencies by providing services in foreign law research and our cooperation with external partners. As I have already mentioned, we have signed interagency agreements with several US federal agencies (five, to be exact) to cooperate and provide them with foreign, comparative and international law research. We are currently also talking to several additional US government agencies. But even more importantly, we recognise that in order to keep up with new trends and new demands, we should go global, not only local. In July of this year we signed a Memorandum of Understanding with the Peace Palace Library of The Hague to form an information-sharing relationship to better serve our two respective groups of users. Under this agreement, the Law Library of Congress and the Peace Palace Library will share information regarding our research and reference services. This includes research methods and techniques and how they are implied in responses for the various types of users each institution serves. Both libraries will also share information on the preparation of written reports and other research products and how they deliver research and reference services to their respective patrons. We will also share information about collection development, including information on collection development policies that are oriented toward particular user groups and how library staff create and employ the policies and keep them up-to-date. And it also allows sharing information about cataloguing, such as the system of classification and the subject headings that each of our libraries has developed. Each library may also, at its own expense, send a member of its staff to visit the other library to observe first-hand its operations and services.

The best way to face challenges and demands that we see in our field of work is by encouraging mutual knowledge, exchange information and experiences together with the growth and

development of each one, to a common policy, technical standards, cooperation programs and mutual assistance. I really look forward to our future cooperative arrangements and am pleased, as a start, consider this as an invitation, to get in touch with us, and even better, to visit us. I am excited to be part of the continuum of change in the library profession and excited to see where it takes us together. As President John F. Kennedy once said: "Change is the law of life, and those who look only to the past or present are certain to miss the future". Let's not miss the future!

Thank you.

The Challenges connected to the evolution of tools. The evolution of the library professions: providing content for catalogues, databases, services for the users.

This paper is the written version of the presentation given by the author at the Court of Justice of the European Union on 4 October 2018 for the *Conference on Challenges Facing Modern Law Libraries*, updated with some last notes in July 2019.

Introduction

I do not want to start this article getting into an in-depth conceptual analysis about the elements that are the subject of debate, mainly “challenges” and “evolution”. I would neither be prepared for it nor do I believe that it is the *raison d'être* of the conferences that we were kindly invited to by the Court of Justice of the European Union. Even so, I would like explain in some detail of how I will approach the concept “evolution” and what I understand by “tools” in order to offer my point of view on what I believe will be (or are) the challenges of libraries and their professionals from the technological evolution.

“Evolution”, according to the second definition of the Oxford Dictionary, is “The gradual development of something.” Something that is transformed gradually requires a scientific look at a level of detail that I will not be able to do here. My professional career has given me responsibilities in the management of university libraries, but - unfortunately - I have not had the opportunity, nor I think I would have known, how to research in the field of Library and Information Science. My notes are based on the practice and observation of a practitioner. Therefore, I will not focus on the evolution through detailed measurements, but I will use those significant moments that, in my view, have resulted in a notable step towards the change of concept and usage of (academic, research) libraries; the elements for a disruptive innovation that could trigger what I think we will face in the coming years.

Second, pointing out something that may be evident to many, the concept “tools” is perceived as information and communication technologies only. I will leave out revolutionary moments as exciting as the passage from parchment to codex, from manuscripts to the printing press or from oil lamps to electric light bulbs, which meant, all of them, a revolution for the world of libraries.

1. The evolution of tools

The interactive exercise between the human and an analogue object is intellectually different from the one generated by the trinomial “human - keyboard - screen”. Buero Vallejo said when asked about why he did not use a computer to write, that he wrote by hand, with a stylographic pen and on paper because he “firmly believed in the direct connection of the brain with the hand” (Esteban & Cremades, 2016). The advantage of using technology instead of pen and paper in environments such as ours is that there are endless possibilities for transforming our working conditions and, consequently, those of our users. Fortunately, Henriette Avram (Coyle, 2016) did not have this passion for paper and ink, or at least not only for these.

There are three (not so recent) disruptive moments based on technology, linked one to the other, that have meant a modernisation of the libraries.

1.1. From paper to electronic

The first one belongs to Henriette Avram, a librarian at the Library of Congress who, in 1968, created the MARC format that allowed the catalogue to go from paper to a computer-readable format. Without going into the technical details of Avram’s invention, the transformation from analogue to digital for the description of the objects in the collections allowed the librarian to reduce the time of searching documents at a level that seemed impossible for paper card catalogues. This reduction allowed librarians to invest time in many other tasks. Likewise, the electronic catalogues permitted accessing final documents through fields that until then were not indexed, thus increased the possibilities of content discoverability. Finally, the simple exercise of transferring the description of the drawers to the computers made it possible to assign the search exercise from the reference librarians to the users in an even more natural way. The professional evolution of library staff since the creation of MARC databases is one of the most significant steps towards more service-oriented environments, partially abandoning collection management duties, and I will try to explain why. As changes need time to be accepted and embraced, it is worth recalling that the Library of Congress continued updating its card catalogue in lockstep to its electronic catalogue until October 1 2015.

1.2. Going online

The next development in library catalogue technology was the creation of network catalogues. It is a step that seems evident from our current perspective, but at the time it meant a vital

transformation; not only for the end-users, who gained access to remote collections that previously would have obliged them to at best visit many libraries or to, at worst neglect part of relevant sources. It also meant a revolution for librarians; a model of cooperation that spread to so many areas of work and for which librarians can claim to have been pioneers. Where I come from, Catalonia, the creation, through an agreement by the library directors of the Catalan public universities, of a unique frontend to get into their different catalogues is still today a remarkable milestone of what library cooperation means. The Collective Catalogue (CCUC) is a tool that has led to the creation of a consortium that unifies services that exceed by far the usefulness of the catalogue itself (Anglada, 2003).

As we know, the interconnected data systems did not start with the Internet. Internet is undoubtedly the biggest revolution in communications of the last 30 years and meant the starting point of exponential development in regards to shared database systems. But as Karen Coyle explains in *The Evolving Catalogue* (Coyle, 2016) OPAC systems were born in the eighties of the last century as a consequence of the need to share users' data in the electronic catalogues of universities with several libraries.

The interconnection also meant the possibility of economies of scale different from those employed until then; the chance of benefiting from the description of documents of other colleagues, of completing information without starting from scratch, of creating business models based on data sharing or others.

At this point I would like to delve into the concept of "disruptive innovation" and its sustainability over time because I believe that libraries have been making a common lapse in relation to technology, its importance and the investment of resources (time, money and personnel).

As I mentioned before, Libraries transformed their catalogues mainly in the 80s or 90s. The software and their interfaces were adapted to the supply market and distinct solutions (many of them brilliant) were born, and the Internet did the rest. Since the middle of the 90s we count on enviable information search systems that dive into our bibliographic databases. I insist that this transformation seems to me an authentic innovation for the reasons I have explained above, but I think that since the end of the 90s and the beginning of the new millennium the Information Library Systems do not represent a break worthy of being called a revolution at all. The investment of time and resources of the librarians in adapting the technology of the OPACs and their metasearch engines, capable of combining the search of the catalogue with the rest of the databases provided by scientific vendors in a single environment, are models that already existed more for than 15 years.

Making an analogy with the world of the automotive industry, the real disruptive innovation occurred in the 60s with the mass production of utility vehicles that were affordable for

middle-class families. The decision to buy a car or not transformed the lives of people and, consequently, their habitat. Having a car meant being able to travel, getting to know other places not reachable by public means of transport, paying a visit to their family on a more frequent basis, considering changing their residence or having a second house if it was the case. Cities were physically transformed to accommodate numbers of cars that multiplied by many the previous number of vehicles, and new infrastructures, services and businesses were created.

Nowadays on the other hand, the decision between changing the car for this or that model is not disruptive, nor represents an innovation. Perhaps soon it will be due to the environmental aspects to consider. But the dilemma of buying a Volkswagen or a Citroën is not a big deal.

In the same way, the *big projects*, with their great debates and dedication of time, of shifting the technology of the OPAC from one software to another, are not a justified investment today. There are solutions on the market that fit into libraries' needs in a very suitable way depending on the characteristics of each one: the size of the collection, its typology, philosophy, etcetera.

1.3. Access to the fulltext

The last really disruptive step, a consequence of the previous two, in my view, has been to complete the bibliographic information with the final content of each document described.

Once the description of the collections, at different levels, is presented in digital; once the data of these descriptions are shared and interconnected among libraries; the following step is to give way to complete these records with the full text. The final shape can be in many formats: HTML, PDF, spreadsheets or multimedia. The transformation of the scientific and technical library into what it is today can be considered definitive.

Having the full text has transformed the libraries even more than the previous two steps together. And that is due to two aspects beyond our control that affect us deeply.

- In the first place, it transforms the use that users make of our collections, transferring to the screens the activity that until then had taken place in the corridors of our shelves, in our reading rooms or in our lobbies. The librarian definitively leaves a central role between the user and the document to play a peripheral role. In fact, the current developments of the linked data are successors of this transformation that meant to transfer to the digital plane the environments and the relations between objects and individuals that previously existed in an analogue plane. Although this change has been slow in regards to the traditional user's behaviour, it has definitively coalesced with the digital natives.

When it comes to books, my experience in the different libraries I have worked in, is that there is a big gap between the digital-born generations and those who are not, despite sometimes we tend to highlight the anecdote of “that veteran who has embraced with passion the digital solutions and devices”, or the story of a “millennial who feels a real passion for traditional formats”. When it comes to research papers, all generations tend to use digital. The collections that require them to go from bibliographical databases to the physical object, become an obstacle in their documentation process.

- Secondly, and this is, in my opinion, the great lost opportunity for the libraries that we are still recovering from today, the full-text is produced by the holder of the copyright, not from the possessor of the -if they exist- reader's rights. Suppliers transformed their collections from print to electronic formats with the consequent advantage for the users. Libraries for the first time became intermediaries of content that was not our property. I witnessed this transformation in a large university such as the Universitat Politècnica de Catalunya. The offer of (then) multiple suppliers of digital collections as an addendum to the paper journals we were subscribed: (a) they gave the same content in two different formats -where digital was the addition- for “a little more” of money... (b) same content in two different formats -where the paper was the added one- for “a little more” of money (I remember the resistance of the most veteran professors to renounce to the print ones)... (c) only electronic format for a price that the provider considered appropriate. And we come to the “*Big Deal*”, that of the great packages of titles where the contents do not respond to the real needs of the libraries, nor of the users, nor to the expert vision of subject specialists of our collections. All this for a price, and we have no choice (EBSCO, 2017).
- Simplifying, but covering a very high percentage of its content, library collections are fundamentally divided between serials and monographs. Digital collections have brought many formulas to access these contents, but the types have changed little. Users of a library specialised in STEM or HSS will use books, parts of them, journal articles or other series. (The series of data are not a negligible typology at all, but even today they mean - and especially in the HSS fields - smaller collections in percentage than books and journals, unless the library responds to special needs. In any case, this is also changing, and I will cover these collections in the last point of this article (3.4)).

The business model of scientific journals has become an impossible marsh for any specialised library. The *Big Deal* and a business concentration process have led the budgets of our services to a situation of kidnapping or, in the best of scenarios, of probation (Bosch, Albee, & Romaine, 2019).

The business model of the books has not been definitively clarified yet. Or at least it has not been simplified into one or two models. There are varied options, none of which are totally satisfactory, but it is easy to guess that if it depends on those who hold the copyright (many times of works produced by authors of our universities, research centres or organisations where our libraries are located), there will be a similar fate to that of the journals.

2. From tools to professionals

What does this panorama of the tools for the evolution of our profession mean? I will try to tackle this from different perspectives:

2.1. Collection development

Libraries are living organisms with their own identity. The Library of the European University Institute that I manage, for example, is a hub that in its forty short years of history has created a collection of almost six hundred thousand volumes in the field of social sciences, law and history. All this done with a pan-European approach, responding to the mission of the EUI. This not inconsiderable collection is the result of the work of evaluation, selection and treatment by a team of specialists in economics, sociology, political science, law, history and the European institutional framework. It is also the result of a commitment to a specific profile of scholars. Its professors and researchers have helped define a unique collection, which represents the mentality of the institution and its evolution. This is why the selection of the collection has been a painstaking work and has been based on the acquisition and preservation of books and publications (on paper) that responded to this institutional personality.

The OPAC has been a tool for the discovery of this identity. This bibliographical patrimony (of the university) was the centre and almost only element represented by the catalogue until the appearance of the full-text. Between a user and our collection there was a tool made by librarians that (a) made the collection searchable, (b) allowed to manage a user's account, (c) book, borrow and renew elements of the collection, (d) communicate with the user in matters relating to the use of the collection.

With the discovery tools, these OPAC functionalities and the collection they describe (a, b, c, d) have become a minor part of a larger universe, much more interesting for the end-user, but that represents a combination of alien interests to those of the library. The discovery tool is an out-of-control gathering of information that assembles the OPAC with collections that suppliers cheerfully entrench with the valuable part of the collection.

The *Big Deal* is a “generous bad offer” from which it is difficult to escape. Multidisciplinary universities that are intensive in research and teaching can really benefit from it, since publications that certainly interest them are accompanied by many others that, without becoming nuclear for professors, researchers or students, may also be of some profit. In institutions dedicated to a single activity (research or teaching, not both) and in specific scientific disciplines, the *Big Deal* came to add noise to collections curated with love during the years of paper acquisitions.

To the loss of identity should be added the uniformity that this same logic entails. It is not just that the nebula resulting from the Discovery tools does not respond to the idiosyncrasy of the library as it was conceived, it is also that libraries in the same disciplinary fields will end up having the same collection, with some glimmer of singularity.

The speed at which this new model transforms libraries differs depending on the activity and discipline. But nobody will escape. Let’s assume it.

2.2. Stewards of Collections vs Providers of Information

Another consequence of the core change in the shape of library collections has been the arrival, to stay, of a business model that bases the provision of content through subscriptions instead of acquisitions. Similar to the digital leisure content platforms (I would even say that before the arrival of these operators), the providers of scientific information offered more and more content under subscription contracts.

This model (the offer of large packages of content accessed through subscription, instead of perpetual acquisitions of specific titles) can be beneficial for different types of academic libraries. Each library director will have his opinion about which parts of the *Big Deal* model are an advantage and which parts are not. There are as many collections management models as there are libraries in the world. My experience in a university dedicated mainly to teaching (and online teaching) with lesser dedication to research (UOC 2008-2015) is that the model is not necessarily bad. It allows professors to use content that, once evaluated and treated for use in the classroom, is very valuable. The reading lists of teaching materials must be adapted often, and having access to a large volume of frequently updated resources allows a versatility that, when it depends on heritage collections (even if they are digital), is expensive and not always possible.

I imagine that research centres in cutting-edge disciplines can also benefit from this model, as having access to the latest published literature in their discipline is much more important

than having access to a heritage collection that allows to follow the trace and study the past. Being better does not mean that it is optimal, but researching in STEM fields is usually based on this access to the very newest publications.

For libraries that create a model collection, whose value is not based on access to the latest article in its topics but on access to content from different periods, its comparative analysis, and the creation of a corpus that responds to the institution's own thinking, this model is a disaster. Librarians go from being stewards of specially selected collections based on a deep knowledge of the activity of the community they serve, to simple information providers that in the worst case can be ephemeral and disappear from our collections without responding to a strategic decision of the library.

For users all this plot is invisible and makes it a futile crusade for the libraries. In the last decades, we have been spectators to a variety of proposals on how to combat the effects of this change. Recently, and thanks to the documentary 'PayWall: The Business of Scholarship', we have discovered the radical case of the Linda Hall Library, in Kansas (US). Its president Lisa Browar explains that the impossibility of facing the costs of electronic collections and the desire to ensure access regardless of the specific situation of the library, has led them to return to the print library model only. Their subscriptions to electronic content have been cancelled and returned to magazines and books exclusively on paper. This decision, undoubtedly extreme, is a reflection of the situation we are living. I do not think Linda Hall Library's will was to diminish the access to information sources for its users, nor to complicate their lives by forcing them to use the library physically when they could do it online. I do not think that Linda Hall is financially unable to make an investment in digital content if it permits the continuous growth of its collection considered by The New York Times as the "largest independently funded public library of science, engineering and technology in North America" and "among the largest science libraries in the world". But it is clear that the offer does not respond to the demand. It is serious when institutions of this category are forced to make sweeping decisions.

A second consequence of this model is the loss of control over the usage metrics. Although companies indeed provide, the librarians do not have control. In a triennial report resulting from a survey (Wolff, 2017), the directors of the North American libraries respond about library management issues and tendencies in the library collections. Of the last report of 2016 (to which 50% of the directors of academic libraries responded) it is worth considering a revealing fact:

The importance attributed by the directors on how strategic it is for users to start their search through their libraries (portals, websites, OPACs, discovery tools ...) to find the research materials they need falls drastically. In research universities, it has gone from more than 80% to just over 50%. Users use Google Scholar, Academia.edu or commercial portals of large providers... almost as much as libraries' websites. And little by little it is seen as a less strategic need. It is as much as saying that the library is not a strategic partner anymore but a mere intermediary.

2.3. The librarian as a partner

At the beginning of the 2000 Elsevier sent the libraries a very inspiring collection of posters for the librarians. Under the title "Never underestimate the importance of a Librarian" it presented a group of researchers in full action, whether it was an operating theatre, an underwater excavation or a photonics laboratory. The poster identified the role of each of the people present there, and among them was one that read "Librarian." The librarian was in those scenes, an active participant in the research activity, in the field, an essential element. I remember that we hung one of these posters on walls of the reading rooms of the library where I was working (UPC 1998-2008) to declare our transcendental role in the university.

The message I read today is something different. Elsevier, who was at the time at the beginning of a business expansion that led them in 2018 to a business worth 2.538 billion pounds¹, was sending a message to the librarians: "add value to your services because we will care about the content ourselves".

Since then libraries have opted for services, pivoting less and less in content management; experts in copyright, experts in user training, experts in understanding the specifications of scholarships for researchers in regards to publications, experts in solutions for the preservation and description of research outputs, and so on.

The librarian focuses on the provision of services, the role of partner for some needs or even a leader in new key areas for the university. But the management of the collection, like it or not, requires less time and expertise that we invest in adding value in different ways.

1 | [2018 RELX Group Annual Report](#) (PDF). *RELX Company Reports*. RELX. March 2019.

3. The challenges facing modern law libraries

3.1. Building and developing a collection: the contradiction of the electronic copy.

The Ithaka report of 2017 (Wolff, 2017), again, presents three growing concerns of the directors of North American libraries that, together, represent a clear clue about what one of the missions of the librarians should be in the coming years:

- Building and maintaining unique special collections of research materials.
- Preserving digital materials
- Digitizing materials and making them broadly available to the public

Libraries will increasingly license -or acquire- collections in a more uniformed way. The purchase of large packages, offered to our institutions in the same way, as well as the purchase through consortia or agreements, leads to an unavoidable uniformity.

What will distinguish libraries are the collections that make us unique. It shall be worth investing time and effort in making them an element of value for our institutions. Preserve them in digital format (while preserving, of course, the original material) and make them accessible to the largest possible public. This is the # 1 challenge for our teams.

3.2. Standards, metadata and cooperation

The librarians understand the standards. The basis for cooperation projects between libraries has been based on the ability of professionals to find globally trusted methods and formulas of description.

The description of outputs (final or intermediate) based on metadata commonly accepted by libraries, is a practice that has allowed us a level of collaboration between organisations as never achieved before. The complexity of the items resulting from the scientific activity will increase, and it will be necessary for the libraries to define and agree on new formulas to interconnect any type of outputs and contributors involved in it. Dublin Core, as an alternative to MARC, has been beneficial for this standardised description of the results of our institutions, but the interconnection of objects and contributors involved needs an amplification of this common

framework. It is already an underway job through different initiatives; BIBFRAME, for example, is a new data recording format that uses the technology of linked data for the construction of the semantic Web and has a great journey. Librarians must rethink our collections and the way they are described and interconnected (Casalini, 2019).

There are other areas (totally different) in which standardisation is an urgent need, such as the legislative or political structures. It is far from the competences of libraries, but it is essential to look for common legal frameworks in relation to matters that affect universities, science and the collections that we use or create. At European level, DG Research and Innovation has done a remarkable job in recent years to achieve a more homogeneous European research environment. Even so, the North American normative framework, although it differs in details depending on each state, is much more uniform than the European one. European directives should continue to strengthen the standardisation of the field of research.

Librarians can help in different ways to a more unified and robust environment. LIBER, for example, has understood the importance of its lobbyist role and has promoted initiatives so that European directives concerning data, copyright and research publications, take into account the specificities of universities, research centres and libraries (LIBER, 2019).

3.3. Open Science

The great response to this new paradigm has been the firm commitment to Open Access repositories, a way of demonstrating to content providers that universities, research centres and their libraries are not mere spectators, rather firm defenders of the common good.

Open Access deserves an article in its own right, and I'm sure I'm not the right person to write it, but if there is a project that the evolution of the tools has led to libraries and is worth noting, this is precisely OA. We are far from the fair and possible goal that academic production is managed by their organisations without the need for intermediaries that add costs well above the value they provide. But even being far from the goal, it would be suicidal deciding to go up the river in the middle of the descent.

Libraries and their professionals should continue to lead the accessibility, openness and dissemination of any type of scientific research output (publications, data, samples, or software), and should pay special attention to finding formulas for an open evaluation scheme of research in all the disciplines of science.

This task is crucial and complex because the different current ways of assessing the impact and quality of the activity of scholarly authors are too simple (even if they are varied and cryptic) to

respond to the atomised and transdisciplinary contemporary research frameworks. Libraries are an essential voice in this debate, naturally together with publishers, authors and funders. We must prepare for two things:

- A fragmented but consensual framework for the evaluation of scientific results.
- An open model that breaks the private monopoly of evaluation.

3.4. Research Data Management

I mentioned before the importance of data. It is part of the vast Open Science umbrella, but I would like to dedicate a point to this aspect because it is a format that for years has had a secondary role in our collections, and that seems to have acquired a new level of importance.

The acquisition, or the management of data created in the universities, or the training of users in questions related to their use, or access or description; the coming years will be characterised by a range of services offered by libraries in which datasets will be at the core of the activity.

The expertise of the subject librarian is key nowadays to understanding the world of publications, but the knowledge of the different data formats and their peculiarities in accordance to the disciplines shall be even higher. The data sets in disciplines as humanities, SS or STEM are yet abysmally different, but even between micro fields of the same research disciplines, there are marked variations.

Librarians should know about new sources of data, how to make a good selection out of them, how to exploit their content, what types of licenses exist. We must actively participate in the acquisition of specific datasets, different from those that the most generalist providers offer. Librarians must be able to interact with agencies or specialised companies that have data of interest of our users, and know how to solve particular requests for individual uses. In collaboration with other colleagues, be able to offer infrastructures and services for the description, preservation and management of new datasets created in our universities or centres.

At the European University Institute we have a Data repository for the Social Science, with professional support at an infrastructure and service level that backs up the activity of our professors and researchers. We are now developing an extension (or a second installation) of this solution for the humanities.

4. Conclusion

We live with the impression that present evolution is an unprecedented trigger for the library profession, and there is probably a lot of truth in it. But librarians have adapted to the evolution of technology for centuries. The current challenge is greater than the previous ones, as it is for many professions. My position regarding the advantage that technology has represented for our activity is quite critical, not because of the technology itself, but because of the outsider leadership, alien to our interests from where this transformation has been led. Making a parallelism with the music industry (which is also an industry of content as is that of scientific publications), the transformation of music support from analogue to digital was made by the interests of suppliers, not of the consumers. There was no public outcry against the LPs or EPs, no melomaniacs demanding a replacement of vinyls for CDs (first) or MP3 later. If the industry carried out this change, it would have been calculated what the business model and the possible benefit for them was. The users were satisfied or resigned to it. We learned how to take advantage when we understood that the new paradigm offered us also the possibility to share content (and we were criminalised by that same industry for having learnt that). Similarly, the libraries did not ask for the change of the previous model, the industry has controlled the market during these first decades, but there is still the possibility that we learn how to capitalise this revolution for the benefit of our users and institutions. The evolution of the library professions connected to the evolution of tools, in a nutshell, are those to add customised and high-value services to the collections we offer to our users (collections that it is difficult to say if we own or if we do not).

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The evolution of discovery tools and information retrieval services

1.

First of all, we would like to thank the President of the Court of Justice and the organisers for inviting us to participate in the “Conference on the Challenges Facing Modern Law Libraries”.

The task entrusted to us by the organisers of this conference was to present the evolution of discovery tools and information retrieval systems in the library world. These tools integrate a variety of resources that extend well beyond the library physical collections. Their creation is justified by the massive presence of digital resources and the multiplication of research tools.

As researchers of the *Istituto di Teoria e Tecniche dell'Informazione Giuridica* of the National Research Council of Italy¹, an institute specifically focused on the study of information technologies and law, including legal information management, we are very pleased to report on the evolution of these tools for libraries and the impact of such development on legal research.

To begin, we can define a discovery tool as a centralised general index containing data from publishers, content aggregators and local sources (catalogues, institutional repositories, digital collections, etc.). Its purpose is to enable users to discover library's complete collections regardless of their location, provenance, format. The possibility of broadening a search beyond local collections, for example by searching for gigantic directories available in open access, is an added value of discovery tools. Therefore, this tool makes it possible to consider a continuum of use by integrating paper resources held by the library and digital resources made available in the library.

We can say that discovery tools broaden Paul Otlet's position² on universal access to knowledge, by referring to a wide variety of ways of knowledge production while always assessing the quality of what will be read, exchanged and discussed among readers.

1| At the time of the Conference, the Institute was called Institute of Legal Information Theory and Techniques (*Istituto di Teoria e Tecniche dell'Informazione Giuridica*). Since June 1st, 2019, the Institute's new name is Institute of Legal Informatics and Judicial Systems (*Istituto di Informatica Giuridica e Sistemi Giudiziari*). Further information at: <<http://www.igsg.cnr.it/>>.

2| Otlet, P. (1934) *Le traité de documentation: le livre sur le livre, théorie et pratique*. Bruxelles: Editiones Mundaneum.

By using these tools, libraries provide an environment very similar to that offered by internet research: such tools are gradually establishing themselves in libraries, while responding to users' experience in a similar way that the search engines like Google have been able to impose. Therefore, these are tools with which the "Google generation", which represents a significant proportion of current and future users, is comfortable.

Google has profoundly transformed users' search strategies and made readers extremely demanding on the quality of presentation of library offerings. The "Google generation" is a popular term for a generation of young people, born after 1993, who have grown up in a world dominated by the internet. The term has become popular to designate a generation whose first port of access to knowledge is the Web and in particular Google, the most influential and popular search engine. This is in contrast to previous generations who acquired their knowledge through traditional books and physical libraries³.

With reference to the legal field, Gallacher⁴ highlighted a deep cultural clash between traditionalists and the "Google generation", explaining the tension between those who advocate traditional book-based research and those who fully support electronic research. The traditionalist view of legal research is essentially based on the belief that legal research relying on traditional bibliographic sources such as books is superior to electronic research, at least as a first step in research. On the other hand, the "Google generation" does not care about paper legal sources and prefers to surf the internet. Most students entering universities are more comfortable working on a keyboard and reading from a computer screen than holding paper in their hands.

This conflict is also noticeable in the teaching of legal research to students and young lawyers. In this context, it was observed that, increasingly, the current legal generation is so web-based that it has learned to rely on search engines to provide answers to complex questions. Law students, and very soon also legal professionals and judges, can be considered part of the

3| Gunter, Rowlands and Nicholas analyse in detail the question of a break between the pre- and post-Google generations. To characterize the Google generation, the authors cite twelve hypotheses: (1) the Google generation prefers visual information to textual information; (2) wants a varied learning experience; (3) has definitely adopted digital modes of communication; (4) is multitasking; (5) is impatient and does not tolerate any delay; (6) considers its peers more credible than other authority figures; (7) needs to feel permanently connected to the Web; (8) learns more through action and knowledge; (9) prefers small amounts of information, easy to digest, to the full text; (10) does not understand and respect intellectual property; (11) is not interested in format or container issues; (12) tends to put virtual reality on the same level as experience. Gunter B., Rowlands I. and Nicholas D. (2009) *The Google Generation. Are ICT innovations changing information-seeking behaviour?* Oxford: Chandos Publishing.

4| Gallacher, I. (2006) *Forty-Two: The Hitchhiker's Guide to Teaching Legal Research to the Google Generation*, Akron Law Review, Vol. 39, n. 1: <<https://ideaexchange.uakron.edu/akronlawreview/vol39/iss1/5>>.

“Google generation”. The easy-to-use appeal of the internet for legal research is attracting more and more people who are fascinated by the idea of finding, through discovery tools, the solution to the practical case and the law applicable to the case.

In our presentation we will analyse the origin and functionalities of the discovery tools and will reflect on their possible developments and improvements; finally, some considerations on the effects of these tools on the activities of legal information research will be highlighted.

2.

With the proliferation of documentary sources and the development of digital collections, libraries have seen access to their collections fragmented in recent decades. It is in this environment that meta-search tools, also known as federated search, have been developed, allowing users to query through a single interface the multiple databases to which a library subscribes. Federated research, initially promising, nevertheless offers a disappointing performance: excessive slowness, relevance of results somewhat inadequate or unsatisfactory, and multiple technical problems. In recent years, real discovery tools have been developed, representing an evolution compared to the Online Public Access Catalogue (OPAC) and the new generation catalogues that have been the main bibliographic research tools so far.

Library OPACs have evolved over time. They have evolved from simple information search tools allowing only certain types of search to online catalogues that are improved with functionality and ease of use, indexing, data coverage, access via links and networks. After the mid-2000s, a strong dissatisfaction with OPACs began to emerge. These are the years in which the Web began to evolve from a technological and functional point of view.

Users’ attitudes change: They get used to new search engines. In this way, users become accustomed to a navigation-based search system. In fact, search engines allow, with a single search session, to easily and immediately obtain a multitude of different resources, by type and discipline.

In addition, with respect to sources of information, new types of digital resources have been created (electronic journals, databases, e-books, etc.) and continue to proliferate.

An evolution of OPAC has been the next generation catalogue: it is an application that uses data in traditional form, allowing users to perform a simplified search using interfaces similar to those of Google integrating external resources. The use of these tools expanded between 2005 and 2007. The objective was to achieve greater integration with the Web, trying to imitate ease of use to better communicate, search and use information.

From 2007 onwards, new generation catalogues began to lose their primacy for bibliographic research in favour of the discovery tool, which is proposed as a unified point of access and discovery of a variety of documentary resources and digital library collections. Therefore, the tools aim to provide simple and intuitive interfaces that users can customise according to their needs. They resolutely place the library at the heart of the social Web; the user no longer has to wonder if he/she is in the catalogue or in a bibliography; he/she has access to all local (catalogues, institutional repositories, etc.) and remote (databases, subscription packages, e-books, etc.) documentary collections.

In this context, technological change plays a decisive role in organizing access to these diversified resources. The technology includes, among others: standardisation of exchange protocols (Z39.50, SRU, OAI-PMH), automated transfer routines, metadata mapping, indexing technology, deduplication algorithms, link resolvers, relevancy algorithms, interface technologies, etc.

In view of these elements, these tools allow a wide range of functionalities⁵:

- provide a research tool that responds to current user practices;
- provide a single point of access to the library's collections, all media, all resources, all levels of granularity combined;
- improve the visibility of digital resources, which are sometimes underutilised, and ultimately increase their consultation;
- simplify and facilitate access to digital documentation;
- renew the image of the library, comparable to any other website.

These features are identified with some real benefits that can be listed below.

Easy to use. The discovery tools respond to Breeding's call⁶ to describe the use of these tools as an experience that provides a consistent and easy-to-use interface, despite the use of multiple technologies and content products. In their studies and usability testing, Gross and Sheridan⁷

5| Wang, Y. and Dawes, T. A. (2012) *The Next Generation Integrated Library System: A Promise Fulfilled*, Information Technology & Libraries. September Vol. 31, 3, p. 76-84.

6| Breeding, M. (2010) *The State of the Art in Library Discovery 2010*, Computers in Libraries, Vol. 30, 1, pp. 31-34: <<http://www.librarytechnology.org/litg-displaytext.pl?RC=14574>>.

7| Gross, J. and Sheridan, L. (2011) *Web Scale Discovery: The User Experience*, New Library World 112: <<http://dx.doi.org/10.1108/03074801111136275>>.

found that there is no doubt that for students discovery tools are an easy way to get results and probably easier than the various options they had previously faced.

Coverage. Users have a much larger data set at their disposal than previous databases could offer. As Vaughan⁸ clearly describes, these new services make it easier for researchers to find the content they might miss by not searching multiple individual databases.

Better use of library resources. As Way⁹ explains in his examination of usage statistics, after the implementation of a discovery tool, the sharp decline in database usage, combined with a sharp increase in the number of full text downloads and link resolver click-throughs, suggests that the tool has had a significant impact on users' search behaviour and on the use of a library's collections.

But, there are also disadvantages¹⁰.

Noise. The number of results and formats that discovery tools bring to users is overwhelming, especially in simple, non-specific searches. In addition, the large number of results, combined with the increasing number of object types and formats available, creates a confusing jumble of results. In such a context, most users need help to refine their search. In addition, in many cases, users are interested in a specific set of resources and the use of discovery tools does not meet their information needs. It also appeared¹¹ that users, once they have chosen the discovery tool, prefer to continue along this path, even if another route may be more successful, for reasons of ease of use.

Cost. Discovery tools are expensive, both in monetary terms and in terms of staff time. Initial system design and configuration, testing and implementation require time and specialised skills.

8| Vaughan, J. (2011) *Investigations into Library Web Scale Discovery Services*, Information Technology and Libraries, Vol. 31, n. 1, pp. 32-82: <<http://ejournals.bc.edu/ojs/index.php/ital/article/view/1916>>.

9| Way, D. (2010) *The Impact of Web-scale Discovery on the Use of a Library Collection*, Serials Review, Vol. 36, 4, pp. 214-220: <<http://dx.doi.org/10.1016/j.serrev.2010.07.002>>.

10| Hoy, M.B. (2012) *An Introduction to Web Scale Discovery Systems*, Medical Reference Services Quarterly, Vol. 31, 3, pp. 323-329.

11| Gross, J. and Sheridan, L. (2011) *Web Scale Discovery*, op cit. Hoy M.B. (2012) *An Introduction to Web Scale Discovery Systems*, Medical Reference Services Quarterly, Vol. 31, 3, pp. 323-329.

Unrealistic expectations of users. Several librarians expressed concern that these tools create the hope that everything is available online in full text and that some users express their frustration and disappointment when the tool direct them to a physical book, located on the library shelves¹².

Different actors and coordination. Discovery tools require coordination between content producers, software solution providers (resource discovery service) and libraries. Unlike other types of more experimental digital interfaces, discovery tools are part of real economic activities and the priority is to define the impact of these new services on each other's economic models¹³.

3.

To reflect on what is missing and recent opportunities, Marshal Breeding's publication "The Future of Library Resource Discovery"¹⁴ helps us to reflect on what is missing and recent opportunities. In his work, the author lists functionalities that can be implemented or that have not been fully realised in the current generation of discovery services. The list of functionalities includes: coverage of relevant resources, internationalisation and multilingual coverage, coverage of open access materials, advanced and accurate search, relevance ranking, improved ease of discovery through non-text associations, and linking to resources.

In particular, in the field of law some of these developments would be very useful, improving legal information searching. One example is multilingual coverage. Articles, books, journals in many areas of law refer to specific national legal systems and are published in the language of the jurisdiction concerned and analysed by the authors. Multilingual research remains a basis for the future development of discovery services as the content represented in discovery indexes becomes increasingly heterogeneous by language.

In addition, discovery services include open access resources published by commercial publishers. The challenge is how to display open access material from various sources. In particular in the field of law, institutional repositories of universities, which include academic publications, can play an important role. Furthermore, a large area is dedicated to open access

12| Howard, D. and Wiebrands, C. (2011) *Culture Shock: Librarians' Response to Web Scale Search*: <<http://ro.ecu.edu.au/cgi/viewcontent.cgi?article=7208&context=ecuworks>>.

13| Chartron, G. (2017) *Le document en prise aux outils de découverte dans les bibliothèques. Le Documents ?* CIDE. 20, Novembre 2017, Lyon: <<https://hal.archives-ouvertes.fr/hal-01889403/document>>.

14| Breeding, M. (2015) *The future of library resource discovery*. Baltimore: NISO, <http://www.niso.org/apps/group_public/download.php/14487/future_library_resource_discovery.pdf>.

law journals, which can summarise the development and evolution of legal science. Also with blogs and social media, legal science is rapidly evolving: many journal articles mention blogs by researchers and professionals as bibliographic references. The professional community is getting closer and closer to these containers, which are spreading rapidly because of their simplicity of implementation and their immediacy of communication. It can also be argued, especially in the *common law* world, that some blogs have become an alternative source to traditional resources, with which they sometimes collaborate, by maintaining a dialogical character with readers.

One of the most critical operations of a discovery service is the way it provides access to the results selected by the user. The construction of the corresponding access links is done by the link resolver: it is a tool that allows the user, by consulting a bibliographic reference on a database, to be offered a direct access link to the full text of the reference, available on the website of one of the library's suppliers. The resolver is based on a knowledge base that contains descriptive information about possible resources and user access rights in its local context. Hence, a link resolver is able, for an article access request, to specify to the user all possible versions in relation to the specific environment: access to a received paper journal, to digital platforms to which the library is subscribed, to open archives. In case the library has not subscribed to the necessary subscription, the resolver also allows the user to restart his search on the catalogue (printed journals) or on other interfaces (other catalogues, Google Scholar, Open access, etc.)"¹⁵.

Nevertheless, Breeding continues by listing new features that should be introduced in response to requests from libraries and users. This list includes: social features, research data set, discovery and access to special collection materials, analysis, altimetry. The aim is to develop functionalities so that users can interact with their collections in different ways. The possibilities for activating social interactions would depend on mechanisms that allow interoperability between discovery service ecosystems and those of external social networks. The ability to link to a data set from published articles based on this data will also allow other users to validate or replicate the results or conduct related studies based on this data. In addition, libraries and publishers should be interested in the ability to measure the performance of their discovery services and the resources recovered as a result of their use. Finally, alternative measures relating to the description of the impact of research resources and the performance of university libraries are probably necessary. It is possible to consider whether they can be used in relevance algorithms to help identify resources of higher interest or quality.

15| Coudrin, D. and Hatt, G. (2014) *Intégrer, signaler les ressources électroniques: 20 questions clés*, in Barron, G. and Le Goff-Janton, P. (Eds): *Intégrer des ressources numériques dans les collections*. Villeurbanne: Presses de l'Enssib, p. 102.

4.

We propose some final reflections on the effects of the discovery tools also from the perspective of research activity in the legal field.

First, we can say that discovery tools have determined a paradigm shift. The perfect discovery tool should encompass and go beyond the library's collections and subscriptions, thus allowing for a "true" discovery of information. It places more importance on discovery than on simple research. Conducting a search means having a document or information in mind that you want to retrieve. The search is performed by formulating a request to create a match with the content that the user wants to retrieve. The terms used tend to be rather descriptive, to accurately describe the information needs, leaving little or no room for ambiguity. On the other hand, discovery has become the word of the day in the library world, in publishing and scientific communication. Although it is used frequently and in multiple contexts, it remains poorly defined. A strict definition would be that discovery is the process of discovering or bringing to light what was previously unknown. In some respects, it could be argued that it is a mixture of deliberate research – a targeted process designed to reveal something known to exist – and a very random process of finding relevant information while searching for or manipulating information. Certainly, discovery represents a range of user actions and interactions that could reveal something valuable. Thus, the path of discovery follows a more exploratory approach, often motivated by a generic need, at least less explicitly stated¹⁶.

Similar to what happens on the Web, where hyperlinks facilitate rapid movement between topics and related information, a discovery tool accompanies the results of a series of components, which can be used as links. These links represent the different results obtained and allow you to move around within the context of the defined information. The tools propose a different approach to information. They aim to raise awareness, rather than give a specific response, by aggregating content related to particular areas of interest.

Second, and on the side of legal users, a discovery tool is adapted to very broad research rather than specific research, which makes it more likely to meet the needs of students. It would make it possible to clear up a subject, by providing a very quick overview, but would be less efficient for a detailed search for which it is rather the specific databases that remain relevant. For researchers and advanced students, it will be difficult for the tool to replace specific databases or the platform to which these audiences are accustomed: a publisher's platform, databases, list of legal journals.

16| Akeroyd, J. (2017) *Discovery systems: Are they now the library?*, Learned Publishing, Vol. 30, 1, pp. 87-90.

The literature on this topic¹⁷ also points out that discovery tools with a centralised general index can lead to masking the complexity of the information-seeking process because of the immediacy of the proposed resources. This is also true in the search for legal information. The immediate availability of access to the full text may encourage you to download a full text result just because it is available.

In addition, users of legal information are often of different origins (citizens, academics, legal professionals, court staff, etc.) and often the discovery tools are not always appropriate for all these types of users. If we think of a university professor, expert in a specific field, he/she has a research approach/method that does not necessarily need the support of a discovery tool. More advanced users may find that databases of specific disciplines continue to provide a better research experience. On the contrary, a law student, who is approaching a general topic for the first time, needs a discovery tool to get an overview of the topic.

Of course, this also applies when considering the various types of libraries. University libraries, if equipped with a discovery tool useful for the legal domain, will offer their users a useful service for legal research; on the contrary, in libraries that cover specific areas of law, the library catalogue and the resources selected by librarians (databases, electronic journals, etc.) could fully satisfy legal experts.

The use of discovery tools is certainly only one phase of the legal research process, a complex process that does not end with resource discovery, but requires evaluation, interpretation and connection with other sources relevant to the study of law. Discovery tools are very useful for navigating the vast world of legal information, but they are only the beginning. Real solutions to complex legal problems obviously require in-depth analysis and conclusions.

Finally, a last reflection concerns the role of librarians, who remain the main actors of the activity. Information professionals have a fundamental role to play in selecting, implementing and evaluating the appropriate discovery tool for specific contexts, but also in training users to make good use of these tools and help them interpret the results of their requests. The articulation of these tools with the library's IT environment is also a crucial point in their implementation and a prerequisite for their proper functioning.

17| Breitbach, W. (2012) *Web-Scale Discovery: A Library of Babel?* in *Planning and Implementing Resource Discovery Tools in Academic Libraries*. Hershey, PA: IGI Global, pp. 637-645; Guthrie A. and McCoy R. (2014) *A Glimpse at Discovery Tools within the HBCU Library Landscape*, in Spencer, J. and Millson-Martula, C. (Eds) *Discovery tools: the next generation of library research*. London: Routledge/Taylor & Francis, pp. 177-191.

This is why Breeding advised libraries not to think simply in terms of the functionalities offered: “Checklists of functionality can be misleading relative to the actual performance of any given system in its daily operation in a library”¹⁸.

Libraries should set up with their partners the central index (what resources will be indexed...), the link resolvers to make the most of the resources available to their users and integrate authentication systems transparently into the proposed service. They also have a major role in the configuration of the algorithm that will classify responses to user requests. The value of the service will depend in large part on the coordination work between content producers, software solution providers and libraries. In the field of law, information professionals are uniquely positioned to lead change effectively in the very particular context introduced by the digital and network revolutions in libraries.

In conclusion, the future of documentary legal research may consist in bringing together the various information silos under one research tool. Discovery tools can be considered the ideal “all-in-one” service for the user. They make it possible to envisage a continuum of use by integrating paper resources accessible in libraries and digital resources made available by the library itself. The simplicity, but also the exhaustiveness associated with a relevancy algorithm, are the main characteristics of this tool. For law libraries in particular, the major challenge is to attract the attention of their legal users through services that compete with the Google experience and to enhance all the resources they have selected and purchased.

18| Breeding, M. (2015) *Library Services Platforms: A Maturing Genre of Products*, Library Technology Reports, Vol. 51, 4 (May/June 2015), p. 5 <<https://journals.ala.org/index.php/ltr/article/view/5686>>.

L'évolution des outils et des services de découverte dédiés à la recherche d'information

1.

Tout d'abord, nous aimerions remercier le président de la Cour de justice ainsi que les organisateurs pour nous avoir invités à participer à la «Journée d'étude sur les défis auxquels sont confrontées les bibliothèques juridiques modernes».

La tâche qui nous a été confiée par les organisateurs de ce colloque était de présenter l'évolution des outils et des services de découverte dédiés à la recherche d'information dans le monde des bibliothèques. Ces outils intègrent des ressources variées qui dépassent largement les collections physiques des bibliothèques. Leur création est justifiée par la présence massive de ressources numériques et la multiplication des outils de recherche.

En tant que chercheurs de l'*Istituto di Teoria e Tecniche dell'Informazione Giuridica* du Conseil National de la Recherche de l'Italie¹, Institut spécialisé dans l'étude et l'analyse des technologies de l'information et du droit, y compris la gestion de l'information juridique, nous sommes très heureux de rendre compte de l'évolution de ces outils pour les bibliothèques et de l'impact de ces développements sur la recherche juridique.

Pour commencer, nous pouvons définir l'outil de découverte comme un index général centralisé composé de données provenant d'éditeurs, d'agrégateurs de contenus et de sources locales (catalogues, dépôts institutionnels, collections numérisées, etc.). Son but est de permettre aux utilisateurs de découvrir les collections complètes d'une bibliothèque, indépendamment de leur localisation, de leur provenance ou de leur format. La possibilité d'élargir la recherche en-dehors des collections locales, par exemple en cherchant des répertoires gigantesques disponibles en accès libre, est perçue comme la valeur ajoutée des outils de découverte. Cet outil permet d'envisager un continuum d'usage en intégrant les ressources papier accessibles dans les bibliothèques et les ressources numériques mises à disposition.

1 | Au moment du Colloque, l'Institut s'appelait Institut de théorie et de techniques de l'information juridique (Istituto di Teoria e Tecniche dell'Informazione Giuridica). Depuis le 1^{er} juin 2019, l'Institut porte le nouveau nom Istituto di Informatica Giuridica e Sistemi Giudiziari. Plus d'informations sur: <http://www.igsg.cnr.it/>.

Nous pouvons dire que les outils de découverte élargissent la position de Paul Otlet² sur l'accès universel à la connaissance, en faisant référence à une grande diversité de régimes de production de cette connaissance mais en vérifiant toujours la qualité de ce qui sera lu, échangé, discuté par lecteurs.

En utilisant ces outils, les bibliothèques mettent à disposition un environnement très similaire à celui offert par la recherche sur Internet : ils s'implantent progressivement dans les bibliothèques et répondent à une expérience utilisateur similaire à celle que le moteur de recherche comme Google a su imposer. Ce sont des outils avec lesquels la «génération Google», qui représente une part importante des utilisateurs actuels et futurs, est à l'aise.

Google a profondément transformé les stratégies de recherche du public et rendu les lecteurs extrêmement exigeants sur la qualité de présentation de l'offre des bibliothèques. La «génération Google» est une expression populaire qui désigne une génération de jeunes, nés après 1993, qui ont grandi dans un monde dominé par Internet. L'expression est entrée dans l'usage populaire pour désigner une génération dont le premier port d'accès à la connaissance est Internet et en particulier Google, le moteur de recherche le plus influent et populaire. Ceci par opposition aux générations précédentes qui acquéraient leurs connaissances dans les livres et les bibliothèques traditionnelles³.

En référence au domaine juridique, Gallacher⁴ a mis en évidence un conflit culturel profond entre les traditionalistes et la «génération Google», expliquant la tension qui existe entre les défenseurs de la recherche documentaire traditionnelle et ceux qui souscrivent pleinement à la recherche informatisée. La vision traditionaliste de la recherche juridique repose essentiellement sur la conviction que la recherche dans le domaine du droit fondée sur des sources bibliographiques traditionnelles comme les livres est supérieure à la recherche

2| Otlet, P. (1934) *Le traité de documentation : le livre sur le livre, théorie et pratique*, Bruxelles : Editions Mundaneum.

3| L'ouvrage de Gunter, Rowlands et Nicholas analyse en détail la question d'une rupture entre les générations pré et post Google. Pour caractériser la génération Google, les auteurs citent douze hypothèses : (1) la génération Google préfère l'information visuelle à l'information textuelle ; (2) elle veut une expérience d'apprentissage variée ; (3) elle a définitivement adopté les modes numériques de communication ; (4) elle est multitâche ; (5) elle est impatiente et ne tolère aucun délai ; (6) elle considère ses pairs plus crédibles que d'autres figures d'autorité ; (7) elle a besoin de se sentir en permanence connectée au Web ; (8) elle apprend davantage par l'action et par le savoir ; (9) elle préfère l'information en petite quantité, facile à digérer, par rapport au texte intégral ; (10) elle ne comprend pas et ne respecte pas la propriété intellectuelle ; (11) elle ne s'intéresse pas aux problèmes de format ou de contenant ; (12) elle tend à mettre la réalité virtuelle au même niveau que l'expérience. Gunter B., Rowlands I. et Nicholas D. (2009) *The Google Generation. Are ICT innovations changing information-seeking behaviour?*, Oxford: Chandos Publishing.

4| Gallacher, I. (2006) *Forty-Two: The Hitchiker's Guide to Teaching Legal Research to the Google Generation*, dans Akron Law Review, Vol. 39, n. 1: <<https://ideaexchange.uakron.edu/akronlawreview/vol39/iss1/5>>.

électronique, du moins en tant que première étape de recherche. D'autre part, la «génération Google» n'a que faire des sources juridiques papier et préfère surfer sur Internet. La plupart des étudiants qui entrent dans les universités sont plus à l'aise en travaillant sur un clavier et en lisant à partir d'un écran d'ordinateur qu'avec un papier à la main.

Ce conflit est également perceptible en ce qui concerne l'enseignement de la recherche juridique aux étudiants et aux jeunes avocats. Dans ce cadre, il a été observé que, de plus en plus, la génération juridique actuelle est tellement axée sur le Web qu'elle a appris à s'appuyer sur des moteurs de recherche pour obtenir des réponses à des questions complexes. Les étudiants en droit, et très bientôt aussi les professionnels du droit et les juges, peuvent être considérés comme faisant partie de la «génération Google». L'attrait séduisant et facile d'utilisation d'Internet pour la recherche juridique attire de plus en plus d'adeptes fascinés par l'idée de trouver, grâce aux outils de découverte, la solution au cas pratique en droit et le droit applicable au cas d'espèce.

Dans notre présentation, nous analyserons l'origine et les fonctionnalités de ces outils et nous ferons ensuite quelques réflexions sur leurs développements et améliorations possibles; enfin, quelques considérations sur les effets que ces outils peuvent avoir sur les activités de la recherche d'informations juridiques seront mises en évidence.

2.

Avec la multiplication des sources documentaires et le développement des collections numériques, les bibliothèques ont vu, au cours des dernières décennies, l'accès à leurs collections se fragmenter. C'est dans ce contexte que se sont développés des outils de méta-recherche, aussi connus comme la recherche fédérée, permettant aux utilisateurs d'interroger à partir d'une interface les multiples bases de données auxquelles est abonnée une bibliothèque. La recherche fédérée, initialement prometteuse, offre cependant une performance décevante : lenteurs excessives, pertinence des résultats laissant à désirer, et problèmes techniques multiples. Au cours des dernières années, de véritables outils de découverte ont été développés : ils constituent une évolution par rapport au catalogue informatisé (OPAC) et aux catalogues de nouvelle génération qui ont été les principaux outils de recherche bibliographique au cours des dernières années.

Les OPACs de bibliothèques ont évolué au fil du temps. Ils sont passés de simples outils de recherche d'informations ne permettant que certains types de recherche à des catalogues informatisés améliorés avec la fonctionnalité et la facilité d'utilisation, l'indexation, la couverture de données, l'accès via des liens et des réseaux. Après le milieu des années 2000, une forte

insatisfaction à l'égard des OPACs a commencé à apparaître. Ce sont les années pendant lesquelles le Web a commencé à évoluer d'un point de vue technologique et fonctionnel.

L'attitude de l'utilisateur change : il/elle s'habitue aux nouveaux moteurs de recherche et par voie de conséquence à un système de recherche basé sur la navigation. En fait, les moteurs de recherche permettent avec une seule session de recherche d'obtenir facilement et immédiatement une multitude de ressources différentes, par type et par discipline.

De plus, en tant que sources d'information, de nouveaux types de ressources numériques ont été créés (revues électroniques, bases de données, livres électroniques, etc.) et continuent à proliférer.

Une évolution de l'OPAC a été le catalogue de nouvelle génération : il s'agit d'une application qui utilise les données sous forme traditionnelle, permettant aux utilisateurs d'effectuer une recherche simplifiée à partir d'interfaces semblables à celles de Google intégrant des ressources externes. L'utilisation de ces outils s'est étendue entre 2005 et 2007. L'objectif était de parvenir à une plus grande intégration avec le Web, en essayant d'imiter la facilité d'utilisation pour mieux communiquer, rechercher et utiliser les informations.

À partir de 2007, les catalogues de nouvelle génération ont commencé à perdre leur primauté pour la recherche bibliographique au profit de l'outil de découverte qui est proposé comme un point unifié de recherche et de découverte de toutes les ressources documentaires et des collections numériques de bibliothèques. Les outils entendent proposer des interfaces simples et intuitives que l'utilisateur peut personnaliser suivant ses besoins. Ils placent résolument la bibliothèque au cœur du Web social ; l'utilisateur ne doit plus se demander s'il est dans le catalogue ou dans une bibliographie ; il accède à l'ensemble des fonds documentaires locaux (catalogues, dépôts institutionnels, etc.) et distants (bases de données, bouquets d'abonnement, ebooks, etc.).

Dans ce cadre, l'évolution technologique joue un rôle décisif dans l'organisation de l'accès de ces ressources diversifiées. La technologie comprend, entre autres : la standardisation de protocoles d'échanges (Z39.50, SRU, OAI-PMH), les routines de transfert automatisées, le mappage de métadonnées, la technologie d'indexation, les algorithmes de déduplication, le résolveur de liens, les algorithmes de pertinence, les technologies d'interface, etc. Au regard de ces éléments, ces outils permettent un large éventail de fonctionnalités⁵:

5| Wang, Y. et Dawes, T. A. (2012) *The Next Generation Integrated Library System: A Promise Fulfilled*, dans *Information Technology & Libraries*. Vol. 31, n. 3, p. 76-84.

- fournir un outil de recherche qui réponde aux pratiques courantes des utilisateurs,
- proposer un point d'accès unique aux collections de la bibliothèque, tous supports, toutes ressources, tous niveaux de granularité confondus,
- améliorer la visibilité des ressources numériques, parfois sous-utilisées, et accroître à terme leur consultation,
- simplifier et rendre fluide l'accès à la documentation numérique,
- renouveler l'image de la bibliothèque, comparable à n'importe quel site web.

Ces fonctionnalités sont identifiées à certains avantages réels qui peuvent être listés ci-dessous.

Facilité d'usage. Les outils de découverte répondent à l'appel de Breeding⁶ qui décrit l'utilisation de ces outils comme une expérience qui présente une interface cohérente et facile à utiliser, malgré l'utilisation de nombreuses technologies et produits de contenu. Dans leurs études et test d'utilisation, Gross et Sheridan⁷ ont constaté qu'il ne fait aucun doute que les étudiants ont trouvé que les outils de découverte sont un moyen facile d'obtenir des résultats et probablement plus facile que les diverses options auxquelles ils étaient confrontés auparavant.

Couverture. Les utilisateurs ont à disposition un ensemble de données beaucoup plus volumineux que ce que les bases de données précédentes pouvaient offrir. Comme Vaughan⁸ le décrit bien, ces nouveaux services facilitent la tâche des chercheurs pour trouver le contenu à côté duquel ils pourraient passer en ne cherchant pas dans plusieurs bases de données individuelles.

6| Breeding, M. (2010) *The State of the Art in Library Discovery 2010*, dans *Computers in Libraries*, Vol. 30 , n. 1, pp. 31 – 34: <<http://www.librarytechnology.org/ltg-displaytext.pl?RC=14574>>.

7| Gross, J. et Sheridan, L. (2011) *Web Scale Discovery: The User Experience*, dans *New Library World* 112 .: <<http://dx.doi.org/10.1108/0307480111136275>>.

8| Vaughan, J. (2011) *Investigations into Library Web Scale Discovery Services*, dans *Information Technology and Libraries*, Vol. 31, n. 1, pp. 32-82: <<http://ejournals.bc.edu/ojs/index.php/ital/article/view/1916>>.

Meilleure exploitation des ressources de la bibliothèque. Comme Way⁹ l'explique dans ses statistiques d'utilisation, après la mise en œuvre d'un outil de découverte, la forte baisse de l'utilisation de la base de données, associée à une forte augmentation du nombre de téléchargements de texte intégral et des clics sur le résolveur de liens, suggère que l'outil a eu un impact considérable sur le comportement de recherche des utilisateurs et sur l'utilisation des collections de la bibliothèque.

Mais, bien sûr, il y a aussi des inconvénients¹⁰.

Bruit. Le nombre de résultats et formats que les outils de découverte rapportent aux utilisateurs est écrasant, en particulier lors de recherches simples et non spécifiques. De plus, le grand nombre de résultats, associé au nombre croissant de types et de formats d'objets disponibles, crée un fouillis indécis de résultats. Dans un tel contexte, la plupart des utilisateurs ont besoin d'aide pour affiner leur recherche. En outre, dans de nombreux cas, les utilisateurs s'intéressent à un ensemble spécifique de ressources et l'utilisation des outils de découverte ne répond pas à leurs besoins d'information. De plus, il est apparu¹¹ que les utilisateurs, une fois qu'ils ont choisi l'outil de découverte, préfèrent poursuivre dans cette voie, même si un autre itinéraire peut être plus fructueux, pour des raisons de facilité d'utilisation.

Coût. Les outils de découverte sont également coûteux, tant du point de vue monétaire que du point de vue du temps du personnel. La conception et la configuration initiales du système, les tests et la mise en œuvre nécessitent du temps et des compétences spécialisées.

Attentes irréalistes des utilisateurs. Plusieurs bibliothécaires se sont inquiétés du fait que ces outils créent l'espoir que tout est disponible en ligne en texte intégral et que certains utilisateurs ont exprimé leur frustration et leur déception quand l'outil les a dirigés vers un livre physique, situé dans les étagères de la bibliothèque¹².

Différents acteurs et coordination. Les outils de découverte supposent une coordination entre les producteurs de contenus, les fournisseurs de solutions logicielles (Resource Discovery Service) et les bibliothèques. Contrairement aux autres types d'interfaces numériques plus

9| Way, D. (2010) *The Impact of Web-scale Discovery on the Use of a Library Collection*, dans *Serials Review*, Vol. 36, no. 4, pp. 214-220: <<http://dx.doi.org/10.1016/j.serrev.2010.07.002>>.

10| Hoy, M.B. (2012) *An Introduction to Web Scale Discovery Systems*, dans *Medical Reference Services Quarterly*, Vol. 31, n. 3, pp. 323-329.

11| Gross, J. et Sheridan, L. (2011) *Web Scale Discovery*, op cit. Hoy, M.B. (2012) *An Introduction to Web Scale Discovery Systems*, dans *Medical Reference Services Quarterly*, Vol. 31, n. 3, pp. 323-329.

12| Howard, D., et Wiebrands, C. (2011) *Culture Shock: Librarians' Response to Web Scale Search*: <<http://ro.ecu.edu.au/cgi/viewcontent.cgi?article=7208&context=ecuworks>>.

expérimentales, les outils de découverte font partie d'activités économiques réelles et la priorité est de définir l'impact de ces nouveaux services sur les modèles économiques de chacun¹³.

3. Pour réfléchir à ce qui manque et aux opportunités récentes, la publication intitulée "The Future of Library Resource Discovery"¹⁴ de Marshal Breeding nous aide. Dans son œuvre, l'auteur liste des fonctionnalités qui peuvent être implémentées ou qui n'ont pas été pleinement réalisées dans la génération actuelle de services de découverte. La liste des fonctionnalités comprend : la couverture des ressources pertinentes, l'internationalisation et la couverture multilingue, la couverture du matériel en accès libre, la recherche avancée et précise, le classement de pertinence, la facilité de découverte améliorée par le biais d'associations non textuelles, la liaison vers les ressources.

En particulier dans le domaine du droit, certains de ces développements seraient très utiles pour améliorer la recherche d'informations juridiques. On pense, par exemple, à la couverture multilingue. Les articles, les livres, les revues dans de nombreux domaines du droit font référence à des ordres juridiques nationaux spécifiques et sont publiés dans la langue de la juridiction considérée et analysée par les auteurs. La recherche multilingue reste une base pour le développement futur des services de découverte car le contenu représenté dans les index de découverte devient de plus en plus hétérogène par langage.

Par ailleurs, les services de découverte comprennent des ressources en accès libre publiées par des éditeurs commerciaux. Le défi est de savoir comment exposer du matériel en accès libre provenant de diverses sources. En particulier dans le domaine du droit, les dépôts institutionnels des universités, qui comprennent toutes les publications académiques, peuvent jouer un rôle important. De plus, un grand espace est dédié aux revues juridiques en accès libre, capables de résumer le développement et l'évolution de la science juridique. Également avec les blogs et les médias sociaux, la science juridique évolue rapidement : de nombreux articles de revues mentionnent, comme références bibliographiques, les blogs de chercheurs et de professionnels. La communauté des professionnels se rapproche de plus en plus de ces conteneurs qui se propagent rapidement pour leur simplicité de mise en œuvre et leur immédiateté de communication. On peut aussi affirmer, surtout dans le monde de la *common law*, que certains blogs sont devenus une source alternative aux ressources traditionnelles, avec lesquelles ils collaborent parfois, en maintenant le caractère dialogique avec les lecteurs.

13| Chartron, G. (2017) *Le document en prise aux outils de découverte dans les bibliothèques. Le Documents ?* CIDE. 20, Novembre 2017, Lyon: <https://hal.archives-ouvertes.fr/hal-01889403/document>.

14| Breeding, M. (2015) *The future of library resource discovery*. Baltimore: NISO, <http://www.niso.org/apps/group_public/download.php/14487/future_library_resource_discovery.pdf> .

De plus, l'une des opérations les plus critiques d'un service de découverte est la manière dont il fournit l'accès aux résultats sélectionnés par l'utilisateur. La construction des liens d'accès correspondants est faite par le résolveur de liens : il s'agit d'un outil qui «permet à l'utilisateur en consultant une référence bibliographique sur une base de données de se voir proposer un lien direct d'accès au texte intégral de sa référence, disponible sur le site d'un des fournisseurs de la bibliothèque. Le résolveur repose sur une base de connaissances qui contient les informations descriptives des ressources possibles et des droits d'accès des utilisateurs dans son contexte local. Un résolveur de lien est ainsi capable, pour une demande d'accès à un article, de spécifier à l'utilisateur toutes les versions possibles par rapport à son environnement : accès à une revue papier reçue, à des plateformes numériques auxquelles sa bibliothèque est abonnée, à des archives ouvertes.

Au cas où la bibliothèque n'aurait pas souscrit l'abonnement nécessaire, le résolveur permet également de proposer à l'utilisateur de relancer sa recherche sur le catalogue (revues imprimées) ou sur d'autres interfaces (autres catalogues, Google Scholar, Open access...)»¹⁵.

Néanmoins, Breeding continue en énumérant de nouvelles fonctionnalités qui devraient être apportées en réponse aux demandes des bibliothèques et utilisateurs. Cette liste inclue : fonctionnalités sociales, ensemble de données de recherche, découverte et accès aux matériaux de collection spéciaux, analyse, altimétriques.

Il s'agit de développer des fonctionnalités afin que les utilisateurs puissent interagir avec leurs collections de différentes manières. Les possibilités d'activation des interactions sociales dépendraient de mécanismes permettant une interopérabilité entre les écosystèmes de services de découverte et ceux de réseaux sociaux externes. La possibilité de créer un lien vers un ensemble de données à partir d'articles publiés basés sur ces données permettra également à d'autres utilisateurs de valider ou de répliquer les résultats ou d'effectuer des études connexes sur la base de ces données. En outre, les bibliothèques et les éditeurs devraient s'intéresser à la capacité de mesurer la performance de leur service de découverte et aux ressources récupérées à la suite de leur utilisation. Enfin, des mesures alternatives relatives à la description de l'impact des ressources de recherche et de la performance des bibliothèques universitaires sont sans doute nécessaires. Il est possible de réfléchir au fait de savoir si elles peuvent être utilisées dans des algorithmes de pertinence pour aider à identifier des ressources ayant un intérêt ou une qualité supérieurs.

15| Coudrin, D. et Hatt, G. (2014) *Intégrer, signaler les ressources électroniques : 20 questions clés*, dans Barron G. et Le Goff-Janton P. (Eds) : *Intégrer des ressources numériques dans les collections*. Villeurbanne : Presses de l'Enssib, p. 102.

4.

Nous proposons quelques réflexions finales sur les effets de ces outils également dans la perspective de l'activité de recherche dans le domaine juridique.

Premièrement, nous pouvons dire que les outils de découverte ont déterminé un changement de paradigme. L'outil de découverte parfait devrait englober et dépasser les collections et les abonnements de la bibliothèque, permettant ainsi une «vraie» découverte d'information. Il accorde donc plus d'importance à la découverte qu'à la simple recherche. Effectuer une recherche signifie avoir en tête un document ou une information qu'on souhaite récupérer. La recherche est réalisée en formulant une requête pour créer une correspondance avec le contenu que l'utilisateur veut récupérer. Les termes utilisés tendent à être plutôt descriptifs, à qualifier exactement les besoins d'information, laissant peu ou pas de marge d'ambiguïté. D'autre part, la découverte est devenue le mot du jour dans les mondes de la bibliothèque, de l'édition et de la communication scientifique. Bien qu'elle soit utilisée fréquemment et dans de multiples contextes, elle reste mal définie. Une définition stricte voudrait que la découverte soit le processus consistant à découvrir ou à mettre en lumière ce qui était auparavant inconnu. À certains égards, on pourrait faire valoir qu'il s'agit d'un mélange de recherche délibérée - un processus ciblé conçu pour révéler quelque chose dont on connaît l'existence - et d'un fort hasard qui consiste à trouver des informations pertinentes tout en recherchant ou en manipulant des informations. Certainement, la découverte représente une gamme d'actions et d'interactions de l'utilisateur qui pourraient révéler quelque chose de précieux. Donc, la voie de la découverte suit une approche plus exploratoire, souvent motivée par un besoin générique, en tout cas moins explicitement énoncée.¹⁶

À l'instar de ce qui se passe sur le Web, où les liens hypertextes facilitent un mouvement rapide entre les sujets et les informations connexes, un outil de découverte accompagne les résultats d'une série de volets, qui peuvent être utilisés comme des liens. Ces liens représentent les différents résultats obtenus et permettent de se déplacer dans le contexte d'information délimité. Les outils proposent une approche différente de l'information. Ils ont pour objectif de susciter la prise de conscience, plutôt que de donner une réponse spécifique, en agrégeant du contenu lié à des domaines d'intérêt particuliers.

En deuxième lieu et du côté des utilisateurs juridiques, l'outil de découverte est adapté aux recherches très larges plutôt qu'aux recherches précises, ce qui le rend davantage susceptible de répondre aux besoins des étudiants. Il permettrait de débroussailler un sujet, en fournissant

16| Akeroyd, J. (2017) *Discovery systems : Are they now the library?*, dans *Learned Publishing*, Vol. 30, n. 1, pp. 87-90.

une vision d'ensemble très rapide, mais serait moins performant pour une recherche fine pour laquelle ce sont plutôt les bases de données spécifiques qui restent pertinentes. Pour les chercheurs et les étudiants avancés, l'outil pourra difficilement se substituer à des bases de données spécifiques ou à la plateforme à laquelle ces publics sont habitués : plateforme d'un éditeur, bases de données, liste des revues juridiques.

La littérature concernant cette matière¹⁷ signale aussi que les outils de découverte à index général centralisé peuvent conduire à masquer la complexité du processus de recherche d'information en raison de l'immédiateté des ressources proposées. Cela est aussi vrai dans la recherche d'informations juridiques. La disponibilité immédiate de l'accès au texte intégral peut inciter à télécharger un résultat en texte intégral juste parce que celui-ci est disponible.

Par ailleurs, les utilisateurs de l'information juridique sont souvent d'origine différente (citoyens, monde académique, professionnels du droit, personnel des cours...) et souvent les outils de découverte ne sont pas toujours appropriés pour tous ces types d'utilisateurs. Si nous pensons à un professeur universitaire, expert dans un domaine spécifique, il/elle a une approche/méthode de recherche qui n'a pas nécessairement besoin du support d'un outil de découverte. Les utilisateurs plus avancés peuvent trouver que les bases de données de disciplines spécifiques continuent de fournir une meilleure expérience de recherche. Au contraire, un étudiant en droit, qui aborde un sujet général pour la première fois, a besoin d'un outil de découverte pour obtenir un aperçu sur le sujet.

Bien sûr, cela s'applique également dans le cas où l'on considère les divers types de bibliothèques. La bibliothèque universitaire, qui est équipée d'un outil de découverte utile pour le secteur juridique, offrira à ses utilisateurs un service profitable pour la recherche juridique ; au contraire, dans les bibliothèques qui couvrent des domaines spécifiques du droit, le catalogue de la bibliothèque et les ressources sélectionnées par les bibliothécaires (bases de données, revues électroniques, etc.) pourraient pleinement satisfaire les experts juridiques.

L'exploitation d'outils de découverte n'est certainement qu'une phase du processus de recherche juridique, processus complexe qui ne se résout pas par l'exploration des ressources, mais nécessite l'évaluation, l'interprétation et la connexion avec les autres sources pertinentes pour l'étude du droit. Les outils de découverte sont très utiles pour naviguer dans le vaste univers de l'information juridique, mais ils ne sont qu'un début. Les solutions réelles à des problèmes juridiques complexes nécessitent bien sûr une analyse et des conclusions approfondies.

17| Breitbach, W. (2012) *Web-Scale Discovery: A Library of Babel?* in *Planning and Implementing Resource Discovery Tools in Academic Libraries*. Hershey, PA: IGI Global, p. 637-645; Guthrie A. et McCoy R. (2014) *A Glimpse at Discovery Tools within the HBCU Library Landscape*, dans Spencer J. and Millson-Martula C. (Eds) *Discovery tools: the next generation of library research*. London: Routledge/Taylor & Francis, p. 177-191.

Enfin, une dernière réflexion concerne le rôle des bibliothécaires qui restent les principaux acteurs de l'action. Les professionnels de l'information ont un rôle fondamental à jouer pour sélectionner, mettre en œuvre et évaluer l'outil de découverte approprié pour les contextes spécifiques, mais aussi pour former les utilisateurs à bien exploiter ces outils et les aider à interpréter les résultats de leurs requêtes. L'articulation de ces outils avec l'environnement informatique des bibliothèques est également un point crucial de leur mise en œuvre et une condition préalable à leur bon fonctionnement. C'est pourquoi, Breeding conseillait aux bibliothèques de ne pas réfléchir simplement en termes de fonctionnalités offertes : "Checklists of functionality can be misleading relative to the actual performance of any given system in its daily operation in a library"¹⁸.

Ce sont donc les bibliothèques qui doivent paramétrer, avec leurs partenaires, l'index central (quelles ressources seront indexées...), les résolveurs de liens pour valoriser au mieux les ressources disponibles pour leurs utilisateurs, intégrer les systèmes d'authentification de façon transparente dans le service proposé. Elles ont aussi un rôle majeur sur le paramétrage de l'algorithme qui classera les réponses aux requêtes des utilisateurs. La valeur du service dépendra en grande partie du travail de coordination entre les producteurs des contenus, les fournisseurs des solutions logicielles et les bibliothèques. Dans le domaine du droit, les professionnels de l'information ont une position unique pour conduire le changement de manière efficace dans le contexte très particulier introduit par les révolutions du numérique et des réseaux dans les bibliothèques.

En conclusion, l'avenir de la recherche juridique documentaire peut consister à rassembler les divers silos d'information sous un même outil de recherche. Les outils de découverte peuvent être considérés comme le service idéal du «tout-en-un» pour l'utilisateur. Il permet d'envisager un continuum d'usage en intégrant les ressources papier accessibles dans les bibliothèques et les ressources numériques mises à disposition. La simplicité mais aussi l'exhaustivité associée à un algorithme de pertinence sont les caractéristiques principales de cet outil. Pour les bibliothèques juridiques en particulier, l'enjeu majeur est à la fois de retenir l'attention de ses utilisateurs juridiques par des services concurrençant l'expérience Google et de valoriser toutes les ressources qu'elle a sélectionnées et achetées.

18| Breeding, M. (2015) *Library Services Platforms : A Maturing Genre of Products*, dans *Library Technology Reports*, Vol. 51, n. 4 (Mai/Juin 2015), p. 5 <<https://journals.ala.org/index.php/ltr/article/view/5686>>.

Part III

Les défis liés à l'évolution des ressources

Copyright and libraries

It is undoubtedly an honour, as I explained to the people who invited me to this study day, that some might think usurped since, as far as I am concerned, my specialisation is rather Swiss inheritance law.

Talking about copyright today is therefore a challenge for several reasons. I am not strictly specialised in the subject and as head of the library of the Law Faculty of the University of Fribourg (Switzerland), I have the impression that questions relating to copyright law are, in the end, rather few in number in the daily work despite their importance in enabling it. Moreover, if such questions arose, they would more often be in the Swiss law perspective. This opportunity to talk about copyright in international law allows me, above all, to return to the foundations that make possible our work as information specialists.

Ultimately, the challenges posed by copyright in libraries are universal since, on the one hand, the primary purpose of libraries is similar and, on the other hand, the legal property protected by copyright is the same.

What are we going to talk about in the next few minutes?

I will first briefly discuss copyright in order to establish the framework and then I will discuss some of our actions in our libraries in relation to copyright. Finally, a discussion will be proposed in order to exchange on our practices and the challenges that still await us in the future regarding this theme.

What is copyright?

A glance at the retro shows us that the idea of protecting authors dates back to the early 18th century in England. It would be Queen Anne who would have provided the first regulation reserving to authors the exclusive right to print and reprint their unpublished books.

Previously, these rights were, in principle, granted by the royal power to publishers and printers in return for censoring the publication of content. Since 1450 and the development of printing by Gutenberg, the distribution of works had expanded and access to the written word had gradually become more widespread, hence the need for some control.

During the 19th century, it was doctrine and jurisprudence, particularly in France and Germany, that developed the main principles of «literary and artistic property».

By publishing in 1838 his «Traité sur les droits d'auteur dans la littérature» Augustin-Charles Renouard enshrined the formula «droit d'auteur» which was intended to be in opposition to the expression *literary property*. We gradually leave the field of material support, copying, paper and ink to consider the work of the mind, whatever its form.

In 1886, the Berne Convention was adopted, which concerns the protection of works and authors' rights in their works. It offers creators (authors, musicians, poets, painters, etc.) the means to control how their works can be used, by whom and under what conditions.

While the 20th century has brought its share of advances, the foundations have remained essentially the same. However, since the 1990s, the development of the Internet and new information and communication technologies (NICTs) has enabled a major advance in the possibilities for the interactive dissemination of knowledge and know-how. Democratised and facilitated access to NICTs is accompanied by a strong movement to question the legitimacy of copyright or exhibition rights, which goes so far as to question free access to the artistic heritage.

At European level, since 2016, MEPs have been working on a highly controversial reform of the Copyright Directive. This controversy pits two sides against each other: on the one hand, there are artistes, journalists and press companies. On the other hand, there are the giants of the digital sector and the supporters of «freedom» to publish on the Internet. This reform should introduce a new right related to copyright that would force online information platforms to pay publishers more if their production is put online. On 12 September, parliamentarians voted in favour of this reform, to the great displeasure of the Internet giants.

But what does copyright protect?

It protects original intellectual works, from their creation, even if they are unpublished or unfinished. No registration formality or material fixation of the work is necessary to benefit from copyright. In most countries, it is therefore not necessary to include the words «all rights reserved» or the symbol ©, which only serve to indicate that the work is protected by copyright, and not to confer legal protection. However, a voluntary registration may be useful to prove his authorship, or to facilitate the collective management of rights.

The qualification of the work of the mind presupposes the existence of a creation of form perceptible by the senses. The ideas expressed in the work, which are of free course, are not

protected in themselves. Therefore, for copyright infringement to exist, the original form in which ideas are expressed must be copied. For example, copyright prohibits the reproduction of Mickey Mouse's character, but does not prohibit the creation of anthropomorphic mice in general. An author can use this idea to create an original work.

What is the term of protection?

The protection of a work is effective from the creation and lasts for 70 years. This period shall be counted from the death of the author or the last of the surviving co-authors. In the case of an anonymous work, the period begins to run from the moment the work is made accessible to the public.

Then it falls into the public domain.

What are the author's rights?

These rights, defined in each national legislation with their own words, overlap very broadly since the origin is common at European level.

First, the author has a moral right, which recognises in the work the expression of the author's personality and protects it as such. Moral rights include several rights, which has sometimes led the doctrine to speak of «moral rights» rather than «moral rights». The author's moral right is similar to personality rights, such as the right to privacy. Like these rights, it is inherent to the person and inalienable.

When a work is original and, as such, protected by copyright, the law gives the author a monopoly to exploit his work and especially a series of prerogatives that will allow him to exploit and make his creations profitable. These are the economic rights of reproduction and communication to the public.

With regard to the right of reproduction, it gives the sole author of a protected work the right to reproduce it or to authorise its reproduction, in any manner and in any form whatsoever. Reproduction can be material or immaterial and can be carried out by all technical means, whether graphic, analogue or digital. The distribution of a creation on the Internet also requires the implementation of the reproduction right, throughout the various stages of the circulation process, whether during its recording or encoding on a digital medium, during its insertion in a database or on a site, during the actual transmission of files or during their download.

The author's monopoly on reproduction suffers from a few exceptions. For example, if private reproduction of works is reserved for the family circle, there is no need to require the authorisation of the rights holder.

Similarly, short quotations, such as for educational purposes, are not subject to certain conditions to obtain permission from the author.

By the right of communication to the public, the author becomes the only person entitled to communicate a work to the public by any means whatsoever.

Finally, copyright appears to be an economic regulation, where the author's personality and the quality of his work have not been neglected. The legislator allows artists to continue to live off their art, even after having alienated their creations. They can exploit their works or authorise their exploitation thanks to the multiple reproduction and communication techniques at their disposal and the monopoly of exploitation that has been recognised by law.

In addition to copyright, mention should also be made of neighbouring rights which grant artists, producers and television stations, for example, rights similar to those granted to authors.

When works are widely distributed, it is in practice difficult for authors to conclude an authorisation contract with each user. Authors therefore most often assign the rights to their works created or to be created to societies that manage them on their behalf. As this topic is not the subject of my speech, I will not expand on it.

What are our daily actions in libraries that are problematic in relation to copyright?

The lending of paper books does not pose any particular problem, especially since this task goes back to the origins of libraries, long before the reflections establishing law. In Switzerland, the authors' representatives would like to be able to introduce a lending right, i.e. an indemnity due by libraries for loans made in their institutions. At European level, this is provided for in Directive 92/100/EEC, as amended by Directive 2006/115/EC. It should be noted that this lending right calls into question the universal mission of libraries to make works available. During the consultation procedure on the Swiss draft law, the article establishing the lending right was the subject of a major outcry.

Books are now coming in more and more regularly with electronic versions for download. This practice is very convenient for transporting the document and poses many problems for libraries. Indeed, implicitly, the document in electronic format is intended to be available to the

buyer of paper documents. The idea is to download it to a computer or tablet by one person. The question therefore arises as to how to make this resource available to the public in our institutions. The copyright issue in this case is the exploitation right granted to the author. It is he who can decide how he wishes to exploit and then distribute his work. If a library chooses to make these electronic versions available to as many people as possible, it must ask the author for permission because this prerogative belongs to it.

The easiest way for libraries would therefore be to acquire e-books that are already planned to be shared. Authors have the opportunity to maintain control over their work through DRMs. The purpose of these digital rights management systems is to control the use made of digital works. For libraries, these DRMs represent an important constraint in their mission of making works available. How can they make e-books available to people who do not have a computer? While scientific library audiences should not have problems at this level, public reading libraries may face more difficulties. One solution could be to print these e-books and make them available. For this, the library will have to ask the author's authorisation because, the modification of the work's support is a prerogative of the author alone.

This change in support is also problematic in the context of interlibrary loan. Indeed, in the case of journal articles, it is very common to send photocopies. Until then, the issue of copyright enforcement can be resolved quite easily. However, when these same photocopies become scans sent by e-mail, the problem immediately reappears.

Worse still, in the context of licensed electronic resources, do we ask ourselves what this allows us to do? As file transfer is clearly a way of distributing a work, it should be checked that the license granted provides for this possibility. Similarly, when we indicate an IP-range for access to a resource, which defines a circle of people authorised to access the data, is it possible to use a VPN (virtual private network) in order to free oneself from the institution's walls?

In terms of licensing, Creative Commons. The latter were created by a non-profit association whose purpose is to offer a legal alternative solution to people wishing to free their works from the standard intellectual property rights of their country, which are considered too restrictive.

Six possibilities exist, combinations of four poles defining the different uses:

- *Assignment*: signature of the original author (mandatory under French law) (acronym: **BY**)
- *Non-Commercial*: prohibition to make a commercial profit from the work without the author's authorisation (acronym: **NC**)

- *No derivative works*: impossibility of integrating all or part of a composite work; *sampling*, for example, becoming impossible (acronym: **ND**)
- *Share alike*: sharing of the work, with an obligation to redistribute under the same or a similar license (later or localised version) (acronym: **SA**)

Example of a combination: *Creative Commons BY-NC-SA*, which is the Attribution-Non-Commercial-Share license.

The CC0 (or CC0) license is a special case and is close to the public domain.

The aim is to encourage in a simple and lawful way the circulation of works, exchange and creativity. Creative Commons is intended for authors who prefer to share their work and enrich the common heritage of culture and freely accessible information. The work can thus evolve throughout its diffusion.

Thanks to these licenses, authors have the direct possibility to indicate what form the sharing can take, without the need to conclude a contract. For their part, libraries know exactly what they can do with the documents they make available to their audiences.

During these few minutes, I talked about books, but there are obviously other activities that can be problematic. Indeed, have you ever illustrated an event with an image, a poster? In this case too, the considerations I have just outlined must be transposed in order to respect the rights of the artist. In this case, the search for royalty-free images is made easier thanks to the Internet.

In the context of copyright, it is also necessary to mention open access. *Open access* is the provision of digital content online, which can itself be either free (Creative commons) or under one of the intellectual property regimes. *Open access* is mainly used for articles from peer-reviewed academic research journals. In reality, we should distinguish between free access (free *open access* in English) and *free open access (gratis open access)*, in order to distinguish more clearly between what is «simply» free access for the Internet user (open access) and what is free and open access, because it is subject to a so-called free use license (Creative commons, for example). Open access can, in theory, include access to data to enable *data mining*, but this is generally not the case.

There are two types of open access with many variations.

- In open access publishing, also known as the «gold» path of *Gold Open Access*, journals make their articles directly and immediately accessible to the public. These publications are called «*Open access journals*».

- By self-archiving, also known as the «green» path of open access, authors deposit copies of their articles in an open archive.

Open access is currently the subject of much discussion among academics, librarians, university administrators, scientific publishers and politicians. There is substantial disagreement on the concept of open access, with a major debate about its economic remuneration.

In Switzerland, the National Fund for Scientific Research has planned that, by 2024, all research financed by this fund will be published in Open Access.

These approaches are free of strict copyright and aim to share knowledge. If Open Access is mainly related to scientific articles, it also extends to monographs. In the same direction, we know the Open Source software that allows us to collaborate on the same project in order to make it evolve. *Open science* is a movement to make scientific research, data and their dissemination accessible.

This openness, while knowledge can be better disseminated, also represents a major challenge for libraries, as the main question is in what form to allow access and how to make this parameter part of the libraries' mission.

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Le droit d'auteur et les bibliothèques

C'est sans doute un honneur, comme je l'ai expliqué aux personnes qui m'ont invité à cette journée d'étude, que d'aucuns pourraient penser usurpé puisque, en ce qui me concerne, ma spécialisation est plutôt le droit successoral suisse.

Parler du droit d'auteur aujourd'hui est donc un véritable défi, et ce pour plusieurs raisons. Je ne suis pas à proprement parler spécialisé dans ce domaine et j'ai l'impression, en tant que responsable de la bibliothèque de la Faculté de Droit de l'Université de Fribourg (Suisse), que les questions relatives au droit d'auteur sont finalement assez peu nombreuses dans le travail quotidien malgré leur importance pour le permettre. En outre, si de telles questions se posaient, elles se situeraient plus souvent dans le cadre du droit suisse. Cette occasion de parler du droit d'auteur au niveau du cadre juridique international me permet avant tout de revenir sur les fondements qui rendent possible notre travail de spécialistes de l'information.

Finalement, les défis posés par le droit d'auteur dans les bibliothèques sont universels puisque, d'une part, le but premier des bibliothèques est similaire et, d'autre part, le bien juridique protégé par le droit d'auteur est le même.

De quoi allons-nous donc parler ces prochaines minutes ?

Je vais, dans un premier temps, aborder, succinctement le droit d'auteur afin de poser le cadre puis j'aborderai certaines de nos actions dans nos bibliothèques en lien avec le droit d'auteur finalement; une discussion sera proposée afin d'échanger sur nos pratiques et sur les défis qui nous attendent encore à l'avenir à propos de cette thématique.

Qu'est ce que le droit d'auteur ?

Un coup d'œil dans le rétro nous apprend que l'idée de protéger les auteurs remonte au début du 18ème siècle en Angleterre. Ce serait la reine Anne qui aurait prévu la première réglementation réservant aux auteurs le droit exclusif d'imprimer et de réimprimer leurs livres encore non publiés.

Auparavant, ces droits étaient, en principe, accordés par le pouvoir royal aux éditeurs et imprimeurs en contrepartie de la censure exercée sur la publication des contenus. Depuis 1450 et le développement de l'imprimerie par Gutenberg, la diffusion des œuvres s'était élargie et l'accès à l'écrit avait pu, peu à peu, se généraliser, d'où la nécessité d'un certain contrôle.

Dans le courant du XIX^e siècle, ce sont la doctrine et la jurisprudence, notamment françaises et allemandes, qui font évoluer les grands principes de la « propriété littéraire et artistique ».

En publiant en 1838 son « Traité sur les droits d'auteur dans la littérature » Augustin-Charles Renouard consacre la formule « droit d'auteur » qui se veut en opposition avec l'expression *propriété littéraire*. On quitte progressivement le terrain du support matériel, de la copie, du papier et de l'encre pour considérer l'œuvre de l'esprit, quelle que soit sa forme.

En 1886, est adoptée la Convention de Berne qui porte sur la protection des œuvres et des droits des auteurs sur leurs œuvres. Elle offre aux créateurs (auteurs, musiciens, poètes, peintres, etc.) les moyens de contrôler la manière dont leurs œuvres peuvent être utilisées, par qui et sous quelles conditions.

Si le XX^e siècle a apporté son lot d'avancées, les fondements sont restés sensiblement les mêmes. Depuis les années 1990 toutefois, le développement d'Internet et des nouvelles technologies de l'information et de la communication (NTIC) permet une avancée majeure dans les possibilités de diffusion interactive des savoirs et savoir-faire. L'accès démocratisé et facilité aux NTIC s'accompagne d'un fort mouvement de remise en question de la légitimité du droit d'auteur ou du droit d'exposition qui va jusqu'à remettre en question l'accès gratuit au patrimoine artistique.

Au niveau européen, les députés s'affairent depuis 2016 à une réforme très controversée de la directive sur le droit d'auteur. Cette controverse oppose deux camps : d'un côté il y a des artistes, des journalistes et des entreprises de presse, de l'autre, il y a les géants du secteur numérique et les partisans de la « liberté » de publication sur Internet. Cette réforme devrait introduire un nouveau droit voisin au droit d'auteur qui contraindrait les plateformes d'information en ligne à rétribuer davantage les éditeurs si leur production est mise en ligne. Le 12 septembre dernier, les parlementaires ont voté en faveur de cette réforme, au grand dam des géants du net.

Mais que protège donc le droit d'auteur ?

Il protège les œuvres de l'esprit originales, dès leur création, mêmes si elles sont inédites ou inachevées. Aucune formalité d'enregistrement ou fixation matérielle de l'œuvre n'est nécessaire pour bénéficier du droit d'auteur. Dans la plupart des pays, il n'est donc pas nécessaire d'inscrire la mention « tous droits réservés », ni le symbole ©, qui ne servent qu'à indiquer que l'œuvre est protégée par le droit d'auteur, et non à conférer la protection juridique. Un enregistrement volontaire peut toutefois s'avérer utile pour prouver sa qualité d'auteur, ou pour faciliter la gestion collective des droits.

La qualification d'œuvre de l'esprit suppose l'existence d'une création de forme perceptible par les sens. Les idées exprimées dans l'œuvre, qui sont de libre parcours, ne sont pas protégées en elles-mêmes. En conséquence, pour qu'il existe une atteinte au droit d'auteur, la forme originale par laquelle les idées sont exprimées doit être copiée. À titre d'exemple, le droit d'auteur interdit la reproduction du personnage de Mickey Mouse, mais n'interdit pas la création de souris anthropomorphiques en général. Un auteur peut ainsi reprendre cette idée pour créer une œuvre originale.

Quelle est la durée de protection ?

La protection d'une œuvre est effective dès la création et se prolonge pendant 70 ans. Ce délai est à compter à partir du décès de l'auteur ou du dernier des coauteurs survivants. S'il s'agit d'une œuvre anonyme, le délai commence à courir dès le moment où l'œuvre est rendue accessible au public.

Ensuite, elle tombe dans le domaine public.

Quels sont les droits de l'auteur ?

Ces droits, définis dans chaque législation nationale avec des mots propres, se recoupent très largement puisque l'origine est commune au niveau européen.

En premier lieu, l'auteur bénéficie d'un droit moral, qui reconnaît dans l'œuvre l'expression de la personnalité de l'auteur et la protège à ce titre. Le droit moral regroupe plusieurs droits, ce qui a parfois conduit la doctrine à parler de « droits moraux » plutôt que de « droit moral ». Le droit moral de l'auteur se rapproche des droits de la personnalité, tels que le droit au respect de la vie privée. Comme ces droits, il est inhérent à la personne et inaliénable.

Lorsqu'une œuvre est originale et, à ce titre, protégée par le droit d'auteur, la loi investit l'auteur d'un monopole d'exploitation de son œuvre et spécialement d'une série de prérogatives qui lui permettront d'exploiter et de rentabiliser ses créations. Il s'agit des droits patrimoniaux de reproduction et de communication au public.

Concernant le droit de reproduction, il donne au seul auteur d'une œuvre protégée le droit de la reproduire ou d'en autoriser la reproduction, de quelque manière et sous quelque forme que ce soit. La reproduction peut être matérielle ou immatérielle et être mise en œuvre par tous les moyens techniques, qu'ils soient graphiques, analogiques ou numériques. La diffusion d'une création sur Internet nécessite également la mise en œuvre du droit de reproduction,

tout au long des différents stades du processus de mise en circulation, que ce soit lors de son enregistrement ou de son encodage sur un support numérique, lors de son insertion dans une base de données ou sur un site, lors de la transmission proprement dite de fichiers ou lors de leur téléchargement.

Le monopole de l'auteur en matière de reproduction souffre de quelques exceptions. Par exemple, si la reproduction privée d'œuvres est réservée au cercle familial, il n'y a pas besoin de requérir l'autorisation du titulaire des droits.

De même, les courtes citations, la reproduction à des fins didactiques par exemple, échappent, à certaines conditions, à la nécessité d'obtenir une autorisation de l'auteur.

Par le droit de communication au public, l'auteur devient le seul ayant droit à communiquer une œuvre au public par quelque procédé que ce soit.

Finalement, le droit d'auteur apparaît comme une réglementation de nature économique, où la personnalité de l'auteur et la qualité de son œuvre n'ont pas été négligées. Le législateur permet aux artistes de continuer à vivre de leur art, même après avoir aliéné leurs créations. Ils peuvent exploiter leurs œuvres ou en autoriser l'exploitation grâce aux multiples techniques de reproduction et de communication mises à leur disposition et au monopole d'exploitation qui leur a été reconnu par la loi.

Parallèlement au droit d'auteur, il convient également de mentionner les droits voisins qui reconnaissent aux artistes, aux producteurs et aux télévisions par exemple, des droits similaires à ceux qui sont attribués aux auteurs.

Lorsque les œuvres font l'objet d'une diffusion importante, il est, en pratique, difficile pour les auteurs de conclure un contrat d'autorisation avec chaque utilisateur. Les auteurs cèdent donc le plus souvent les droits sur leurs œuvres créées ou à créer à des sociétés qui en assurent la gestion pour leur compte. Ce thème n'étant pas le propos de mon intervention, je ne m'y étendrai pas.

Quelles sont nos actions quotidiennes, en bibliothèques, qui posent problème en lien avec le droit d'auteur ?

Le prêt d'ouvrages papier ne pose pas de problème particulier, ce d'autant que cette tâche remonte aux origines des bibliothèques, soit bien avant les réflexions instituant le droit. En

Suisse, les représentants des auteurs souhaitent pouvoir introduire un droit de prêt, soit une indemnité due par les bibliothèques pour les prêts effectués dans leurs institutions. Au niveau européen, cela est prévu dans la directive 92/100/CEE, modifiée par la directive 2006/115/CE. Il est à noter que ce droit de prêt remet en cause la mission universelle de mise à disposition d'œuvres par les bibliothèques. Lors de la procédure de consultation du projet de loi suisse, l'article instituant le droit de prêt a fait l'objet d'une importante levée de boucliers.

Les ouvrages arrivent aujourd'hui, de plus en plus régulièrement, avec les versions électroniques à télécharger. Bien pratique pour transporter le document, cette pratique pose bien des problèmes aux bibliothèques. En effet, implicitement, le document au format électronique est prévu pour être à disposition de l'acheteur de document papier. L'idée est de le télécharger sur un ordinateur ou une tablette par une personne. La question se pose donc de savoir comment mettre à disposition cette ressource au public de nos institutions. La problématique du droit d'auteur, dans ce cas, se situe au niveau du droit d'exploitation octroyé à l'auteur. C'est lui qui peut décider de quelle façon il souhaite exploiter puis distribuer son œuvre. Si une bibliothèque fait le choix de mettre à disposition du plus grand nombre ces versions électroniques, elle doit en demander l'autorisation à l'auteur, car cette prérogative lui appartient.

Le plus simple pour les bibliothèques serait donc d'acquérir des e-books qui sont déjà prévus pour être partagés. Les auteurs ont, en effet, la possibilité de garder un contrôle sur leur œuvre grâce aux DRM. Ces digital rights management ont pour objectif de contrôler l'utilisation qui est faite des œuvres numériques. Pour les bibliothèques, ces DRM représentent une contrainte importante dans leur mission de mise à disposition des œuvres. Comment peuvent-elles mettre à disposition des e-books à des personnes qui n'ont pas d'ordinateur ? Si les publics des bibliothèques scientifiques ne devraient pas avoir de problème à ce niveau-là, les bibliothèques de lecture publique risquent de rencontrer plus de difficultés. Une solution pourrait être d'imprimer ces e-books pour les mettre à disposition. Pour cela, la bibliothèque devra demander l'autorisation de l'auteur car, la modification du support de l'œuvre est une prérogative du seul auteur.

Cette modification du support pose également problème dans le cadre du prêt entre bibliothèques. En effet, dans le cas d'articles de revues, il est très courant d'envoyer des photocopies. Jusque-là, la question du respect de droit d'auteur peut être résolue assez facilement. Par contre, quand ces mêmes photocopies deviennent des scans envoyés par e-mail, la problématique ressurgit immédiatement.

Pire encore, dans le cadre de ressources électroniques fournies sous licence, est-ce que nous nous posons la question quant à ce que cette dernière nous permet de faire ? Le transfert de fichiers étant manifestement une manière de distribuer une œuvre, il convient de contrôler

que la licence accordée prévoit cette éventualité. Pareillement, est-ce que lorsque nous indiquons un IP-range pour l'accès à une ressource, ce qui définit un cercle de personnes autorisées à accéder aux données, est-il possible d'utiliser un VPN (virtual private network) afin de s'affranchir des murs de l'institution ?

En matière de licences, les licences Creative Commons. Ces dernières ont été créées par une association à but non lucratif dont la finalité est de proposer une solution alternative légale aux personnes souhaitant libérer leurs œuvres des droits de propriété intellectuelle standard de leur pays, jugés trop restrictifs.

Six possibilités existent, combinaisons de quatre pôles définissant les différents usages :

- *Attribution* : signature de l'auteur initial (obligatoire en droit français) (sigle : **BY**)
- *Non Commercial* : interdiction de tirer un profit commercial de l'œuvre sans autorisation de l'auteur (sigle : **NC**)
- *No derivative works* : impossibilité d'intégrer tout ou partie dans une œuvre composite ; l'échantillonnage (*sampling*), par exemple, devenant impossible (sigle : **ND**)
- *Share alike* : partage de l'œuvre, avec obligation de rediffuser selon la même licence ou une licence similaire (version ultérieure ou localisée) (sigle : **SA**)

Exemple de combinaison : *Creative Commons BY-NC-SA*, qui est la licence Attribution-Non Commercial-Partage à l'identique.

La Licence CC0 (ou CC0) est un cas spécial et se rapproche du domaine public.

Le but recherché est d'encourager de manière simple et licite la circulation des œuvres, l'échange et la créativité. Creative Commons s'adresse ainsi aux auteurs qui préfèrent partager leur travail et enrichir le patrimoine commun de la culture et de l'information accessible librement. L'œuvre peut ainsi évoluer tout au long de sa diffusion.

Grâce à ces licences, les auteurs ont directement la possibilité d'indiquer quelle forme le partage peut prendre, sans avoir besoin de conclure de contrat. De leur côté, les bibliothèques savent exactement ce qu'elles peuvent faire avec les documents qu'elles mettent à dispositions de leurs publics.

Durant ces quelques minutes, j'ai parlé d'ouvrages mais il y a évidemment d'autres activités qui peuvent poser problème. En effet, avez-vous déjà illustré une manifestation avec une image, une affiche ? Dans ce cas également, il convient de transposer les considérations que

je viens d'esquisser pour respecter les droits de l'artiste. Dans ce cas, la recherche d'images libres de droit est facilitée grâce à internet.

Dans le cadre du droit d'auteur, il faut également mentionner l'open access. Le libre accès (en anglais : *open access*) est la mise à disposition en ligne de contenus numériques, qui peuvent eux-mêmes être soit libres (Creative commons), soit sous un des régimes de propriété intellectuelle. L'*open access* est principalement utilisé pour les articles de revues de recherche universitaires, sélectionnés par des pairs. On devrait, en réalité, distinguer le libre accès (libre *open access* en anglais) et l'accès ouvert (*gratis open access*), afin de distinguer plus nettement ce qui est « simplement » en accès gratuit pour l'internaute (accès ouvert) et ce qui est en accès gratuit et libre, parce que soumis à une licence d'utilisation dite libre (Creative commons, par exemple). Le libre accès peut, en théorie, inclure l'accès aux données afin de permettre le *data mining*, mais ce n'est en général pas le cas.

Il existe deux types de libre accès avec de nombreuses variations.

- Dans la publication en libre accès, également connue comme la voie en « or » du libre accès (*Gold Open Access*), les revues rendent leurs articles directement et immédiatement accessibles au public. Ces publications s'appellent des « revues en accès ouvert » (« *Open access journals* »).
- par auto-archivage, aussi appelé la voie « **verte** » du libre accès, les auteurs déposent des copies de leurs articles sur une archive ouverte.

Le libre accès est actuellement à l'origine de beaucoup de discussions entre universitaires, bibliothécaires, administrateurs d'universités, éditeurs scientifiques et politiciens. Il existe un désaccord substantiel sur le concept de libre accès, avec un grand débat autour de sa rémunération économique.

En Suisse, le Fonds National pour la Recherche Scientifique a prévu que, d'ici à 2024, la totalité des recherches financées par ce fonds soit publiée en Open Access.

Ces démarches s'affranchissent du strict droit d'auteur et visent à partager les savoirs. Si l'Open Access se trouve principalement en relation avec les articles scientifiques, cela déborde également sur les monographies. Dans la même direction, on connaît les logiciels Open Source qui permettent de collaborer à un même projet afin de le faire évoluer. La science ouverte (*open science*) est, quant à elle, un mouvement visant à rendre la recherche scientifique, les données et leur diffusion accessibles.

Cette ouverture, si le savoir peut mieux être diffusé, représente également un défi de taille pour les bibliothèques car la grande question est de savoir sous quelle forme permettre l'accès et comment faire entrer ce paramètre dans la mission des bibliothèques.

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European Union law and German law

Abstract:

Digitisation causes a great number of changes. It enables researchers to use new methods. Communication among scholars as well as between scholars and economy/society is reorganised on the basis of radical technological changes. These changes also put into question established business models and prompt law makers to adapt the law in order to preserve established or support new business models. Copyright law is one of the main “battle fields” for the conflicts induced by these changes. The talk will focus on two aspects of major importance for the scholarly community: the introduction of a) a new exemption for text and data mining and b) a secondary publication right. Both new regulations have been introduced by several EU member states, but only the former is part of the current proposal for amending EU copyright law. Both aspects will be introduced with a focus on EU and German law.

1. Introduction

Helmholtz Association is Germany's biggest research association and it has centres all over Germany. There's one particularly nice centre which is in Potsdam and this is where my project, the “Helmholtz Open Science Coordination Office”, is located. A responsibility of this project is to help all Helmholtz centres in transferring from closed science to open science, which includes open access. While open access is focused on the research publication, open science encompasses making available, for example, research data.

2. Secondary Publication Right

To understand what secondary publication right is and why it is important, you have to understand what is written about open access publishing. The previous speaker, Mr. Colella, mentioned it already and that was very helpful and I will explain it in a little more detail shortly.

The program GOALI - Research for Global Justice: a cooperation between the International Labour Organisation and several publishers. The idea of the project is to make publications in the field of law – and I think they are specialised on labour law in this case - available in low-income countries. This reminds us, that there is an issue with access. It's not at all the case that everybody gets access to information of importance for him or even, even if it pertains

to law, which one needs to know in order to know and assert one's rights. I work with rich institutions; nevertheless I have difficulties with access. Indeed, I do and I personally do not have access to the law databases I would like to have access to. I cannot afford to buy all the books I would like to have available for me and I'm working in a rich institution.

When we talk about open access, which means making works freely available, there are two ways to achieve this: one is called the "Green Road" and the other is called the "Golden Road".

So, this is what it is all about. An author writes something. It can be an article or it can be a book. That's actually not all that important and then this author has to decide where to publish. If it is an article, and I use this example – he can choose whether he wants to go to a traditional closed journal which would only make articles available for payment, or he would go to an open access journal which would make all the articles published in the journal freely available. (I'm not talking about the associated business model). The open access journal makes the material freely available for the readers, whereas a closed journal does not do that. In many cases, the authors will decide to go to the closed journal, because it's one of the journals which have a high reputation. So it is important for them to publish in these journals.

But not everything is a must, because – and now we are talking about the "Green Road" (using the free open access journal is called the "Golden Road", using the closed journal is called the "Green Road") – you may decide – and that's an important condition - to make the manuscript of your article in that journal publicly and freely available. In order to do that, you do need the consent of the publisher. The usual way is: you write the article, you go to the publisher and ask: "Would you like to publish?" The publisher checks the article; if he agrees, he says: "Yes, I like the article, please, give me all your rights. I give you nothing." You do that – all the use rights are with that journal, but you, the author, would like to do that secondary publication. Now, if the publisher is nice, he will allow you, the author, to do that but if he doesn't, you, the author, can't. But there is a backdoor that I will talk about a little bit later.

That's the situation you're basically in: you give away your rights to the publisher. If you want to use the "Green Road", the secondary publication needs the consent of the publisher. The problem with the "Green Road" is that you, the author, can, in theory, make it available – with the consent of the publisher – but there is the issue that it is the manuscript and not the PDF you, the author, used as seen from the publisher. And the second problem, of course, is that you, the author, cannot attach a license to it. What usage can be done is dependent on the copyright law in the jurisdiction where the usage takes place.

Now you want to know: "What does my journal at all in respect to the "Green Road"?" and you can consult the database and in that database you, the author, can find the journal in which you publish and then this database will tell you what the publisher allows or does not

allow in respect to open access and to the “Green Road”, so the secondary publisher. This is a complicated way. This is something most or all of us would not like to do; also, this database shows you, the author, what one can find on the website of the various publishers. But, of course, information from that database does not replace what’s in the publishing contract you signed. So, actually, you would need to consult the publishing contract. But now we have a difficult catch-22 situation, because we have these electronic submission systems today: the publishing contract you sign is a click license; you never read it and never get it printed out, so you never know how many washing machines you bought with that. And if the publisher allows, possibly also in the contract, that you, the author, do make available the final manuscript after an embargo period, the problem is that you’d never get the final manuscript, because it’s all in the system. So that makes life very difficult, in reality, to realise the “Green Road”.

The right of secondary publication is a legal answer to that issue, because the right of secondary publication establishes a limitation to the freedom to conclude a contract. The right of secondary publication establishes: “No matter to what right transfers an author agrees by signing a publication contract, an author that publishes a work that stems from publicly funded research retains the right to make the final manuscript publicly available (electronic publication) after a certain embargo period.” That’s basically what’s in these laws.

The problem with that is twofold. The first thing is that not all people know that the law exists. That’s one big issue. The second issue, of course, is that you, the author, still needs the manuscript and the question is: how do you get hold of that manuscript?

Within my short presentation I would like to introduce several of these laws - I think more or less all that exist - and I will show you some differences between these laws, because they help to start a conversation about in which direction copyright can possibly be developed.

German secondary publication right (reference: § 38 (4) Beiträge zu Sammlungen (UrhG)) has been the first that was passed by any legislature. It says that you, the author, need a 50% public funding in respect of an individual article to claim the secondary publication right. As a second condition the article has to be published in a journal that has to appear at least twice a year. When an author intends to use this publication right after the embargo period of twelve months, he needs the manuscript (post print version) of this article, as authorisation granted by the German secondary publication right is limited to the post print. When he publishes the manuscript he has to add the citation to the original publication, which I think is not a problem at all. But there’s also a condition in respect to where the secondary publication can be realised: (1) he can only publish electronically, so you, the author, cannot publish/disseminate a printout and (2) it has to be a non-commercial venue. The German lawmaker created a big controversy by introducing an unexpected definition of the term “publicly funded” in respect

to § 38 (4) UrhG. The conservative party in Germany wanted to interpret this law as narrowly as possible. Its representatives in Parliament succeeded in inserting a definition of the term “publicly funded” into the explanatory statement that goes with the draft law which excludes basic public funding for universities, meaning only articles based on research publicly funded by “project money” are eligible for the secondary publication right. It would exclude all articles produced as part of the “regular research” at the universities in Germany. By now the law commentators are more or less persuaded that this law has to be interpreted in a way that it includes the works that stem from research at the public universities – also for projects that only get basic funding.

French secondary publication right (reference: article L-533-4 du Code de la recherche)

The French lawmakers learned from the Germans. The text of the French secondary publication right is more elaborate in respect to “public funding”. For example, German commentators interpreted “public funding” in such a way that the money has to come from the German government. This provokes the question how to treat articles stemming from EU-funded research projects. The French put that explicitly into their law and they define public funding fairly broadly. They also added a paragraph which refers to “research data”. So they want to make sure that research data are made available, but I will not talk about research data which is a separate subject that I just mentioned here.

Austrian secondary publication right (reference: § 37a Zweitverwertungsrecht von Urhebern wissenschaftlicher Beiträge (UrhG))

The interesting thing about the Austrian solution – which is very close to the German solution – is that in order to profit from the right it’s not enough that the author is a researcher working in a publicly funded research project, but he has to be employed by this public funder, which of course limits the application spectrum. I don’t know who came up with that idea. Otherwise it is very similar to the German law.

Belgian secondary publication right (reference: article XI.196 du Code de droit économique)

The Belgian law is brand-new, just a few weeks old. The Belgian law is quite interesting. The most important thing about the Belgian law is that it influences also past publications. So the Belgian law allows to make publicly available manuscript of article whose publication predates the law, which is really great. That’s the most important thing about the Belgian law.

Dutch secondary publication right (reference: [suggested] Article 25fa (Copyright Act and the Neighboring Rights Act) – proposal which did not succeed

The Netherlands almost passed a law but the proposal did not succeed. But I included it just to show that there is a different approach to the regulation. The Dutch suggestion regulates very little. Actually, it says: “We should do that: let’s start negotiating.” This is a very different approach. Maybe a good, maybe a bad approach, we don’t know as of now. Also in the Dutch proposal there was no referral to the manuscript version. If this proposal would come into force, authors would need to negotiate what version they could use.

Switzerland secondary publication right (reference: Suggestion Swiss National Science Fund)

Switzerland is in a process of amending copyright law. The scholarly community in Switzerland lobbied hard for a secondary publication right. In first instance they did not succeed but there is a rumour that there may be a way to succeed; I do not know if it will happen. They have a very sympathetic way of wording this thing. If you transfer rights for publication you cannot transfer the right to make the work publicly available if the production of the work was publicly funded. So, no limitation to articles or certain classes of works is included, no reference to any version, no embargo period. Great! I like that very much, but that’s the suggestion of the Swiss National Fund; it’s not a law yet and I do not know whether it will ever come to that. The very basic question connected to all of this is: What, as a society, do we consider adequate and fair in respect to regulating access to publicly funded research results? On one extreme you have the Swiss solution and, more or less on the other extreme, you have either the countries that do not have the right of secondary publication, or, if you look at the countries with the right of secondary publication, the Germans and the Austrians are the most restrictive, but they were the first to come up with the idea, so maybe that’s not so surprising. And, unfortunately, in the current negotiations about amending the EU copyright law this issue is not included. I hope it will come later.

3. Text and data mining

Text and data mining is not regulated within copyright law. So, the issue here is that in order to perform text and data mining, you may need to produce copies, so you may infringe on the author’s reproduction right. So what is called text and data mining exemption is actually about an exception to the reproduction right, which would allow to reproduce and possibly extract content out of a database in order to mine it.

The prerequisite is always legal access. An exception for text and data mining does authorise access to otherwise closed content. It only authorises production of copies for a specified usage. Legally speaking, both an exception for text and data mining as well as a right of

secondary publication are limitations of the freedom to conclude contracts. In absence of an exception for text and data mining user ability to mine content could be limited or even rule out by license terms.

We have exception for text and data mining in Germany, we have a proposition on the European level. The problem with existing exceptions and this suggestion is that the permission is limited to text and data mining performed as part of a non-commercial research endeavour. So two conditions have to be met to profit from the exception for text and data mining: the mining needs to be part of a research project and the project needs to be non-commercial.

Now I would like to explain why I believe this limitation does not make sense.

Panama papers: This exposure of tax fraud would not have been possible without text and data mining.

Your rights, as a citizen: if there's a big building project in your community and you're not happy with that, you get tons of information about that project. In future, you will get help from professionals who can sift through that with the computer: that is text and data mining. Again, chances are this usage will not be considered non-commercial, possibly because you are a home owner profiting from changes to the building project.

It's imperative for a level playing field in the information society that if you have access to material, you should be able to make technical copies and we already have a provision for that in European law: transient copies (article 5 Directive 2001/29/EC), but right now these transient copies are defined as something that's only existing for a very short period of time in your computer, but even copies that you keep for a longer time in your computer could be considered as transient copies if their usage would be limited to specified purposes. Also, copyright - we heard that from the other speaker - protects the form. Copyright does not protect information and copyright does not protect ideas.

Text and data mining is a search tool. People who employ text and data mining never ever intend to read everything they mine. They mine all the material to find the very little thing they actually want to read. So they don't look at the form. They only look at the content of the material and the content is not protected. So the idea to limit text and data mining is contrary to the very basic idea of what text and data mining is about and also to what copyright is about, because copyright is protecting the form and text and data mining is not interested in the form at all.

The European legal publishing market (inventory and outlook)

Thank you very much, Mr. Stotz, for your kind welcome and thank you for having me here in Luxembourg. I was at ease coming here today, because for once I was not at risk of being annulled in Court on the decisions that the Commission had taken.

In the European Commission, and in DG Competition as well, libraries are a lifeline to our work. The results of our work are tested in court: in national courts, but, ultimately, most what we do ends up here in Luxembourg, where parties exercise their rights of defence. To prepare our decisions we work closely together with our colleagues from the Legal Service who all the more have a need for reliance on good and accessible information.

When I got the invitation to come here today through my Director General Johannes Laitenberger, I knew I would be in front of people with whom I do not have a daily contact. Library work is not my work even if I benefit from it.

But then the topic of today very quickly threw me back in time to the years when I was in the merger control division. We were then confronted with a very big take-over, the announced merger between Reed Elsevier and Wolters Kluwer. I am talking about the year 1997. In preparation I went back into that case. We considered it would have resulted in a dominant position of the merged company. You would probably agree with me that there was good reason for an abandonment of that merger. It could only have survived with significant concessions and divestments of the parties. So in those days we had a lot of contact with libraries. They saw a chance to become more vocal in the debate, raising issues such as access to information, possible abusive behaviour by the publishers, increasing prices. As libraries work with limited budgets, significant price hikes automatically influenced choices that were being made in terms of acquisition of publications.

I would like to delve a little deeper with you into the analysis of that merger because in many respects it is a reference case in the analysis of competition in publishing in legal markets. Whilst in DG Competition we consider many publishing cases, either in mergers or antitrust, in this specific sector there have only been few investigations. That is equally true for our competition work in controlling State aid (subsidies), where public support is rather in the area of public broadcasting – on issues such as plurality of information, overcompensation or expansion of public broadcasters into internet based services – , rather than in academic publishing markets as such.

It was interesting to hear from other speakers about the issue of access to information generated by public funds, that is the availability of fundamental research carried out with public funds, academic publications being built upon that work and then the private publishing market actually walking away with all of the benefits. I also heard the term “open access” which struck a familiar tone when thinking about State aid in telecoms: within the work that we do, that is to ensure that where State aid is being used in these markets for the construction of telecom networks, that these investments do not result in monopolies but provide sufficient open access for any downstream service provider, and ultimately the consumer, to benefit.

So after these introductory remarks I propose to go through the following aspects, which I hope corresponds to your expectations. I may be taking you a bit out of your comfort zone as we will discuss competition instruments and how we use them in publishing markets in general. Then we will zoom in on legal publishing.

I will start by a short recap, a *tour d'horizon* across the different competition instruments, and to see how they operate in practice today and how they might operate in future, also in these markets. I will do that with a degree of humility, because I'm not currently confronted with the questions that you are debating today in these markets in terms of the new technological developments and different services and what competition issues these might bring.

As competition agency we are embedded in the European Commission. One Directorate General - call it a ministry if you want to compare it to national situations. As we are a part of the Commission, we also have a regulatory role, i.e. to prepare legislation. In our enforcement role, we are a competition agency in its own right, much like the Bundeskartellamt, the Office of Fair Trading (or now I should say the CMA) or other authorities in the European Union. And there is a well-designed system in place for dealing with complaints about anticompetitive behaviour. We operate the system together with the national competition authorities. The rules foresee that the European competition rules are applied by both the Commission and the national authorities, in a coherent system of case allocation. And when we look at behaviour that impacts on competition we don't only consider behaviour of companies but also interventions by governments: how do they influence markets and is there undue favouritism that takes place which distorts competition?

Our leadership, the head of our DG, is Johannes Laitenberger, and then Margrethe Vestager is the Commissioner for competition in the European Commission. You will have seen her being vocal most recently, for instance, during press conferences on cases involving Google.

So there are three pillars in competition enforcement: **traditional antitrust** as it comes out of, one might say, the US tradition, which has influenced Europe on the adoption of provisions in the Treaty, Articles 101 and 102, which tackle collusive behaviour between companies – Article

101 - and prohibit abuse of dominance – Article 102. Then there is a specific instrument for **merger control** and the third pillar is the **prohibition on distortive State aid**, indeed, to control government spending that instead of remedying market failures influences competition.

How are the rules enforced? Who are the actors? That's a very conflictual debate in the international context, given the different types of systems, basically split between administrative and prosecutorial/criminal systems. The EU system is often criticised because the Commission is considered to be prosecutor, judge and jury. Therefore, the decisions of the Commission do not always go down so well, particularly American companies believing that the Commission is not sufficiently independent, meaning that there is no independent judge who decided a case initially. It is all done by the Commission. It is therefore often said that the EU system violates fundamental rights of companies, which are legal persons. That claim of a violation of the rights of persons was considered by Court of Human Rights in Strasbourg. They found that, as long as the system is built on pecuniary sanctions on legal persons rather than natural persons, such a system is compliant with fundamental rights, under the condition that independent legal review, full review, is possible by a judicial institution. That independent and unrestricted review takes place here in Luxembourg at the Court of Justice. Indeed, the EU system, as compared to that of Member States and that of the US, does not allow sanctions on individuals let alone serving jail time.

Allow me to explain a bit more the investigative tools the Commission possesses, the instruments to work with.

In merger and antitrust cases a market definition is used to determine whether there is a problem, or whether consumers can turn to alternative products to satisfy the same needs. We make that assessment also looking at a variety of criteria. For cases of abuse of dominance, before you can actually say there is an abuse, you have to have assessed what the sphere of products or services is that you are looking into. So this is always a very important first step.

An important tool to decide which products or services are in the relevant market is to simulate a small but lasting price increase, and then see if consumers might switch. Are fizzy drinks substitutable one to the other? Is there a specific market for different flavours of drinks? Is there a difference between fizzy and still water, in terms of switching behaviour of consumers? In other words are they substitutable? In publishing markets the answers may look straightforward, as one publication – say in tax law – can hardly replace another – for instance in criminal law. Then we need to consider the geographic scope of the market, which may be delineated by linguistic and other consumer preference aspects. In publishing markets you're looking at a mix of various elements. Some publications are truly geared towards a specific audience within a Member State, others may have a cross-border, international appeal. The market for

scientific publications are often intended for international audiences in the English language, so there we may be looking at a market that is wider than national.

Once the market has been defined, the competition assessment takes place: what does a market share really mean in terms of market power? What does turnover really mean in a given sector, if it is subject to very rapid technological developments? What about ease of entry of new competitors? And what kind of behaviour is abusive? And how should it be corrected? By a prohibition? Should enforcement be strengthened by fines? These are all difficult legal and policy questions which – on the basis of a Commission decision – are extensively tested in the EU courts.

So, let us go back to the year 2000/2001, when the merger between Wolters Kluwer and Reed Elsevier had been announced, but was abandoned. What were the relevant markets? Of course, if you atomise the markets you are more likely to find that the two companies are dominant. Conversely, the larger you make the market, the lower the market share and market power may be, as there will be more competitors within that space. I should add, of course, that if a company achieves to be dominant or even create a monopoly by creating a new market or outsmarting other players with regular competitive means, there is of course nothing wrong with that. This is the competitive process that we encourage.

I would suggest that a lot of what we analysed some 18 years ago still holds true today, in spite of technological and other developments. Academic publishing was considered as a worldwide, rather than national, market. That said, legal publishing was seen as a national market, for the fact that laws are still predominantly nationally oriented. Educational publishing and professional publications were also nationally oriented. Online publishing was coming on stream but considered to belong to the same product market, because the means of distribution and access to that information at that point in time did not differentiate these markets sufficiently. Academic and professional libraries agreed with that view. Taking a more encompassing approach allowed us to consider a number of important competitive parameters, without it becoming too atomised: an assessment by title, for instance, would actually have resulted in considering hundreds of different markets, so you would no longer see the forest through the trees. The parameters of competition in publishing is in particular to attract authors. In other words, the supply-side features of the markets – attracting authors – are actually more important than the specific demand side. In the legal publishing market, the expertise, image, and reputation of publishers were seen as key. Also the ability to offer comprehensive packages based on access to authors was seen as a key to commercial success.

Well, the Reed Elsevier / Wolters Kluwer merger was abandoned, but I submit that the nature of the analysis, analysing competition issues from broader perspective than publication by publication still stands today.

Having reviewed the way the Commission analyses a merger, let me present to you some other examples of competition problems in publishing markets. The Apple case was one in point. The collusion between publishers and Apple was aimed at getting a better grip on prices. Apple would, as an agent of the publishers, sell books for a price fixed by the publishers. This would avoid discounting by Apple below the price level desired by the publishers. Indeed, a legal way of tying your distributor to a price is to make the distributor your agent so you can impose your prices. In other cases of so-called vertical distribution, you have to leave your distributor in principle free to set his own price. Apple had agreed to go along with this agency model, which turned out to be a coordinated effort of the publishers, resulting in higher prices. The advantage of the agency model for Apple was that they were guaranteed the 'best price' in a *most favoured nation* agreement. The case was resolved by a settlement with the US Department of Justice, which also benefitted the EU market. The agency model and most favoured nation clause for Apple were abolished.

Another manner in which to tackle competition problems can be to challenge the business practices of a dominant company as being abusive. Bundling and tying, for instance, where you make the purchase of one good or service dependent on the purchase of another, may be illegal for a dominant company. Another example may be that a dominant company imposes on sellers a most favoured nation clause, which in effect puts a floor-price in the market: In the search market for hotel rooms, for example, booking.com was found to use these methods illegally. A similar case was brought against Amazon, for these 'best price' deals with publishers.

I am coming to a close. In my talk I identified some of the competition issues that we have spotted in publishing markets. There may be many more and I'm very eager to learn also from you what the current challenges are. I am aware that bundling of entire packages of information remains an issue, in particular for libraries with limited budgets. That reminds me of a cartel complaint we once had from an Austrian citizen, who stated that he could only buy a subscription for the entire area with 200 ski-lifts, rather than paying, what he was used to, just access to one mountain with a more limited number of lifts. The tying together of the whole area clearly was not what this consumer wanted. One issue that I heard being discussed is the development of self-publishing as a constraint on the big players. And do new distribution models and modes of consumption provide for new competition issues? Where are the new sources of market power?

So with that I would like to close. I hope I've given you a little bit of an insight into our work. We go out into the market and get the views of stakeholders and those views, are a very, very important factor in objectivizing the analysis in specific cases. We want to prevent less choice and higher prices; that is our task. In order to carry it out we need to be close to the market and need your information, your help, so we can do our job better and keep markets contestable.

Thank you very much!

The challenges facing modern law libraries.

The identification of quality legal resources

One observation must be made: the legal research carried out over the past five years has evolved considerably, while training in the use of new research tools has remained sporadic and uneven depending on the Member States, the sectors of activity concerned and the type of public.

During the 2000s and beyond, with the advent of search engines and access to new data sources and the corresponding decline in the printing of books, articles and documents, legal research has changed completely.

We will not go back over the causes of the decline in paper, linked in particular to the search for savings and space in libraries and to the protection of the environment.

The advent of new search engines and free access to many funds offers, in the eyes of as many economic operators and researchers as possible, many advantages that should be discussed before dealing with the actual identification of quality legal resources.

Search can always take place in a legal library, which is desirable in order to access high-performance search engines, benefit from filters and security features, work in an appropriate environment and benefit from the advice of specialists.

The new means are supposed to be accessible to the greatest number of people, i.e. all those, experienced or novice lawyers or even non-lawyers, who are interested in legal issues for any purpose and wherever they may be:

- opposition of interest with another person in relationships of couple or family, neighbourhood, work, investment, leisure, such research should no longer be reserved for a researcher or a craftsman in the field of law but should be accessible to everyone according to the contemporary adage “do it yourself”.
- legal monitoring by company lawyers or national or European administration officials on the application of existing or future law. New research methods are then expected to make data more accessible and contribute to the economy of litigation.
- the handling of a dispute by legal practitioners, whether lawyers, counsel, arbitrators or magistrates. New research methods are also expected to make applicable law more accessible and, in addition, to equalise the opportunities between the parties to the

dispute. They can have the effect of remedying inequalities in the means of judging differences in dispute resolution bodies, whether or not they have significant collections of books and law reports.

- Further study in the context of studies carried out by students at different levels of research, from bachelor's to doctoral level. New search modes should help to speed up the retrieval of the items sought (queues are reduced in libraries and there is no longer a need for interlibrary loan). They also help to reduce the inequalities that remain between large, richly endowed universities and those that are less so.
- the daily work of the academics in charge of teaching and carrying out a real mission of researchers who will publish the results of their work. A benefit comparable to that noted for students can be observed.

The benefits of search engines and access to multiple sources seem well established and easily verifiable.

Such advantages may have caused such blindness that many of us are swept away by this indiscriminate modernisation movement. The disadvantages and dangers resulting from the use of these new modes are not well known and, above all, have not yet been fully identified.

Among the disadvantages and risks that researchers now face are promiscuity, insecurity, uniformity, lack of pluralism and unreliability of results.

The question of how to remedy this raises many difficulties that we will have to examine and discuss through a series of questions that I have submitted to several book publishers and legal information providers who have provided me with converging elements.

1. How to do a thematic search for quality articles or books on the net?

A quality search on the Internet requires several requirements to be taken into consideration: first, the quality of the search as such; second, the quality of the sites consulted and their referencing; third, the quality of the information obtained on the sites consulted.

The quality of research as such requires learning about computer resources, the use of search engines and the basics of the legal field. Only research conducted by an attentive, competent, lucid and informed researcher can produce the expected results. The formulation of the request using relevant keywords is essential.

The quality of the sites visited and the information are inseparable. It does not depend directly on the researcher but on how this information has been processed, classified and prioritised using objective and accessible criteria.

It is recommended to refer to the official sites that are at the source of the information sought: the website of an international or European court, such as the International Court of Justice, the European Court of Human Rights or the Court of Justice of the European Union, an institution of the European Union, such as that of the European Commission or the European Parliament, or a national institution, such as that of a national government or parliament, but also broader official websites that offer information according to their European or national source, such as Eurlex or Legifrance.

The catalogue of the Library of the Court of Justice of the European Union and the European Commission's Find-er search tool are powerful bibliographic search tools. References to the judgment notes and comments are also available on the Eur-lex and Curia websites.

Sites developed by reputable legal publishers - although it is still necessary to be able to rank them - offer reliable information that has been processed by operators with legal expertise and solid experience in word processing. These include Dalloz.fr, LexisNexis and Stradalex Europe. The identification of these sites is in principle facilitated by their referencing linked to their frequent use and the means they use to this end to appear prominently on search engines managed by Google in particular. Some publishers' sites, such as Strada lex Europe, constitute "aggregators" of European law content, thus aggregating official documentation but also other sites of private legal publishers.

The publishers concerned recommend saving them as favourites to save time and gain serenity. They also argue that their sites refer to official sites, which allows, while remaining in the interface of a publisher's site, to access the official site, without having to leave the publisher's site. This allows you to benefit from publisher search algorithms and an enhanced search that facilitates access to relevant secondary sites.

Legal editors evolve daily in the legal field in order to provide appropriate answers to users. They strive to contextualise the elements sought in order to provide results in a selective and appropriate way. Thus, for a research on the selectivity criterion for State aid, it is preferable to take into consideration the sector concerned and, where applicable, the relevant market. Research on trade barriers would need to clarify whether the regulation covers the product as such, transport, use of the product or its terms of sale, otherwise the data obtained could be very broad in scope and lead to conflicting results.

One of the reputable publisher's legal portal is based on a "thesaurus" of 150,000 legal terms and concepts that allow a semantic search engine to carry out a detailed and detailed analysis in order to propose a series of results that fully meet the demand. Under these conditions, the editor will have to deal with other more relevant words than those chosen by the user and included in the search bar. Such re-qualifications or clarifications proposed by certain high-performance engines cannot lead the user to choose an assisted posture.

Unreliable sites expose the researcher to "malware" that may slow down the research and expose him to detours and referrals to commercial sites that may involve additional costs and will also be time-consuming.

2. Is there a need for immediate referral to specialised sites?

The orientation will depend on the type of research, its purpose and the type of researcher.

The researcher may be of very different types depending on the size of the experiment and the purpose of the research. This may be an ordinary user who is looking for so-called "first line" information. It may then be an experienced researcher who is looking for information that is complementary to the information he or she has already collected. Finally, it may be an author who wishes to produce a text or information that will seek comparable texts or information in order to take a position.

The use of specialised sites according to a subject or sector of activity can have advantages in terms of relevance and adequacy of the results obtained. Thus, the site of a particular agency specializing in maritime security or narcotics can provide relevant and sometimes valuable results, because of their very specific and isolated nature, to researchers working in these specific fields. Of course, it cannot be limited to such research. It needs to explore the issues through systemic research, which could be described as horizontal, to measure the impact of other policies on issues related to the issues involved. Thus, it would also need to use other sites specialised in transport, fundamental rights, environmental protection, consumer protection, taxation and searches on generalist sites, in particular sites of legal publishers where the data may have been cross-processed in order to make the relevant references.

3. How can references be prioritised according to the reliability of the information available?

The use of recognised and reputable research sites makes it possible in principle to obtain reliable information.

Each text made available by a reputable publisher was reviewed and examined before being referenced by a team of editors competent in forensic science. A text that would no longer be in force could not be offered to those who have done the research, unlike commercial search engines that are freely accessible on the web. It is indeed frequent to find on open access sites references to texts that are no longer applicable.

Access to case law requires even more expertise given its fluctuating and evolving nature. Reversals of case law, often not explicit and unconfessed, are difficult to detect, with courts sometimes making compartmentalisations or subtle distinctions that lead to the marginalisation of a particular case law that is considered inappropriate. Only very elaborate sites could make it possible to make the most relevant lines of the case law available to researchers. Free circuits would certainly not be able to offer them anything. Thus, if we look for the case law of the Court of Justice applicable to sales methods, it is possible to find references to judgments of the Court of Justice of the early 1990s which were challenged by the case law resulting from the *Keck and Mithouard* judgment of 24 November 1993, which was itself limited in the course of the 2010. A question such as this type of regulation would help to assess the reliability and sophistication of search engines.

4. How can references be prioritised according to the quality or reputation of the author?

The researcher aspires not only to obtain the texts and case law applicable to the subject matter that is the subject of his research but also to identify the most significant doctrinal references, due to the relevance of the study and its adequacy to the problems to be addressed as well as the authority of the author of the study.

As in any scientific discipline, it is very difficult to rank within legal doctrine when the user is not at the heart of the academic community. In some cases, university professors may not themselves be able to provide a researcher with the name or names of colleagues who are particularly competent in a particular field. Artificial intelligence can therefore hardly be expected to go beyond this type of precision.

Nevertheless, demanding publishers use authors recognised in the subjects they cover, whatever their professions, publishers use university professors, more rarely lecturers, judges, lawyers or even agents of the institutions' legal services. Encyclopaedias, collections and legal journals are always directed by university professors who ensure the choice of themes and authors and who review all contributions in such a way as to ensure the required consistency and homogeneity. The most reliable legal journals have an editorial board and a scientific board or a reading board, which are composed of authoritative lawyers. Studies have been conducted on this subject. Examples include the report by Professor Francis Snyder published in *Doctrine and European Union Law* published in Bruylant in 2009 and Professor Joël Rideau's article on written materials on European Union law published in the *Review of European Affairs* in 2016.

5. How can we detect articles by “beginners” who are nevertheless bearing a university label?

The user of a generalist search engine who wishes to obtain doctrinal references will be confronted with a proliferation of studies written by authors who are not necessarily recognised and whose titles and qualities are not always known. It will be able to find student papers and reports posted on the Internet without it being known whether they are works evaluated and recognised by academics.

Open access has the advantage for young authors to make themselves known more easily and quickly than in the past. At the same time, it may happen that the dissemination of their work is premature and inappropriate, particularly when it has not been verified or validated. The proliferation of *open access* studies is explained more by the authors' mastery of the tool than by the density of the research they have carried out.

Rather than being based on the authors' initiative, *open access* could be initiated by researchers or librarians from academic institutions who would be better able to guide authors.

Without waiting for a system of systematic evaluation using points or stars as in a guide, the user aspires to know whether or not the author is experienced.

Publishers must allow younger people to make their first steps and thus to make a name for themselves, as such work is important to recognise them in a profession such as that of teacher-researcher.

In order to reconcile such imperatives, it should be ensured that each author of a study, chronicle or even free speech indicates his or her qualities and titles in support of his or her contribution.

Some publishers are careful to avoid this mix of experienced and “novice” authors by distributing their contributions under separate headings: doctrine and doctoral studies for example. When such publications or broadcasts are offered, credit can be given to journals that have actual peer review committees.

6. How to cite references obtained in open access or on specific sites in a study?

Publisher sites offer an editorial charter that may vary from one publisher to another. The case law references made available by a publisher will in principle be accompanied by references before and after those sought and supplemented by doctrinal references consisting of comments on the decisions sought. A site has been set up with the assistance of several legal publishers to establish rules for drafting and quoting national, foreign and international legal references. This site is intended for all actors involved in the production of legal content. This is the website <http://reflex.sne.fr> References obtained in free access may not be cited without verification on the website of the institution or court concerned, it being noted that some information is disseminated in a fanciful or oriented manner. For example, several sites accessible after a Google search referred to a decision of the General Court of 19 August 2018 that allegedly declared a collective action on climate justice admissible. A check on the official website of the Court of Justice of the European Union leads to the conclusion that this reference, which has been quoted many times, was completely fanciful...

Les défis auxquels sont confrontés les bibliothèques juridiques modernes.

L'identification des ressources juridiques de qualité

Un constat s'impose : la recherche juridique effectuée depuis ces cinq dernières années a beaucoup évolué alors que la formation à l'utilisation des nouveaux outils de recherche est restée sporadique et inégale selon les Etats membres, les secteurs d'activité concernés, le type de public.

Au cours des années 2000 et plus encore 2010, avec l'avènement des moteurs de recherche et l'accès à de nouvelles sources de données et, corrélativement, le déclin de l'impression des livres, articles et documents, la recherche juridique a complètement changé.

On ne reviendra pas sur les causes du déclin du papier, lié notamment à la recherche d'économies et d'espace dans les bibliothèques ainsi qu'à la protection de l'environnement.

L'avènement des nouveaux moteurs de recherche et de l'accès libre à de nombreux fonds présente, aux yeux du plus grand nombre d'opérateurs économiques et de chercheurs, de multiples avantages sur lesquels il y a lieu de revenir avant de traiter l'identification proprement dite des ressources juridiques de qualité.

La recherche peut toujours prendre place dans une bibliothèque juridique, ce qui est souhaitable de manière à accéder aux moteurs de recherche performants, à bénéficier des filtres et dispositifs de sécurité, à travailler dans un environnement approprié et à pouvoir bénéficier de conseil de spécialistes.

Les nouveaux moyens sont censés être accessibles au plus grand nombre, c'est-à-dire à tous ceux, juristes expérimentés ou néophytes, voire non-juristes, qui s'intéressent à des questions de nature juridique à quelque fin que ce soit et où que ce soit :

- opposition d'intérêt avec une autre personne dans les relations de couple ou de famille, de voisinage, de travail, d'investissement, de loisir, une telle recherche ne devant plus être réservée à un chercheur ou à un artisan des métiers du droit mais devant être accessible à tout un chacun selon l'adage contemporain « do it yourself »,

- veille juridique assurée par des juristes d'entreprise ou des agents de l'administration nationale ou européenne au sujet de l'application du droit en vigueur ou à venir. Les nouveaux modes de recherche sont alors censés rendre les données plus accessibles et contribuer à l'économie de litiges,
- traitement d'un litige par des praticiens du droit, qu'il s'agisse d'avocats, de conseils, d'arbitres ou de magistrats. Les nouveaux modes de recherche sont également censés rendre le droit applicable plus accessible et de surcroît égaliser les chances entre les parties au litige. Ils peuvent avoir pour effet de remédier aux inégalités des moyens de jugement des différentes instances de règlement des litiges, qu'elles soient ou non dotées d'importantes collections d'ouvrages et de recueils de jurisprudence,
- approfondissement dans le cadre d'études accomplies par des étudiants, de différents niveaux de recherche, de la licence au doctorat. Les nouveaux modes de recherche devraient contribuer à accélérer l'obtention des éléments recherchés (les files d'attente sont réduites dans les bibliothèques et il n'est plus besoin de prêt inter-bibliothécaire). Ils contribuent également à atténuer les inégalités qui demeurent entre les grandes universités richement dotées et celles qui le sont moins,
- travail quotidien des universitaires en charge d'enseigner et d'accomplir une véritable mission de chercheurs qui vont publier le fruit de leur travail. Un avantage comparable à celui qui a été relevé au sujet des étudiants peut être constaté.

Les avantages liés aux moteurs de recherche et à l'accès à des sources multiples semblent bien établis et aisément susceptibles d'être vérifiés.

De tels avantages ont pu provoquer un aveuglement tel que beaucoup d'entre nous sont emportés par ce mouvement de modernisation sans discernement. Les inconvénients et les dangers résultant de l'usage de ces nouveaux modes sont mal connus et surtout n'ont pas encore tous été identifiés.

Parmi les inconvénients et risques auxquels les chercheurs sont désormais confrontés, on peut relever celui de la promiscuité, de l'insécurité, de l'uniformité, de l'absence de pluralisme et de l'absence de fiabilité des résultats obtenus.

La question des moyens pour y remédier soulève de multiples difficultés que nous serons amenés à examiner et à discuter au moyen d'une série de questions que j'ai soumises à plusieurs éditeurs d'ouvrages et fournisseurs d'informations juridiques qui m'ont fourni des éléments convergents.

1. Comment faire une recherche thématique d'articles ou d'ouvrages de qualité sur le net ?

Une recherche de qualité sur le net nécessite de prendre en considération plusieurs exigences : en premier lieu, la qualité de la recherche en tant que telle ; en deuxième lieu, la qualité des sites consultés et de leur référencement ; en troisième lieu, la qualité de l'information obtenue sur les sites consultés.

La qualité de la recherche en tant que telle passe par un apprentissage des moyens informatiques, de l'usage des moteurs de recherche et des rudiments de la matière juridique. Seule une recherche opérée par un chercheur attentif, compétent, lucide et éclairé peut produire les résultats escomptés. La formulation de la demande au moyen de mots-clés pertinents est essentielle.

La qualité des sites consultés et de l'information sont indissociables. Elle ne dépend pas directement du chercheur mais de la manière dont cette information a été traitée, classée et hiérarchisée au moyen de critères objectifs et accessibles.

Il est recommandé de s'orienter vers les sites officiels qui sont à la source de l'information recherchée : le site d'une juridiction internationale ou européenne, telle que la Cour internationale de justice, la Cour européenne des droits de l'homme ou la Cour de justice de l'Union européenne, d'une institution de l'Union européenne, tel que celui de la Commission européenne ou du Parlement européen, ou d'une institution nationale, telle que celui d'un gouvernement ou d'un parlement national, mais aussi des sites officiels plus larges qui offrent les informations en fonction de leur source européenne ou nationale, tels que Eurlex ou Legifrance.

Le catalogue de la bibliothèque de la Cour de justice de l'Union européenne et l'outil de recherche Find-er de la Commission européenne sont des outils de recherche bibliographique performants. Des références aux notes et commentaires d'arrêts sont également disponibles sur les sites Eur-lex et Curia.

Les sites élaborés par les éditeurs juridiques réputés - encore faut-il être en mesure de hiérarchiser - offrent des informations fiables qui ont été traitées par des opérateurs qui ont une expertise sur le plan juridique et qui ont une solide expérience en matière de traitement de textes. On peut citer notamment Dalloz.fr, LexisNexis et Stradalex Europe. L'identification de ces sites est en principe facilitée par leur référencement lié à leur fréquente utilisation et aux moyens qu'ils mettent en œuvre à cet effet pour figurer en bonne place sur les moteurs

de recherche gérés notamment par Google. Certains sites d'éditeurs, tels que Strada lex Europe, constituent des « agrégateurs » de contenus de droit européen, agréant ainsi la documentation officielle mais aussi d'autres sites d'éditeurs juridiques privés.

Les éditeurs concernés recommandent de les enregistrer comme favoris pour réaliser un gain de temps et gagner en sérénité. Ils font valoir également que leurs sites renvoient à des sites officiels, ce qui permet, tout en restant dans l'interface d'un site d'éditeur, d'accéder au site officiel, sans devoir quitter celui de l'éditeur. Cela permet ainsi de bénéficier des algorithmes de recherche d'éditeur et ainsi d'une recherche enrichie facilitant l'accès aux sites secondaires pertinents.

Les éditeurs juridiques évoluent quotidiennement dans la matière juridique afin d'apporter des réponses appropriées aux utilisateurs. Ils s'efforcent de contextualiser les éléments recherchés de manière à apporter des résultats de manière sélective et appropriée. Ainsi, pour une recherche concernant le critère de sélectivité en matière d'aides d'Etat, il est préférable de prendre en considération le secteur concerné et, le cas échéant, le marché pertinent. Une recherche concernant l'entrave aux échanges nécessiterait de préciser si la réglementation vise le produit en tant que tel, le transport, l'utilisation du produit ou ses modalités de vente, faute de quoi les données obtenues pourraient revêtir un champ très vaste et conduire à des résultats contradictoires.

L'un des portails juridiques d'éditeur réputé est fondé sur un « thesaurus » de 150 000 termes et concepts juridiques qui permettent à un moteur de recherche dit sémantique de procéder à une analyse fine et circonstanciée en vue de proposer une série de résultats répondant pleinement à la demande. Dans ces conditions, l'éditeur sera amené à traiter d'autres mots plus pertinents que ceux qui ont été choisis par l'utilisateur et inclus dans la barre de recherche. De telles requalifications ou précisions proposées par certains moteurs performants ne sauraient conduire l'utilisateur à choisir une posture d'assisté.

Les sites non fiables exposent le chercheur à des « malwares » qui pourront ralentir la recherche et l'exposent à des détours et renvois vers des sites commerciaux qui peuvent entraîner des coûts supplémentaires et qui seront de surcroît chronophages.

2. Y a-t-il lieu de s'orienter immédiatement vers des sites spécialisés ?

L'orientation va dépendre du type de recherche, de sa finalité et du type de chercheur.

Le chercheur peut être de types très différents selon son expérimentation plus ou moins grande et la finalité de sa recherche. Il peut s'agir d'un utilisateur ordinaire qui recherche une information dite de « première ligne ». Il peut s'agir ensuite d'un chercheur expérimenté qui cherche une information complémentaire à celles qu'il a déjà collectées. Il peut s'agir enfin d'un auteur souhaitant produire un texte ou une information qui va rechercher des textes ou des informations comparables en vue de prendre position.

Le recours à des sites spécialisés en fonction d'une matière ou d'un secteur d'activité peut présenter des avantages en termes de pertinence et d'adéquation des résultats obtenus. Ainsi, le site de telle ou telle agence spécialisée en matière de sécurité maritime ou de stupéfiants pourra fournir des résultats pertinents et parfois précieux, en raison de leur caractère très particulier et isolé, au chercheur qui travaille dans ces matières précises. Il ne saurait évidemment se cantonner à de telles recherches. Il lui faut en effet explorer les matières en procédant à une recherche systémique, que l'on pourrait qualifier d'horizontale, pour mesurer l'incidence d'autres politiques sur les questions qui se rapportent aux matières concernées. Ainsi, il lui faudrait également utiliser d'autres sites spécialisés en matière de transports, de droits fondamentaux, de protection de l'environnement, de protection des consommateurs, de fiscalité et procéder à des recherches sur des sites généralistes, en particulier des sites d'éditeurs juridiques au sein desquels les données ont pu faire l'objet de traitements croisés permettant de procéder aux renvois pertinents.

3. Comment peut-on hiérarchiser les références en fonction de la fiabilité de l'information accessible ?

L'utilisation de sites de recherche reconnus et réputés permet en principe d'obtenir des informations fiables.

Chaque texte mis à disposition par un éditeur réputé a été relu et examiné avant d'être référencé par une équipe d'éditeurs compétents en matière de légistique. Un texte qui ne serait plus en vigueur ne pourrait être proposé à ceux qui ont fait la recherche, à la différence des moteurs commerciaux de recherche qui sont en libre accès sur le web. Il est en effet fréquent de trouver sur des sites en libre accès des références à des textes qui ne sont plus applicables.

L'accès à la jurisprudence exige encore plus d'expertise compte tenu de son caractère fluctuant et évolutif. Les revirements de jurisprudence, souvent non explicites et inavoués, sont difficiles à déceler, les juridictions procédant parfois à des cantonnements ou à de subtiles distinctions conduisant à marginaliser tel ou telle jurisprudence jugée inappropriée. Seuls des sites très élaborés pourraient permettre de mettre à la disposition des chercheurs les lignes les plus pertinentes de la jurisprudence considérée. Les circuits libres ne pourraient assurément rien leur offrir. Ainsi, si l'on recherche la jurisprudence de la Cour de justice applicable aux méthodes de vente, il est possible de trouver des références à des arrêts de la Cour de justice du début des années 90 qui ont été remis en cause par la jurisprudence issue de l'arrêt *Keck et Mithouard* du 24 novembre 1993, laquelle jurisprudence a été elle-même cantonnée au cours des années 2010. Une question portant par exemple sur ce type de réglementation permettrait d'évaluer la fiabilité et la sophistication des moteurs de recherche.

4. Comment peut-on hiérarchiser les références en fonction de la qualité ou de la réputation de l'auteur ?

Le chercheur aspire non seulement à obtenir les textes et la jurisprudence applicables à la matière qui est l'objet de sa recherche mais également à identifier les références doctrinales qui sont les plus significatives, en raison de la pertinence de l'étude et de son adéquation aux problèmes à traiter ainsi que de l'autorité de l'auteur de l'étude.

Comme dans toute discipline scientifique, il est très difficile de hiérarchiser au sein de la doctrine juridique lorsque l'utilisateur n'est pas au cœur du milieu universitaire. Il arrive même que des professeurs d'université ne soient pas capables eux-mêmes d'indiquer à un chercheur le ou les noms de collègues particulièrement compétents dans tel ou tel domaine. On ne peut, dès lors, guère attendre de l'intelligence artificielle qu'elle aille au-delà de ce type de précision.

Il reste que les éditeurs exigeants ont recours à des auteurs reconnus dans les matières qu'ils traitent, quelles que soient leurs professions, les éditeurs ayant recours à des professeurs d'université, plus rarement à des maîtres de conférences, à des magistrats, à des avocats ou encore à des agents des services juridiques des institutions. Les encyclopédies, collections et revues juridiques sont toujours dirigées par des professeurs d'université qui assurent le choix des thèmes et des auteurs et qui relisent l'ensemble des contributions de manière à assurer la cohérence et l'homogénéité requises. Les revues juridiques les plus fiables comportent un comité de rédaction et un comité scientifique ou un comité de lecture, lesquels sont composés de juristes qui font autorité. Des études ont été menées à ce sujet. On peut citer le rapport du

Professeur Francis Snyder publié dans l'ouvrage *Doctrine et droit de l'Union européenne* publié chez Bruylant en 2009 et l'article du Professeur Joël Rideau sur les supports écrits du droit de l'Union européenne publié dans la *Revue des affaires européennes* en 2016.

5. Comment déceler les articles de « débutants » qui sont pourtant revêtus d'un label d'une université ?

L'utilisateur d'un moteur de recherche généraliste qui souhaite obtenir des références doctrinales sera confronté à une prolifération d'études écrites par des auteurs non nécessairement reconnus dont on ne connaît d'ailleurs pas toujours le titre et les qualités. Il pourra trouver des mémoires et rapports d'étudiants diffusés sur Internet sans que l'on sache s'il s'agit de travaux évalués et reconnus par des universitaires.

L'*open access* présente l'avantage pour les jeunes auteurs de se faire connaître plus facilement et rapidement que par le passé. En même temps, il peut arriver que la diffusion de leurs travaux soit prématurée et inadaptée, particulièrement lorsqu'elle n'a pas fait l'objet d'une vérification ou d'une validation. La prolifération d'études en *open access* s'explique davantage par la maîtrise de l'outil par les auteurs que par la densité de la recherche qu'ils ont effectuée.

Plutôt que de reposer sur l'initiative des auteurs, l'*open access* pourrait être initié par des chercheurs ou des bibliothécaires des établissements universitaires qui seraient mieux à même d'orienter les auteurs.

Sans attendre un système d'évaluation systématique au moyen de points ou d'étoiles comme dans un guide, l'utilisateur aspire à savoir si l'auteur est ou non expérimenté.

Les éditeurs doivent permettre aux plus jeunes de faire leurs premières armes et ainsi de s'illustrer, de tels travaux étant importants pour les reconnaître dans une profession telle que celle d'enseignant-chercheur.

De manière à concilier de tels impératifs, il y aurait lieu de veiller à ce que chaque auteur d'étude, de chronique, voire de libre-propos, indique ses qualités et titres à l'appui de sa contribution.

Certains éditeurs veillent à éviter ce mélange d'auteurs expérimentés et d'auteurs « débutants » en diffusant leurs contributions dans des rubriques distinctes : doctrine et études doctorales par exemple. Lorsque de telles publications ou diffusions sont proposées, on peut faire crédit aux revues qui sont dotées de véritables comités de lecture.

6. Comment citer les références obtenues en accès libre ou sur des sites déterminés dans une étude ?

Les sites d'éditeur proposent une charte éditoriale qui est susceptible de varier d'un éditeur à l'autre. Les références jurisprudentielles mises à disposition par un éditeur seront en principe assorties de références antérieures et postérieures à celles recherchées et complétées par des références doctrinales qui consistent en des commentaires des décisions recherchées.

Un site a été mis en place avec le concours de plusieurs éditeurs juridiques en vue de fixer des règles de rédaction et de citation des références juridiques nationales, étrangères et internationales. Ce site s'adresse à tous les acteurs participant à la production de contenus juridiques. Il s'agit du site <http://reflex.sne.fr>

Les références obtenues en accès libre ne sauraient être citées sans une vérification sur le site de l'institution ou de la juridiction concernée, étant observé que certaines informations sont diffusées de manière fantaisiste ou orientée. Ainsi, plusieurs sites accessibles au terme d'une recherche sur Google ont mentionné un arrêt du Tribunal rendu le 19 août 2018 qui aurait déclaré recevable une action collective en matière de justice climatique. Une vérification dans le site officiel de la Cour de justice de l'Union européenne permet de conclure que cette référence pourtant citée à de multiples reprises était complètement fantaisiste...

Discours de clôture

Ladies and Gentlemen,

I am very happy with the outcome of this study day, which kept all its promises: the quality of the interventions and debates was of a very high standard!

I thank all the speakers for their very high quality interventions.

I would also like to express my gratitude to each of you for your participation in this day. We were very honoured to welcome some thirty library officers from the constitutional and supreme national jurisdictions as well as ten or so law library officers from the Greater Region. I am also pleased with the strong inter-institutional participation, which shows the great interest in the subject of this study day.

I would like to summarise in a few words our discussions today. I will make an effort to summarise, but given the limited time available, I may miss some points.

Our day of reflection and debate on the theme of the challenges facing our legal libraries is based on four observations.

I. The first observation is the significant *digitisation of most books and periodicals*.

For a library, the digitisation of content is both an opportunity and a challenge.

The electronic format is flexible for users to use because it is available 24/24 hours and 7/7 days and limits storage costs (for information the Court's library has about 10.2 km of shelf space). But its use by libraries is often very expensive because of the cost of often expensive user licenses. In addition, unlike paper format, which is perpetually available to the library, in the event of the bankruptcy of a database provider, electronic resources may be difficult to recover. In some cases, it is probably impossible to recover them.

Therefore, in the current transitional phase and given the limited resources available to most libraries, as part of our new strategy, we have decided that for publications concerning European Union law, paper format will always be purchased to ensure the sustainability of our specialised fund in this area. For the others, we prefer the electronic format only in the sense that the purchase in paper format is no longer automatic.

Copyright is a complex subject that may undergo a major evolution. On 12 September 2018, the European Parliament adopted a proposal for a Directive on copyright in the digital single

market. Mr Bruch raised the main concerns for libraries in this regard. He drew our attention to the need for a legal framework adapted to libraries.

Mr Sakkers has demonstrated that sometimes competition law can provide answers to some of the publishers' behaviour. However, he pointed out that competition law will probably not provide answers to all cases. As a result, it is worth considering the need to adopt specific regulations to combat certain practices of suppliers or publishers.

Mr Collela's speech, which also dealt with this theme, taught me about the existence of "creative common licences" that could help to promote the dissemination of open access knowledge. In addition, the initiative of the Swiss National Research Fund to open up all the research financed by this fund by 2024 should make it possible, if it were generalised, to enrich our libraries' catalogues at a lower cost.

II. The second observation is the *multiplication of resources called "open source/open access" or free access.*

On a daily basis, we can all see the multiplication of open access legal resources, i.e. content put online spontaneously by its author without going through a legal publisher. However, both blog articles and free downloadable "legal studies" raise the issue of resource reliability.

In this respect, on many current legal topics, it can be seen that an Internet search brings open access resources to the top of the list of results.

However, as Professor Picod pointed out in his speech, these new open sources, often disseminated without control, present risks, particularly for the less experienced lawyers. In this respect, as Mr Poiares Maduro pointed out, when the control of online resources is as well ensured as for paper journals, the latter could lose their interest.

The analytical grid proposed by Professor Picod to identify quality resources rightly highlights official resources or those of renowned legal publishers. These resources do offer guarantees that result from a lengthy verification process before their release. For open access resources, the criterion suggests that the author should be clearly identified by academic titles or reputation, which probably helps to ensure the quality of online contributions.

III. A third observation is the *evolution of IT tools*.

The progress of information science is impressive.

Libraries are not immune to this observation of the rapid evolution of computer tools. It is important to be aware of future developments because, as in many professions, the installation of high-performance tools may require redefining the tasks of library staff when IT tools replace part of their daily work. As Mr Torn pointed out, it is essential to clearly identify the tools necessary for libraries to function properly.

With regard to **bibliographic research**, the time when searches were carried out using cardboard sheets meticulously filed by librarians in lockers is undoubtedly over. Things are changing very quickly. Mr Faro explained very well the evolution of the behaviour of researchers, in particular young researchers, due to technological progress.

While libraries that manually search periodicals seem to be less and less common, researchers can see that library catalogues provide fairly accurate reference rankings, including journal articles. This is now possible thanks to discovery tools that often use data from thesauri of legal publishers or a national reference library.

As Mr Faro mentioned, these discovery tools can be considered as a kind of “conciliation” of traditional search (in library catalogues) and search in Internet search engines.

One of the advantages of the discovery tool is that it provides the researcher with a single point of access to a large number of sources. Often, they also provide direct access to the full text. In this respect, as Mr Torn pointed out, access to the full text must be considered as a decisive step forward for libraries.

But as Mr Faro indicated, the main disadvantage may be the noise in the results. We are currently experimenting with this in the configuration work of the prototype we have presented to you. To limit noise, we have decided to limit indexation to the resources referenced in our catalogue as well as those to which we subscribe. The expansion of resources will be gradual in order to limit noise as much as possible and guarantee the quality of the indexed resources.

The evolution of tools is not limited to bibliographic finding aids. Indeed, integrated library management systems tend to simplify tasks, thus limiting the tasks of least interest to library staff. These time savings can be used to **strengthen the training offer**. Indeed, the library's professions tend to specialise in training users, particularly in new research tools. Even for basic training, new tools and social networks can improve the service offering such as the 24/7 chatbot service available on the Facebook page of the Library of Congress.

IV. The fourth observation is the *need to strengthen collaboration between libraries.*

Our study day highlighted the current challenges facing modern law libraries. Mr Poiares Maduro's intervention highlighted the potential future needs of lawyers, in particular the future need to have experts to highlight what is important. These potential future needs are potential new challenges.

To meet current and future challenges, I believe that collaboration between libraries is a key to success.

Indeed, at the national level, there are many library networks that make it possible to combine the strengths of each library, thus contributing to a better dissemination of information and a greater strength in negotiations with suppliers.

To meet the needs of users in different states, library networks already exist for interlibrary loans: For example, since 1989, there has been the Eucor Network, which brings together the universities of the Upper Rhine (Basel, Mulhouse, Freiburg/Breisgau, Strasbourg, Karlsruhe) and above all here in the Greater Region, since 2008, there has been the UNI Grande Région Network, whose partners are the universities of Kaiserslautern, the University of Lorraine, the University of Liège, the Luxembourg Library Network, the Saarbrücken University Library and the Trier University Library.

At judicial level, since January 2018, there is the European Union Judicial Network, which provides an opportunity to strengthen cooperation between the constitutional and supreme courts of the Member States, particularly in the field of libraries. In this regard, I am delighted once again that more than thirty heads of libraries from national jurisdictions participated in our day.

I am honoured by the invitation extended to us by Ms Sanchez, Law Librarian of Congress, Washington D.C., in her inspiring statement, which has opened the opportunity of our day to invite each of your libraries to collaborate.

In this respect, first of all, I would like to point out that collaboration between our libraries would in any case be carried out with strict respect for the richness and cultural and linguistic diversity of each Member State and with respect for the law, even when it would seem that legislative developments are necessary.

Through this offer of collaboration, it is not a question of harmonisation but only of finding areas in which we could provide mutual support with the respective strengths of each of our libraries.

In this perspective, the sharing of bibliographic data, the exchange of cataloguing practices and training could be areas in which concrete cooperation could quickly be established. Subsequently, other avenues could be considered, such as the evaluation of open source, the exchange of documentation and even the awarding of joint invitations to tender to increase the bargaining power with suppliers.

It seems to me that such collaborative opportunities are very exciting and bring benefits to each of our libraries. As I leave my position as Director General of Information at the end of the month, I will not be personally involved in this great project, but I already know that you can count on Mr Schauss, the Director of our library, to initiate collaborations between our libraries.

I would like to reiterate my thanks for your participation in this study day, which I hope will have given you great satisfaction.

Mesdames, Messieurs,

Je suis très heureux de la concrétisation de cette journée d'étude qui a tenu toutes ses promesses : la qualité des interventions et les débats étaient d'un très haut niveau !

Je remercie tous les orateurs pour leurs interventions de très grande qualité.

J'exprime également à chacun d'entre vous ma gratitude pour votre participation à cette journée. Nous étions très honorés d'accueillir une trentaine de responsables des bibliothèques des juridictions constitutionnelles et suprêmes nationales ainsi qu'une dizaine de responsables de bibliothèques juridiques de la Grande Région. Je me réjouis également de la forte participation interinstitutionnelle qui témoigne du grand intérêt du sujet de cette journée d'étude.

J'aimerais en quelques mots résumer nos échanges d'aujourd'hui. Je vais faire un effort pour résumer mais vu le temps limité il se peut que certains points m'échappent.

Notre journée de réflexions et de débats sur la thématique des défis auxquels sont confrontées nos bibliothèques juridiques trouve son origine dans quatre constats.

I. Le premier constat est celui de l'importante *digitalisation de la plupart des livres et des périodiques.*

Pour une bibliothèque la digitalisation des contenus est à la fois une opportunité mais également un défi.

Le format électronique est souple à l'usage pour les utilisateurs car il est disponible 24/24h et 7/7 J et il limite les frais de stockage (pour information la bibliothèque de la Cour c'est environ 10,2 km de volumes en rayons). Mais son utilisation par les bibliothèques est souvent très chère en raison du coût des licences d'utilisation souvent onéreuses. Par ailleurs, à la différence du format papier qui est perpétuellement à la disposition de la bibliothèque, en cas de faillite du fournisseur d'une base de données, les ressources électroniques peuvent être difficiles à récupérer. Dans certains cas, il est probablement impossible de les récupérer.

Par conséquent, dans la phase transitoire actuelle et compte tenu de la limitation des ressources qui affecte la plupart des bibliothèques, dans le cadre de notre nouvelle stratégie, nous avons décidé que pour les publications en droit de l'Union européenne le format papier sera toujours achetée pour garantir la pérennité de notre fonds spécialisé en cette matière. Pour les autres,

nous privilégions le format électronique uniquement en ce sens que l'achat au format papier n'est plus automatique.

Le droit d'auteurs est une matière complexe qui va peut-être connaître une importante évolution. Le 12 septembre 2018, le Parlement européen a adopté une proposition de directive sur le droit d'auteur dans le marché unique numérique. Monsieur Bruch a évoqué les principales préoccupations pour les bibliothèques à cet égard. Il a attiré notre attention sur la nécessité de disposer d'un cadre juridique adapté aux bibliothèques.

Monsieur Sakkers a démontré que, parfois, le droit de la concurrence peut apporter des réponses à certains comportements des éditeurs. Toutefois, il a signalé que le droit de la concurrence n'apportera probablement pas de réponses à tous les cas. Si bien qu'il convient de s'interroger sur la nécessité d'adopter une réglementation spécifique pour lutter contre certaines pratiques des fournisseurs ou des éditeurs.

L'intervention de Monsieur Collela, qui a également portée sur cette thématique, m'a appris l'existence de « creative common licences », qui pourraient contribuer à favoriser la diffusion de la connaissance en open access. Par ailleurs, l'initiative du fonds national suisse pour la recherche de mise en open access de la totalité des recherches financées par ce fonds à l'horizon 2024 devrait permettre, si elle était généralisée, d'enrichir à moindre frais les catalogues de nos bibliothèques.

II. Le deuxième constat est celui de *la multiplication des ressources dites en « open source/open access » ou libre accès.*

Au quotidien, nous pouvons tous faire le constat de la multiplication des ressources juridiques en libre accès, c'est-à-dire un contenu mis en ligne spontanément par son auteur sans passer par un éditeur juridique. Les articles sur les blogs tout comme les « études juridiques » téléchargeables gratuitement posent toutefois le problème de la fiabilité des ressources.

À cet égard, sur de nombreux sujets d'actualité juridique, on peut constater qu'une recherche sur Internet fait remonter au début de la liste des résultats des ressources en libre accès.

Or, comme l'a relevé le Professeur Picod dans son intervention, ces nouvelles sources en libre accès, souvent diffusées sans contrôle présentent des risques, en particulier pour les juristes les moins avertis. A cet égard, comme l'a souligné Monsieur Poiaras Maduro, lorsque le

contrôle des ressources en ligne sera aussi bien assuré que pour les revues au format papier, ces dernières pourraient perdre de leur intérêt.

La grille d'analyse proposée par le Professeur Picod pour identifier les ressources de qualités met en avant, à juste titre, les ressources officielles ou celles des éditeurs juridiques renommés. Ces ressources offrent effectivement des garanties qui découlent d'un long processus de vérification avant leur diffusion. Pour les ressources en libre accès, le critère proposant de bien identifier l'auteur par ses titres académiques ou sa réputation permet probablement de s'assurer de la qualité des contributions en ligne.

III. Un troisième constat est celui de l'évolution des *outils informatiques*.

Les progrès de la science de l'information sont impressionnants.

Les bibliothèques n'échappent pas à ce constat de l'évolution rapide des outils informatiques. Il est important d'avoir conscience des évolutions futures car, comme dans de nombreux métiers, l'installation d'outils performants peut nécessiter de redéfinir les tâches du personnel des bibliothèques lorsque les outils informatiques se substituent à une partie de leur travail quotidien. Comme l'a signalé M. Torn, il est essentiel de bien identifier les outils nécessaires au bon fonctionnement des bibliothèques.

S'agissant des **recherches bibliographiques**, le temps où les recherches se faisaient à l'aide de fiches cartonnées classées méticuleusement par les bibliothécaires dans des casiers est incontestablement révolu. Les choses évoluent très rapidement. Monsieur Faro a très bien expliqué l'évolution du comportement des chercheurs, en particuliers les jeunes chercheurs, du fait des progrès techniques.

Alors que les bibliothèques qui pratiquent le dépouillement manuel des périodiques semblent être de moins en moins répandues, les chercheurs peuvent constater que les catalogues des bibliothèques proposent des classements de références assez précis, y compris d'articles de périodiques. Ceci est aujourd'hui possible grâce aux discovery tools qui reprennent souvent les données des thésaurus des éditeurs juridiques ou d'une bibliothèque nationale de référence.

Comme l'a indiqué M. Faro, ces discovery tools peuvent être considérés comme une sorte de « conciliation » de la recherche traditionnelle (dans des catalogues de bibliothèques) et la recherche dans les moteurs de recherche sur Internet.

Les discovery tool présentent notamment l'avantage d'offrir au chercheur un point d'accès unique à un grand nombre de sources. Souvent, ils permettent également d'accéder directement au texte intégral. À cet égard, comme l'a souligné Monsieur Torn, il convient de considérer que l'accès au texte intégral a constitué un pas en avant décisif pour les bibliothèques.

Mais comme l'a relevé Monsieur Faro, le principal inconvénient peut être le bruit dans les résultats. Nous en faisons actuellement l'expérience dans les travaux de paramétrage du prototype que nous vous avons présenté. Pour limiter le bruit, nous avons décidé de limiter l'indexation aux ressources référencées dans notre catalogue ainsi que celles auxquelles nous sommes abonnés. L'élargissement des ressources sera progressif afin de limiter au maximum le bruit et garantir la qualité des ressources indexées.

L'évolution des outils ne se limite pas aux instruments de recherche bibliographiques. En effet, les systèmes de gestion intégrée des bibliothèques tendent à simplifier les tâches permettant ainsi de limiter les tâches les moins intéressantes pour le personnel des bibliothèques. Ces gains de temps peuvent être mis à contribution pour **renforcer l'offre de formation**. En effet, les métiers de la bibliothèque tendent à se spécialiser dans la formation des utilisateurs en particuliers aux nouveaux outils de recherche. Même pour la formation de base, les nouveaux outils et les réseaux sociaux peuvent améliorer l'offre de service comme le service d'assistance à la recherche (chatbot) disponible 24/24h et 7/7 J sur la page facebook de la library of Congress.

IV. Le quatrième constat est celui du *nécessaire renforcement de la collaboration entre les bibliothèques.*

Notre journée d'étude a mis en évidence les défis actuels auxquels les bibliothèques juridiques modernes sont confrontées. L'intervention de Monsieur Poiars Maduro a mis en évidence les potentiels futurs besoins des juristes, notamment le besoin futur de disposer d'experts pour mettre en évidence ce qui est important. Ces potentiels besoins futurs constituent autant de nouveaux défis potentiels.

Pour relever les défis actuels et futurs, j'ai la conviction qu'une collaboration entre les bibliothèques constitue un facteur de succès.

En effet, au niveau national, il existe de nombreux réseaux de bibliothèques qui permettent de conjuguer les forces de chaque bibliothèque contribuant ainsi à une meilleure diffusion de l'information ainsi qu'à une plus grande force dans les négociations avec les fournisseurs.

Pour satisfaire les besoins des utilisateurs établis dans différents États, il existe déjà des réseaux de bibliothèques permettant des prêts entre bibliothèques : par exemple, depuis 1989, il existe le Réseau Eucor qui rassemble les universités du Rhin supérieur (Bâle, Mulhouse, Fribourg/Brigau, Strasbourg, Karlsruhe) et surtout ici même dans la Grande Région, depuis 2008, il existe le Réseau UNI Grande Région dont les partenaires sont les universités de Kaiserslautern, l'université de Lorraine, l'université de Liège, le Réseau des bibliothèques luxembourgeoises, la bibliothèque de l'université de Saarbrücken et la bibliothèque de l'université de Trier.

Au niveau juridictionnel, depuis janvier 2018, il existe le Réseau judiciaire de l'Union européenne qui constitue une opportunité de renforcer les coopérations entre juridictions constitutionnelles et suprêmes des États membres, notamment dans le domaine des bibliothèques. À cet égard, je me réjouis, une nouvelle fois, que plus de trente responsables de bibliothèques de juridictions nationales ont participé à notre journée.

Je suis honoré de l'invitation que M^{me} Sanchez, Law librarian of Congress, nous a adressée dans son intervention. Comme elle, j'aimerais saisir l'occasion offerte par notre journée pour proposer à chacune de vos bibliothèques de collaborer ensemble.

À cet égard, de prime abord, je tiens à préciser que la collaboration entre nos bibliothèques se ferait, en toute hypothèse, dans le strict respect de la richesse et de la diversité culturelle et linguistique de chaque État membre ainsi que dans le respect du droit même lorsqu'il semblerait que des évolutions législatives soient nécessaires.

Par cette offre de collaborations, il n'est pas question d'harmonisation mais uniquement de trouver des domaines dans lesquels nous pourrions nous apporter un soutien mutuel avec les forces respectives de chacune de nos bibliothèques.

Dans cette perspective, le partage de données bibliographiques, l'échange de pratiques concernant le catalogage, la formation pourrait constituer des domaines dans lesquels des coopérations concrètes pourraient rapidement être établies. Par après, d'autres pistes

pourraient être envisagées comme l'évaluation de l'open source, l'échange de documentation, voire même la passation de procédures d'appels d'offres conjoints, pour accroître le rapport de force avec les fournisseurs.

Il me semble que de telles perspectives de collaborations sont très enthousiasmantes et porteuses de bénéfices pour chacune de nos bibliothèques. Dans la mesure où je quitte mes fonctions de directeur général de l'information à la fin du mois, je ne participerai pas personnellement à ce beau projet mais je sais déjà que vous pouvez compter sur Monsieur Schauss, le directeur de notre bibliothèque pour amorcer des collaborations entre nos bibliothèques.

Je vous renouvèle mes remerciements pour votre participation à cette journée d'étude qui, je l'espère, vous aura apporté une grande satisfaction.



COUR DE JUSTICE DE L'UNION EUROPÉENNE

Cour de justice
L-2925 Luxembourg
Tél. +352 4303-1

Tribunal
L-2925 Luxembourg
Tél. +352 4303-1

La cour sur l'internet: curia.europa.eu

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