

# Abstracts

## 04 Introduction

Françoise TRASSOUDAINE and Jean-Pierre DARDAYROL

## 07 A historical panorama of the legal professions in France and abroad

Jean-Louis HALPÉRIN

A historical view leads us to inquire into the origins of the legal professions and changes therein. Legal procedures were invented before legal experts appeared in ancient societies such as Rome (prudents). The figure of the court lawyer emerged later, before learned sources of law in the Middle Ages gave rise to prosecutors, attorneys and notaries. In France, royal authorities required a licence in law for lawyers and then judges. By the end of the 17th century, they tolerated the formation of the equivalent of bar associations. After the breach of the French Revolution, attorneys, notaries and lawyers were reorganized under Napoleon; and an original structure was set up for lawyers. A comparison with foreign countries lets us glimpse various configurations of these legal professions and the trend in the 19th and 20th centuries toward professionalization and a rapprochement between these various legal professions.

## 11 Digital technology, an essential lever for the efficiency and quality of justice in Europe

Yannick MENECEUR

Without any doubt, digital technology, owing to its capacity for shaping both processes and information about them, is a major lever for changing organizations so as to improve efficiency. For several years now but at different rates and with disparate results, European court systems have taken the introduction of this technology to be an opportunity. Courts are now, in general, equipped; but the impact on the quality of services delivered to citizens varies widely. In 2016, the European Commission for the Efficiency of Justice (CEPEJ) not only updated its biennial assessment but also tried using the guidelines on cyberjustice to identify the factors of success in the 47 countries belonging to the Council of Europe. The CEPEJ is now examining the latest developments, such as the uses of open data and artificial intelligence, in order to identify the assets and limits with regard to the European Convention.

## 16 The Challenges of Justice in the "stage 3" Digital Age

Harold ÉPINEUSE et Antoine GARAPON

The Ministry of Justice should not allow itself to be "outdated" by the libertarian ideology of the digital world and its legaltechs. However, it cannot ignore or underestimate the upheaval to come and must redefine its organization to continue to assert public power and its missions in complementarity with what machines can bring.

## 20 Legal technology's economic impact on the law market

Bruno DEFFAINS

Legal technology is modifying the economics of the law by offering new services and lowering the costs of existing services. Legal professionals are gradually being forced to reorganize their activities and their relations with colleagues.

## 28 Teaching computer science to legal professionals

Serge ABITEBOUL et Claire MATHIEU

The education of legal professionals in the 21st century should have a significant scientific dimension encompassing the information sciences and digital technology.

## 32 The digital transition, an opportunity for legal professionals to seize

Marc MOSSÉ

The digital revolution is deeply changing law and the legal professions. Instead of being apprehensive, legal professionals should control this trend within ethical guidelines still to be defined. They will thus be able to devote themselves to more valuable tasks. Higher education and ongoing training are essential for this. To have a hold on this opportunity, corporate attorneys and attorneys at law must come together.

## 38 Factors changing fields of law

Guy CANIVET

Presented as a “total social fact”, the digital revolution is setting off major changes in the law owing to many factors. The first set of factors is legal: they force every legal field to take account of the coming of information and communications technology to all human activities; and they induce national or international lawmakers to regulate digital techniques via the creation of a new discipline, digital law. Other factors are economic and social owing to the deep changes wrought in the practice of the law by the sudden appearance of new service-providers in legal technology. The latter are proposing innovative services on Internet platforms, upsetting the economics of the legal professions and destabilizing the legal professional’s social position. At the institutional level, these factors mean that the public service of justice must review: the assignments made to these new service-providers, the settlement of disputes on line, the distribution (in particular geographical) of modes of access, the organization of court hearings, and the pronouncement of decisions. These factors are also epistemological: big data, artificial intelligence and digital terminology are altering both the rationale of the legal professions and the nature of norms. These factors are, too, political: by making possible a new system of transactions secured through shared trust (without a trusted third party), blockchains emancipate economic agents from both the law and the justice of nation-states. All in all, the conjunction of these factors is subversive; and the political, economic, ethical and symbolic effects are yet to be gauged.

## 44 Digital technology and administrative law

Jean-Marc SAUVÉ

The surge in digital technology, ranging from the Internet to artificial intelligence, provides the administrative court system with several opportunities for progress in terms of the efficiency, rapidity and quality of the services delivered to litigants. Opposite these opportunities however are risks and worries that we should not underestimate. The dematerialization of proceedings is a first major change in the work methods of courts of administrative law. The advances made in artificial intelligence are causing deep but ambivalent changes, which must be better understood in order to control their effects. Otherwise, the principles of an independent, impartial and human justice will be endangered.

**48 Automating court decisions: To what point?**

Florence G'SELL

Predictive algorithms provide judges with tools of an unprecedented efficiency for assisting their decision-making. Predictions related to behavioral profiling and court decisions are going to increasingly be factored into the work of judges, who, though sovereign, will be unable to ignore them. Can we imagine that machines will sooner or later make decisions in place of courts of law, perhaps in cases of routine litigation? Gradually automating the judge's work now seems likely, but it raises questions so awesome that only a new, multidisciplinary approach can address them.

**53 Digital technology and the protection of intellectual property rights on the Internet**

Anna BUTLEN

The argument that technological advances, by themselves, would offer an alternative to the protection by the law of intellectual property and suffice to fight against pirates on the Internet has soon encountered its limits. Problems due to the dependence on technology and its domination have sparked lively debates. Piracy involves several parties under rival legal systems, and the fight against it has aroused strong concerns about the protection of basic freedoms and the social acceptability of the measures to be adopted. Arguments about the introduction of new technology in the legal realm have emphasized how these new tools can better protect rights and draw attention to the conditions for authorizing and regulating their uses.

**58 Techniques of digital inquest: The challenge to survive in modern times**

Floran VADILLO

The techniques used by criminal investigators in France have been neglected politically and overlooked by industry and the media. They have to be adjusted to new forms of criminality, adapted to the digital environment and modernized, whence three nearly vital challenges: an ontological challenge to criminal investigators to cope with the competition, both political and technological; a legal and jurisprudential challenge; and the technological challenge of modernization and project management.

**63 The profession of notary: The new stakes**

Nicolas TISSOT

Over the past fifteen years, notaries have undertaken projects related to dematerialization, electronic signatures and the electronic storage of archives. They are also using a very effective tool for producing certified acts that heavily relies on electronic exchanges. For the passage from paper to an electronic format however, the client was lost from sight. Given the digital tidal wave and the proliferation of startups in the field of law, thoughts about digital technology must concentrate on clients. Since 2017, a digital strategy has been worked out that recognizes the client's importance and, too, the need to deal with an ecosystem that, by nature, is beyond control. This strategy relies on a platform with the goal of interconnecting all notarial offices within the digital ecosystem while complying with standards on interoperability and using application programming interfaces (APIs) for exchanging data between platforms. Besides optimizing the tools for producing official documents while

staving off reductions in the regulated schedule of fees, digital technology has become a major means for notaries to make clients loyal and to win new markets, thus anticipating any legislative changes.

## 68 Digital access to the law

Roseline LETTERON

Access to the law evokes the idea of the transparency of the rule of law and of its interpretation by judges. The website Légifrance provides access to French laws and decrees; but open data on court decisions is still very partial and incomplete. Enshrined in the 2016 Lemaire Act for a Digital Republic, the open data principle has unsettled traditions by challenging the supremacy of higher courts to control jurisprudence, including the jurisprudence of trial judges. By requiring anonymity and preventing the identification of the parties to a case, this principle risks eventually making court decisions more abstract, removed from a consideration of the facts of the case. Above all, open data challenges our vision of justice by providing us with a glimpse of a “predictive justice”, whereby computers pronounce decisions by using models built from precedents. What characterizes predictive justice — besides its violation of the principle of an individual examination of cases and its incapacity for factoring into its decisions the finer points that have motivated decisions — is its conservatism. Fully turned toward the past, it risks petrifying jurisprudence, thus making the law static and rigid.

## 73 Making the law during the digital era

Laure de LA RAUDIÈRE

“E-democracy”, a new concept based on digital technology, should not take the place of legislative institutions or undermine parliament’s legitimacy. This new technology provides powerful means for public decision-makers to better draft laws and include citizens in the hearings process.

## 77 A panorama of legaltechs

Olivier CHADUTEAU

The law has not escaped; it has been caught by the digital revolution. The three aspects of this revolution are value, technology and new forms of collaborative work. The principal stakeholders are the so-called legaltechs, firms in legal technology. There are now 843 of them in the world. They have roiled the law market. Their two-sided platforms and their processing of legal data have affected all players in this market. This panorama presents a view of 518 legaltechs and classifies them in three categories: sharing, production and assisted decision-making.

## 81 Doctrine.fr, artificial intelligence at the service of the law

Antoine DUSSÉAUX et Hugo RUGGIERI

The law seems to figure among the sectors of the economy least affected by the digital revolution. Given, however, that court decisions and texts of law are studded with references and links to other decisions and texts, the law seems to lend itself to the invention of a Google-like search engine. For this reason, artificial intelligence can make the law more accessible for litigants and more practicable for professionals. Doctrine.fr, a legal search engine, places artificial intelligence at the service of people for the purpose not of providing

a predictive justice but, instead, of assisting justice. Its development depends on the general availability of raw data from judiciary sources (in particular court decisions). These data are necessary to perfect the tools for extending internationally the sway of the economy and the French legal model.

## **86 The ethics of predictive justice**

Louis LARRET-CHAHINE

The upsurge of digital technology in the law, via the emergence of legaltechs and predictive justice, calls for updating the rules of ethics necessary for justice to operate as it should. The design and control of algorithms, the anonymization of data, the management of biases in databases, sanctions against pirates: clear rules have to be drafted and obeyed lest litigants' trust in the justice system be eroded.

## **92 MyCercle.net helps lawyers share information in full confidentiality**

Jérôme CAZES

MyCercle.net offers lawyers new solutions for exchanging and sharing electronic messages and documents in full confidentiality with their clients. Lawyers' reactions to this offer are a litmus test on their use of digital technology and of their expectations and anxieties. For the time being, lawyers are mostly wary. To be convincing, offers of digital services must clearly state whether they are bringing lawyers solutions or problems in three areas of special concern to them: confidentiality, competition and the personalization of justice.