
This special issue of *EuroJus* collects the papers presented during the first edition of the seminars of the Doctorate in Public, International and European Law of the University of Milan that took place between the 15th and the 17th of October, 2018 in the prestigious setting of Palazzo Feltrinelli, on the shores of the lake in Gargnano sul Garda.

Papers’ collection as well as the editorial revision of the papers were carried out solely by Gherardo Carullo, Research Assistant at the University of Milan, whom I’m especially grateful to also for the precious help in organizing the two days of seminar in Gargnano.

Participants were selected with an open call for PhD students and recent post-docs, titled “Big Data and Public Law: new challenges beyond data protection”. The aim was to gather papers that could, in various ways, identify the challenges deriving from the increasing digitization of society and its actors, in particular by examining how the most recent technologies can influence national and supranational law.

Therefore, the criteria used by the selection Committee of full Professors of the University of Milan favoured those paper with the most interdisciplinary approach, encompassing international law, constitutional law, tax law and administrative law; and to this end, the call identified three main subject areas, which corresponded to the three different panels.

The introduction to the seminar was delivered by Jean-Bernard Auby, distinguished Professor of Public Law at Sciences-Po (Paris, France) who held a *lectio magistralis* which provided a wide and inspiring overview of the various issues that lawyers face due to the digital revolution, both at the local level, and globally.

The first panel – chaired by myself, in my capacity as Director of the PhD Programme in Public, International and EU Law of the University of Milan and as organizer of the doctoral seminar, and with the final remarks of Giuseppe Marino, Tax Law Professor at the University of Milan – titled “Big Data and Public Law: artificial intelligence, algorithmic decision and algorithmic transparency, Big Data and Taxation”, and focused on the role of technology in relation to human rights.

The first paper of this panel, of Mauri, addresses the delicate issue of the use of artificial intelligence for military purposes. In particular, the article analyses the admissibility

(*)(*) Director of the PhD Programme in Public, International and EU Law of the University of Milan. Full Professor of Administrative Law and European Administrative Law.
of so-called Algorithmic Target Construction (ATC), in order to assess the legality of such instruments in relation to human rights.

The second paper, of Dal Monte, focuses on human rights, as well; its special focus is on whether, and to what extent, the use of big data can constitute a risk for the individual’s self-determination and for the implementation of his/her fundamental rights. After an introduction on the notion of human dignity, the text unfolds through a comparative law analysis between Europe and the United States, thus evaluating how competition rules and antitrust powers of the public authorities can be used as a tool to protect (also) the rights of the individual.

On the tax law side, Sut’s paper analyses the challenges that increasing digitalization of the internal market poses for Member States and for European institutions. After a brief exposition of the new problems that the digital market poses under a tax law perspective, the author proposes an interesting analysis of the recent proposal for a Council Directive on the Common System of Digital Services.

To conclude the first panel, Pitto’s paper focuses on another very topical issue, namely electoral freedom and the use of big data as a tool for the dissemination of political messages. The actuality of the problem, and the enormous size of it, is approached through an interesting historical analysis, starting from the traditional means of political propaganda. The author stresses out what has actually changed with the new tools offered by Information and Communication Technologies (ICT); and, in particular, how the use of big data to convey messages on social media might have changed, or not, the traditional relationship between voters and their representatives.

The second panel – chaired by Daniele Senzani, Professor of Public Law at the University of Bologna, and with the final remarks of Gabriele Della Morte, Professor of International Law at the University of Milan-Cattolica – titled “Big Data and State Jurisdiction (The un-territoriality of Data): how centrality of territoriality is challenged by the present day dynamics governing the search and seizure of digitized information”, and focuses on problems arising from the inmateriality of digital assets, as well as the speed with which data move, and can be moved, from one nation to another.

Cantekin’s paper addresses specifically the problem of cross-border data transfers. The author begins by analyzing the case US v. Microsoft, and then the US Cloud Act. Based on these premises, the article focuses on the analysis of the opposing interests inherent in data management, the protection of individuals and free trade.

The second contribution to the panel, by Piovesani, focuses on data protection litigation. The author analyzes in particular Regulation 2016/679/EU, the General Regulation on Data Protection (so-called GDPR), and Regulation 2012/1215/EU, on jurisdiction and the recognition and enforcement of judgments in civil and commercial matters (so-called B1R). The author deals in particular with the problems related to the coordination of proceedings before different courts or tribunals, analyzing the discipline referred to in the GDPR and how it can be interpreted in light of the rules provided by B1R.
Regarding criminal trials, Bartoli analyzes the problem of accessing data in criminal proceedings. In particular, the author focuses on the problems posed by the fact that data is now often kept in the hands of private companies (so called cloud); so that access to the physical facilities where such data is stored (data centers) can sometimes be extremely complex, if not impossible, due to territorial limitations and/or jurisdiction limitations.

The paper by Jolly focuses on criminal trial and analyzes the issues raised by the development of distributed register technologies (so-called blockchain). From a criminal law point of view, the author assesses in particular what effects the new delocalized and decentralized tools based on blockchain have on national jurisdiction. The paper thus evaluates how the targeted public theory could be referred to in order to establish jurisdiction over offences enabled or facilitated by the use of such technologies.

Lastly, the third panel – chaired by Russel L. Weaver, Professor at the University of Louisville, Louis D. Brandeis School of Law (Kentucky - USA) and with the closing remarks of Jean-Bernard Auby and myself – titled “Digitization of Public Administration and Big Data: tools, challenges and prospects of the transition to a digitalized public administration”, and focuses on the transformations underway in the public administration, both as regards the modalities of action, and the protection and promotion of individual rights and freedoms.

The first paper of the panel, by Pinotti, analyses a problem at the basis of digitization, i.e. access to the source code of software used by public administrations. Thanks to the analysis of the recent case-law on this matter, the author verifies to what extent the right of access can be deemed to exist in relation to the source code of a software licensed to a public administration, when such software has been used to adopt an administrative decision.

Schneider’s second paper of the panel questions what limitations can be said to exist with respect to the use of intelligent algorithms, and therefore of artificial intelligence, for the adoption of administrative decisions. The author underlines how crucial it is to be able to guarantee transparency and accountability in public decisions. For this reason, the paper calls into question the use of artificial intelligence by public administrations, especially in those circumstances where the software does not allow to comprehend the reasons for a given output.

Alberti’s paper also focuses on the topic of the use of artificial intelligence by public administrations. However, unlike Schneider, he assesses the compatibility of AI with the due process principle. In particular, the author analyzes how the use of data can allow a deeper knowledge by public administrations and, therefore, how the decision-making process can change for the better thanks to the use of artificial intelligence.

Finally, Lima De Arruda introduces with her paper the concrete example of the state of digitalization of the public administration in Brazil. In this context, the author explains how the use of information and communication technologies can have disruptive effects for the Brazilian bureaucracy, from tax authorities to the health system.