"How Matter Matters": "Translations", Boundary Objects, and Digital Innovation in the Public Reforms

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Abstract[1]

Framing of the research. *This paper illustrates a research program on the processes of organizational change and institutional learning in the Italian administration of the justice and in the trajectories of courts technology development. It is argued that objects, artifact and materiality should be included in theoretical accounts of organizational phenomena connected with (digital) innovation and change (Carlile et al. 2013). Drawing on the "socio-technical-systems" (STS) (Law 1986; Mol 2002; Latour 2005, 2009; Bijker et al. 2012; Pickering 1995; Nimmo 2016), we argue that it is possible to understand the process of reform in the Italian judiciary: (i) by combining two theoretical dimension, between "institutions & materiality" and "materiality & change"; (ii) conceptualizing the relation between technology, work and organizations as "enacted in practice" (Orlikowski, Scott 2008); (iii) and analyzing the introduction of accountability mechanisms, and digital technologies in terms of "sociomaterial practices" (Power 1997; Gherardi, Lippi 2000).*

The theoretical premises of this work are based on the interpretation of:

a) the change in the governance structure of the Italian judicial system as one of the expression of the technology of accountability (Power 1997), considering how the "transformative/performative" process in which this technology is used makes the administration of justice truly more "accountable" than before;
b) the administration of justice as a set of "situated and emerging practices" (Suchman 1987; Gherardi 2012), in which the practice-based perspective has the interpretive advantage of eliminating the organizational boundaries of a phenomenon articulated at different organizational levels, between center and periphery (Council of the Judiciary, Ministry of Justice, Courts of Appeal on one hand, courts on the other), showing forms of decoupling between means and ends and policy and practice (Bromley, Powell 2012);
c) institutional learning and organizational change as participation in social practice that produces and circulates knowledge situated in contexts of interaction and mediated by technological artifacts (digital archive as artifacts, "digital evolution of archiving practices" as "memory practices", and processes of "digital infrastructure" within the courts as "technologically dense environments", i.e., Suchman 1997; Bowker, Star 1999; Mol 2002; Pickering 1995; Bowker 2005);
d) the reform as a process of "translation-into-practice" by an "actor-network" capable of triggering institutional learning in the judicial system and organizational change in the courts (Czarniawska, Sevon 1996; Gherardi, Lippi 2000; Nimmo 2016), rather than an "implementation" of a policy (i.e., a model of rational and temporally linear decision) or "diffusion" of an innovation (i.e., recalling the absence of "agency" and logics of "replication", or "institutional isomorphism").

Purpose of the paper/Evidence. *Since the mid 1990s, the reforms of the European judicial systems have addressed the issue of improving efficiency, quality, and accountability mechanisms, in line with the "new public management" (NPM) approach intended as "an assortment of ideas and orientation driving the reform of public administration" (Power 1997: p. 92; Miller, Power 2013; Power 2021).*

As can be seen in the following abbreviated episodes, the interdependence between the two dimensions of the phenomenon, namely 1) the introduction of digital technologies and 2) the performance evaluation mechanisms, is taken for granted (CEPEJ 2022), while our theoretical perspective considers this as a matter of concern:

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[1] «Courts are first considered as legal entities, i.e. institutions responsible for settling disputes submitted to them by citizens. […] In addition to their character of legal entities, courts can also be defined by their geographic location, i.e. by the premises in which judicial activities take place» (p. 79)

«The good development and proper use of ICT is an important element of the good functioning of judicial systems as it contributes to increased transparency, efficiency, access and quality of the services delivered. ICT is no longer a novelty in European judicial systems. Judicial systems whose traditional activities and work organization were based on paper (legal texts, case files, court registers, etc.) are increasingly replacing the old tools with the digital one. The courts are being transformed to accommodate new options and move on-line. Some hearings are taking place via videoconferencing, electronic evidence is regularly presented, while case files and court decisions are becoming digital objects with their content tagged to ease search, analysis and legal reasoning. ICT innovation in the European judicial systems has evolved through different paths because of tensions between different elements, which have led to different results in various national contexts. Examples of these are tensions between local versus centralized solutions, between the development of specialised tools versus more global and generic systems, data security versus external access by users and the public, competences between the executive power in this area and judicial power. Furthermore, institutional settings may differ, depending on the national specificities in the organisation of the judiciary» (p. 95).

[2] «The efficiency of courts and public prosecution services is one of the vital factors for upholding the rule of law and a critical component of a fair trial. It facilitates good governance, promotes the fight against corruption and builds confidence in institutions. Efficient courts and public prosecution services enable individuals to enjoy their economic and social rights and freedoms. They improve the business climate, fosters innovation, attracts foreign investment and secures stable state revenues. [This chapter] demonstrates the main trends and tendencies, while also promoting the best practices among member States, entities and observers. Is also provides basic facts and figures on the performance of courts and public prosecution services. It treats all jurisdictions equally and compares them without any intention of ranking them or promoting any particular type of justice system. Its approach is inspired by the fundamental principle enshrined in Article 6 of the European Convention on Human Rights – the right to a fair trial.

The CEPEJ has developed two performance indicators to assess court efficiency at the European level. Clearance Rate (CR) and Disposition Time (DT) present an overall picture of the judicial efficiency in a particular judicial system. An analysis of their evolution provides a clear picture of efforts of the judicial system to maintain or improve its efficiency. The CR is the ration obtained by dividing the number of resolved cases by the number of incoming cases in a given period, expressed as a percentage. CR shows how the court or the judicial system is coping with the in-flow of cases and allows comparison between systems regardless of their differences and particularities. DT is the theoretical time necessary for a pending case to be resolved, taking into consideration the current pace of work. The resulting indicator should not be taken as an actual calculation of the average value. Actual average times needed for case resolution would need to derive from judicial case management ICT systems. […] This indicator offers valuable information on the estimated length of the proceedings» (p. 107).

Figure 1 describes the research context of this paper, by illustrating on the left the three waves of the recent Italian judicial reforms. In addition, it proposes a matrix based on two descriptive dimensions, namely professional control and administrative accountability, within which some episodes are situated. Below the matrix, the multidimensionality of the concepts of accountability in the field of judicial governance are described. These aspects will be discussed in detail in the following paragraphs.

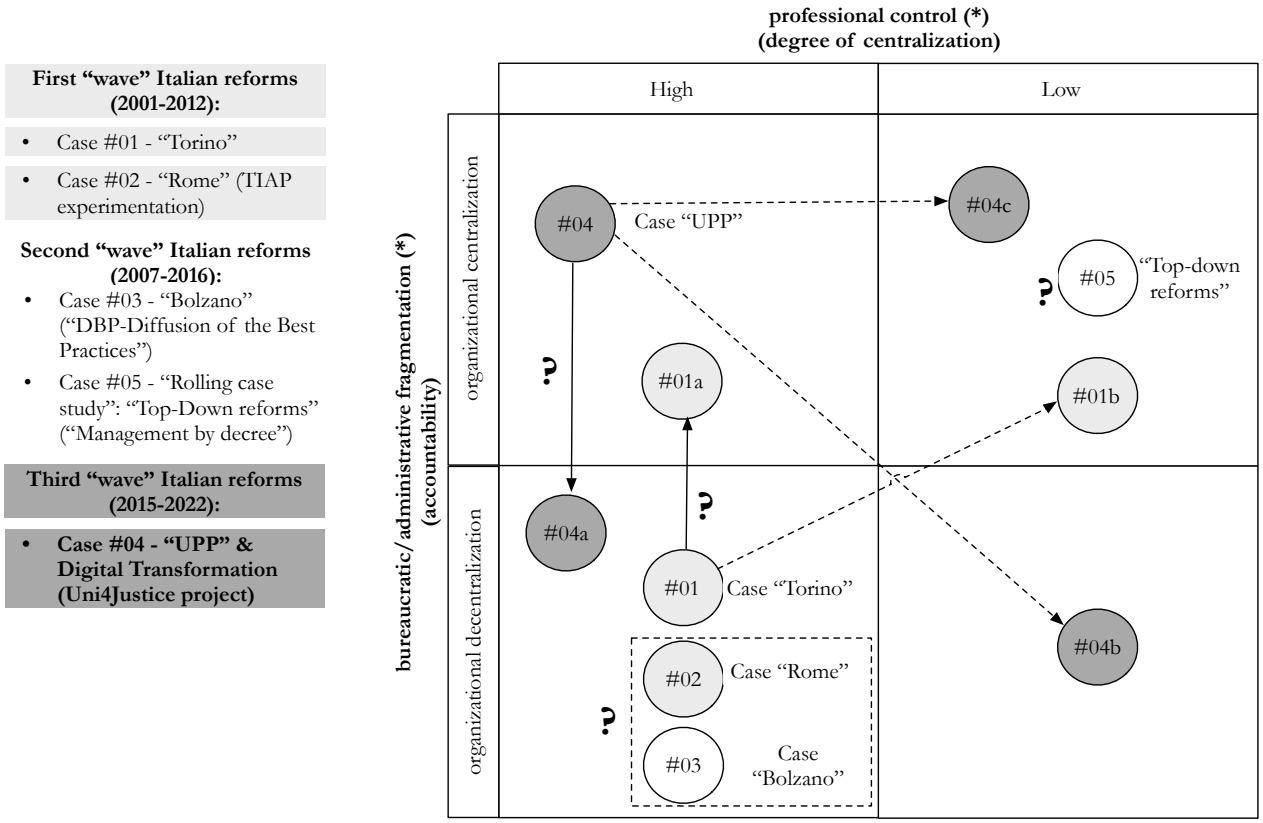
The three "waves", also overlapping, of the Italian judicial system are the following (Sciacca et al. 2013; Piana 2016, 2017; Vercelloni 2020): 1) a "quality-of-justice-oriented" agenda (2001-2012); 2) the judicial offices "in-search-of-best-practices" (2007-2016); 3) and the "management-by-decree" and "digital transformation" reforms (from 2015) (CEPEJ, 2020). This work mainly focuses on this last stage, in relation to the NextGenerationEU – "UNI4Justice" project.

The intent of the reforms largely responds to the need to introduce European standards into the Italian judicial system (CEPEJ 2020, 2021a, 2021b). In 2002, the European Commission for the Efficiency of Justice (CEPEJ) was created within the framework of the Council of Europe, inspired by a user-oriented and a results-oriented viewpoint and by a coherent agenda of macro themes (Piana 2017, p. 187): "access to justice and the proper and efficient functioning of courts; the status and roles of legal professionals; administration of justice and the management of courts; use of information and communication technologies (IT)". Although the States are not under the supervision of the CEPEJ, the spread of rationalizing trends in the international language of the reform process of bureaucratic administration was pervasive: "ruling issued within reasonable amounts of time; judicial decisions executed in conditions of certainty and reliability; transparency of budgetary policies; transparency and accessibility of legal proceedings and legal texts" (Guarnieri, Pederzoli 2002, 2020; Piana 2016). The "dual" Italian system of judicial governance is founded on the balance of power between the executive branch (the Ministry of Justice ensure the availability of resources and their management) and the High Judicial Council (responsible for judicial appointments and promotions). In this "resource/goals oriented" approach (Piana 2010, 2017), the "appropriateness of the quality-of-justice mainstream has been perceived for years as being very low, [and] any policy touching upon the institutional and the organizational setting of the court system has since the early 1990s encountered a high level of conflict" (Piana 2017, p. 191). The most notable example of escalation of conflict between the judicial branch and the political elite in the important actions against corruption can be seen in the "Clean Hands" affair.

Since 2001, the first wave encouraged the Italian public policy debate to explicitly take in consideration the quality of justice: a constitutional provision entrenches the principle of "fair trials" and by means introduces the conditions for a number of legal measures, among which the most significant is the law on the damage suffered because of unreasonable delays in proceedings ("Law Pinto"). The Government presented a decree law which aimed to digitize civil proceedings: Civil Trial Online (or "Processo Civile Telematico-PCT") is the digital procedure for civil cases in

the Italian judiciary (Zan 2002, 2004): it is expected to reduce delays in the courts, and to reduce the costs of the justice system, and its use became compulsory in 2014.

Figure 1 - Professional control and accountability in the Italian judiciary reform



(*) (An assemblage of) Norms and standards of quality of justice (in the "language" of European Commission and Council of Europe) (Piana 2010, p. 59):

(1) Legal accountability:
- Centralised control of constitutionality; judicial review handled by specialised bodies (i.e. constitutional courts)
- Coherence with arts. 5 and 6 of the European Convention for Human Rights
- Respect of the timeframe standards of a fair trial in due time
- Artt. 5 and 6 of the European Convention for Human Rights
- Every citizen should be ensured about the availability of a legal representative in case she can't afford the costs of legal representation
- Organization of systematic and comprehensive programmes of training in law.

(2) Institutional accountability:
- The Judicial Council's board should be composed by a majority of judges (but not all of the members should be judges)
- The Judicial Council has representative and administrative functions
- The Judicial Council is entitled to handle all the mechanisms of recruitment and promotion
- HJC prepares the budget; the court manager is managerially accountable to the HJC
- Creation of a judicial school, centralided, providing programmes of initial and in-service training; the State should provide for the budget for training; the School is accountable to the Judicial Council for the programmes and for the management

(3) Professional accountability:
- Legal training
- Judges and prosecutors (courses of ICT by experts of public administration)
- Adoptions of National and Supranational Codes

(4) Managerial accountability:
- Court manager; system of e-filing
- Non judicial staff
- Performance assessment for judges and clerks at the court level
- ICT tools for judges & ICT tools for clerks; data set of case law and doctrine

(5) Social accountability:
- front office system of e-filing
- web sites of judicial institutions; broad and free availability of information about rights of citizens
- information about the development of judicial procedures
- statistics and survey available to public

A second "wave" of judicial policies is marked by 2006 and 2011's interventions (Sciacca et al. 2013; Piana 2016; Verzelloni 2020). The first attempt to reform the judicial branch leads to reconsider the mechanisms of performance evaluation "whereby the confirmation in office of chief justices and chief prosecutors was made subject to the outcome of performance evaluations in their first four years office – with a consequential increase in their organizational entrepreneurship" (Piana 2017, p. 191). The reform has taken several years to be fully implemented effectively, mainly for the weakness of central institutions (both the executive and judicial branches). As a result, "in 2011 [Mario Monti forms a new government], the level of conflict between the judicial and the executive branches decreased. […] Since 2013, a large number of measures […] designed to improve the management and organization of judicial offices have

been introduced" (Piana 2017, p. 194). This introduces an organizational change to harness skills, competences and leadership in the courts based on a logic of "management-by-decree" (Panozzo 2000; Miller, Power 2013), marked by incisive change at the ministry of Justice.

The first two waves of reforms have been characterized by (Piana 2016; 2017; Contini, Lanzara 2009; 2014):

(a) initiatives taken by a number of chief justices to digitize civil proceedings, relying on the collaboration of the local bar association and the availability of technical expertise with pilot projects in Bologna, Milan and Florence (Piana 2010; Sciacca et al 2013);

(b) initiatives taken by a number of chief justices and chief prosecutors to improve the accountability of the offices in the quality-of-justice mainstream, with pilot projects in Turin, Bolzano, Rome (Piana 2010, 2017);

(c) initiatives to incorporate into regional planning programs the projects of organizational innovation praised by the EU and financially supported by the structural funds, with pilot projects in Bolzano and "DBP" (Sciacca et al., 2013; Castelli et al. 2014);

(d) initiatives driven by the general policy regarding IT, trying to regain control and centrality of the digitization processes to ensure homogeneous implementation patterns in the judicial districts (i.e, e-justice platforms for civil and criminal trials; the introduction of the "Ufficio per il Processo" (UPP), "Office for Proceedings", within the PNRR).

The evidence on the judicial policies between 2001 and 2016 reflects three features (Piana 2017: p. 194): 1) in policy formulation the "local level" predominates; 2) the lack of leadership in the central judicial institutions – the High Judicial Council and the Ministry of Justice – has obstructed the governance of the results achieved by the projects; 3) the long wave of local initiatives taken to improve the quality of justice has had unintended consequences both at the micro and macro levels.

The third "wave" of reform starts from and develops the digitization processes, in line with the highlights above.

The analysis of the evolutions in the governance and reforms of the judiciary system in Italy leads to identify the two dimensions, which give rise to the matrix proposed in figure 1 (Piana 2010, 2016, 2017; Sciacca et al. 2013; Castelli et al. 2014; Verzelloni 2020): the level of centralization of professional control connected to the judicial independence, and the degree of institutional fragmentation among different organizational levels considered as an initial approximation of the dimension of judicial accountability.

Research Design/Method. *This work uses the language of the "sociology of translation", or Actor-Network Theory (ANT) (Latour 2005; Czarniawska 2017) to make sense of the reforms concerning the introduction of digital technologies and accountability mechanisms in the administration of justice (Gherardi, Lippi 2000). The "actors" who enter into action in a space of social action (an "action net": Callon 1984; Law 1986, 2009) can be considered as translators who, in attributing and negotiating the meaning of what they do, also build the collective subject who implements the process of translation (Gherardi, Lippi 2000). In the ANT language, the actors of a translation process (Callon, Latour 1981; Latour 2005) form a space of relationships that involves (Gherardi, Lippi 2000): those who produce and codify/share expert knowledge (universities, legal training, consultants); regulators and laws that impose themselves as obligatory passage points, the movements and detours that must be accepted as well as the alliances that must be forged (Law 1986, 2009; Latour 2005) (the ministry of Justice, the High Judicial Council, the CEPEJ, the reform decrees, internal rules); the "territorial" actors who in turn produce knowledge, imitate, copy, adopt what a "transfer center" imposes or disseminates as a model, such as courts that "resist" the process of translation or promote it as forms of "representation" or as a "community of practice"; intermediaries, anything that circulate between actors and defines their relationships (Law 1986; Latour 2005), who can be humans (i.e. chief justices and chief prosecutors), technological (i.e. software or performance indicators) and, in general, texts, documents, exchange of information in various forms (i.e. conferences or meetings, legal training classes, slides in power point).*

The courts constitute a local translation center in which the intermediaries, starting with the judicial file as an artifact (a digital archive) converge, stabilizing the meaning of digital technologies and accountability mechanisms in an actor-network that will act as an "actor of the translation" (Callon 1984; Law 1986, 2009; Latour 2005, 2009).

In the cases of Turin (#01, #01a and #01b) and Bolzano (#03), chief justices and chief prosecutors are facing with the construction of relationships between "discourses", bodies/work practices, texts, machines, infrastructure/architectures in an attempt to make sense of reforms that have by object technologies and forms of accountability (digital innovation, quality-of-the-justice, performance indicators). The case of Turin is based on the idea of reducing the time of justice by extending the experience of the chief justice of the "civil section" to the entire court when the magistrate becomes president (Sciacca et al. 2013; Piana 2016, 2017). The court adopts the "Strasbourg programme", a series of organizational practices based on a large collaboration in the classifying pending files by "seniority", based on the "risk factor": the risk the file could generate a proceeding in the European Court of Human Rights (ECHR) in Strasbourg and, by analogy, the risk of falling under the "Law Pinto". The "inventory" of pending judgments requires the identification of different "social group" in the court which relates to the artifact (the inventory), redefines the nature of the problem and produces some alternative solutions, for example, sharing the importance of enhancing internal court monitoring mechanisms. The judicial offices agree on the elaboration of two statistics a year which become the "communication standard" used by the Courts of Appeal (i.e., in the inauguration of the judicial year). In 2001, the court added two more statistics on the disposal of pending judgments "by seniority", sharing the information with the entire organization. In 2009, 98% of the pending cases were outside the "Pinto risk" and the "Strasbourg risk" (Piana 2016).

Table 1 - Boundary objects, centers of coordination and "translation" in the Italian reform of Judicial System (***)

CENTERS OF COORDINATION (**)	BOUNDARY OBJECTS (*)			
Centers of coordination (**): «are representative of a set of situations which have to do with 'working together' [the world of humans interacting with the world of non-humans and with ICTs which support distance work]. These places […] make it possible to revise categories of analysis like cooperation and individual/collective work, as well as *'organizing' understood as an activity situated in practice*» (Gherardi 2012)	**Boundary objects: «**they are a major method of solving heterogeneous problems. BOs are objects that are both plastic enough to adapt to local needs and constraints of the several parties employing them, yet robust enough to maintain a common identity across sites. They are weakly structured in common use, and become strongly structured in individual-site use. […] A BO "sits in the middle" of a group of actors with divergent viewpoints. *There are different types of BOs depending on the characteristics of the heterogeneous information being joined to create them*» (Bowker *et al.* 2015, p. 251).			
	(A) Repositories (*)	**(B) Ideal type (*)**	**(C) Coincident boundaries (*)**	**(D) Standardized forms (*)**
(1) Technologies as material practices: the inseparability of technologies and the activities of their use. This includes locating the functionality of technological artifacts not in particular devices, but in densely structured courses of action involving the assembly of heterogeneous devices into a working information system **(2) Reading a scene:** how competency in these settings involves learning how to read scene, through the juxtaposition and interpretation of verbal reports, visual images, and various forms of text, in real time, into provisional assessments of an emerging situation **(3) (Re)producing a normal order:** how, through their management of everyday contingencies, workers are able to maintain an accountable spatio/temporal order **(4) Structures of participation:** how participants in a multi-activity setting structure their focus of attention and engagement, from moment-to-moment **(5) Constituting workspaces:** how workspaces are dynamically configured through interactions across visible and invisible boundaries **(6) Acquiring competency:** how the identity of competent practitioner is acquired through progressive rounds of increasingly demanding work, supported *in situ* by experienced co-workers **(7) Autoritative knowledge:** relations between participants' access to technologies and the distribution of knowledge taken to be consequential for the work at hand **(8) Designing for change:** implications of the relations between professional design and design-in-use	• there are ordered "piles" of objects which are indexed in a standardized fashion. • Repositories are built to deal with problems of heterogeneity caused by differences in unit of analysis. An example of a repository is a library or a museum. • It has the advantage of modularity. People from different worlds can use or borrow from the 'pile' for their own purposes without having directly to negotiate differences in purpose.	• this is an object such as a diagram, atlas or other description which in fact does not accurately describe the details of any one locality or thing. It is abstracted from all domains, and may be fairly vague. However, it is adaptable to a local site precisely because it is fairly vague; it serves as a means of communication and cooperating symbolically - a "good enough" road map for all parties. • An example of an ideal type is the species. This is a concept which in fact described non specimen, which incorporated both concrete and theoretical data and which served as a means of communication across both worlds. Ideal types arise with differences in degree of abstraction. • They result in the deletion of local contingencies from the common object and have the advantage of adaptability	• these are common objects which have the same boundaries but different internal contents. They arise in the presence of different means of aggregating data and when work is distributed over a large-scale geographic area. • The result is that work in different sites and with different perspectives can be conducted autonomously while cooperating parties share a common referent. • The advantage is the resolution of different goals. An example of coincident boundaries is the creation of the state of California itself as a boundary object for workers at the museum. The maps of California created by the amateur collectors and the conservationists resembled traditional roadmaps familiar to us all, and emphasized campsites, trails and places to collect. The maps created by the professional biologists, however, shared the same outline of the state (with the same geo-political boundaries), but were filled in which a highly abstract, ecologically-based series of shared areas representing 'life zones', an ecological concept.	• these are boundary objects devised as methods of common communication across dispersed work groups. Because the natural history work took place at highly distributed sites by a number of different people, standardized methods were essential. In the case of the amateur collectors, they were provided with a form of fill out when they obtained an animal, standardized in the information it collected. • The results of this type of boundary object are standardized indexes and what Latour would call 'immutable mobiles' (objects which can be transported over a long distance and convey unchanging information). • The advantage of such objects are that local uncertainties (for instance, in the collecting of animal species) are deleted.

Definitions (***) - Memory practices: «acts of committing to record (such as writing a scientific paper) do not occur in isolation; thery are embedded within a range of practices (technical, formal, social) that collectively I define as memory practices. Taken as a loosely articulated whole, these practices allow (to some extent) useful/interesting descriptions of the past to be carried forward into the future» (Bowker 2005: p. 7). Four moments of **Translation (***)**: «**problematization** in which translators attempt to define as issue and offer an 'obligatory passage point' drawing an initial set of actors together to solve it; **'interressment'** in which translators determine and fix the interests of key actors so that they are willing to stay with an emerging project; **enrollment** in which representatives of main groups of actors are assigned 'roles' and drawn together to build an alliance; **mobilization** in which the actor-network is extended beyond an initial group» (Lawrence, Suddaby 2006, p. 243)

(*) boundary objects, memory practices, classification/standard/archiving: **Star, Griesemer (1989)**. "Institutional ecology, 'translation' and boundary objects: Amateurs and professionals in Berkeley's Museum of Vertebrate Zoology, 1907-1939", *Social Studies of Sciences*, 19(3), pp. 387-420; Berg, Bowker 1997; Bowker, Star 1999; Mol 2002; Bowker 2005; Bowker et al. 2015 **(**) Suchman L. (1997)**. "Centers of Coordination: A Case and Some Themes", in Resnik L.B. et al., *Discourse, Tools, and Reasoning: Essays on Situated Cognition*, pp. 41-62; Suchman 1987; Gherardi 2012; Pickering 1995; Harvey, Jensen, Morita 2017. **(***) STS/ANT**: Gherardi S., Lippi A. (eds.) (2000). *Tradurre le riforme in pratica*; McGee K. (2014). *Bruno Latour: The Normativity of Network*; McGee K. (ed.) (2015). *Latour and the Passage of Law*; Latour 2005, 2013; Latour, Weibel 2005; Callon 1984; Law 1986; Bijker, Hughes, Pinch 2012

In 2004, in Bolzano the new chief prosecutor proposed a program for the "rationalisation, monitoring and quality certification of the office" (Piana 2016): revision of the forms, revision of the "operation management" of the judicial files, attention to the time and costs of the procedures. In 2006, the "Bolzano case" was extended to all Italian judicial offices (ministry of Justice as a promoter). Since 2007, the European Commission has included this experience in the program for the implementation of "best practices" in judicial offices funded with the European Social Fund, within the National Operational Plan PON 2007-2013. The DBP program acts on the organization of the work of the administrative staff, without the direct involvement of the magistrates (Piana 2016): it is possible to change the organization of the courts without changing the law; the chief justices and chief prosecutors can play a decisive role in the organizational change; the DBP program has at least introduced the idea that the courts can report and adopt goal-oriented strategies (CEPEJ 2020, 2021b, 2022). The PON Governance and Institutional Capacity 2014-2020 program, which includes the Uni4Justice project, and the funding from the NextGenerationEU start from these foundations.

The evidence proposed in figure 1 brings out a common feature that allows us to justify the choice of the court as the empirical context con this research (Piana 2017).

Findings. *In the context of the third wave of reform, the Italian National project "Uni4Justice" aims at investigating digitalization and the introduction of "Ufficio Per il Processo" (UPP), within courts, in consequence of a recent legislative reform. "Uni4Justice" is a complex project involving a consortium of universities coordinated by the Alma Mater - University of Bologna. This research project promotes organizational, technological, and professional change in the courts on the basis of objective and verifiable knowledge of work practices, methods in using the resources, and monitoring tools. This interdisciplinary project, funded under the PON Governance and Institutional Capacity 2014-2022, involves socio-legal experts, legal informatics, and management scholars and fits into the third wave of Italian judiciary reforms (figure 1: case #04 and case #05). In 2012 (with Law Decree 179/2012), the UPP was introduced in courts and Courts of Appeal as an "urgent measure" meant to reduce the length of trials: in these offices were employed even students in internship or on-training staff, auxiliary judges at the Courts of Appeal and honorary judges at the courts, with the purpose of supporting full-qualified judges in their routinary duties (e.g., writing minutes of the hearings and drafts of the decisions: CSM 2019, 2021). Adapting similar legal initiatives enacted in other Countries (e.g., UK, USA, Spain and France) in 2021 (with Law Decree 80/2021), additional personnel was recruited in order to increase the efficiency of the UPP as an extraordinary measure included in the programs financed by the Next Generation EU Plan. Those resources, called "Addetti all'Ufficio del Processo" were aimed at supporting the legal workflow performing complementary tasks (e.g., organising files, planning hearings, and facilitating the imminent process of digitalization: CSM 2019, 2021). The combination of said pieces of legislation (figure 1: cases #04b and #04c: UPP & Digital Tranformation; case #05: "management-by-decree" or "top-down" reforms), both justified by urgency and necessity brought further confusion, bringing uncertainty in procedures, and establishing overlapping competences (Zan 2002, 2004; Sciacca et al. 2013).*

The organizational work in the reform of the Italian judicial system is heterogenous, requiring different actors and viewpoints (Contini, Lanzara 2009, 2014; Verzelloni 2020). Table 1 presents a scheme in which actors managed this tension in "the making of law". In a practice-based perspective (Gherardi 2012), we argue that: (i) if the process of "translation-into-practice" of the reform of the judicial system in Italy involves the adoption of digital technologies and the introduction of the UPPs; (ii) we will investigate the evolution of this process in the court, considering "the judicial file" as the "unit of analysis"; (iii) considering digital archives as artifacts (boundary objects: Star, Griesemer 1989); (iv) the digital evolution of archiving practices (memory practices: Bowker 2005) as "infrastructure processes" (Bowker, Star 1999; Berg, Bowker 1997); (iv) and, as well as, the UPP as a "center of coordination" (Suchman 1987, 1997: forms of "situated work", a "technologically dense" workplace and a "technology in use"; case #04a). The episodes that intersect in the scheme and populate this analytical framework emerge from our research process: "having identified the relevant social groups for a certain [digital] artifact, we are especially interested in the problems each group has with respect to that artifact. Around each problem, several variants of solution can be identified" (Bijker et al. 2012, p. 28).

Research limitations. *The research project considers the problem of how the "adventures" of a "requested reform" in the Italian judicial system are marked by the general need for "facilitating a comprehensive introduction of managerial vocabulary and knowledge into the public domain" (Panozzo 2000, p. 357). However, since managerial notions of accountability and performance, of organizational change and digital transformation are enacted by law ("management by decree", Panozzo 2000), "they enter into a terrain governed by legal framework and terminology" (p. 347). The rhetoric of change and "management by decree" constitute a paradox in the reform of the Italian judiciary (i.e.: figure 1, case #4b and #04b; case #05). From an institutional learning perspective, when the relationship between means and ends is opaque, some consequences emerge from our analysis of this form of "decoupling" (Powell 1997; Bromley, Powell 2012; Miller, Power 2013): (i) internal organizational structures become increasingly complex, (ii) organization persist in a state of perpetual reform, and (iii) resources are often diverted away from core goals.*

Theoretical and managerial implications. *According to Star and Griesemer (1989), we identify four types of BOs: repositories, ideal types, coincident boundaries, standardized forms. Based on the Suchman's study of an air traffic control tower (1997), we consider eight themes for research and analysis. Through the language of the "sociology of translation" (Callon 1984; Czarniawska, Sevon 1996; Callon, Latour 1991; Nimmo 2016) and the concepts of actor-network (Latour 2005; Law 2009; Nimmo 2016; Czarniawska 2017), heterogenous engineering (Law 1986; Bijker et al 2012; Law 2009; Nimmo 2016), sociomateriality (Orlikowski, Scott 2008; Carlile et al. 2013), we have combined the*

notions of boundary objects and center of coordination with the aim of bringing out a type of organizational environment (the UPP: figure 1, case #04a) that allow us to define technology (both the digital and the accountability) as a social practice. John Law suggested that "heterogeneous engineers seek to associate entities that range from people, through skills, to artifacts and natural phenomena. This is successful if the consequent heterogenous networks are able to maintain some degree of stability in the face of the attempts of other entities or systems to dissociate them into their component parts" (Bijker et al . 2012: p. 123).

Managerial implications concern the multidimensionality of the concept of (public) accountability in the same semantic field of judicial governance, as listed in figure 1 (Bovens 2009; Piana 2010; Castelli et al. 2014; Verzelloni 2020).

Originality of the paper. *In contrast to traditional models, the metaphor of "translation-into-practice" of justice reform should produce (Gherardi 2012): (i) "technologically dense environments", (ii) in which "working implies expert practices" and specific "technological know-how", (iii) in which "human and technology work together", (iv) and interaction is made possible by technologies (i.e. space-time is "reconfigured on the basis of such interactions and technologies").*

Keywords: *materiality; organizational change; judiciary reform; digital innovation; accountability; actor-network theory*

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