Chapter 22
The Challenges of Digital Democracy, and How to Tackle Them in the Information Era

Ugo Pagallo

Abstract Scholars examine legal hard cases either in the name of justice, or in accordance with the principle of tolerance. In the case of justice, scholars aim to determine the purposes that all the norms of the system are envisaged to fulfil. In the second case, tolerance is conceived as the right kind of foundational principle for the design of the right kinds of norms in the information era, because such norms have to operate across a number of different cultures, societies and states vis-à-vis an increasing set of issues that concern the whole infrastructure and environment of current information and communication technology-driven societies. Yet the information revolution is triggering an increasing set of legal cases that spark general disagreement among scholars: Matters of accessibility and legal certainty, equality and fair power, protection and dispute resolution, procedures and compliance, are examples that stress what is new under the legal sun of the information era. As a result, justice needs tolerance in order to attain the reasonable compromises that at times have to be found in the legal domain. Yet, tolerance needs justice in order to set its own limits and determine whether a compromise should be deemed as reasonable.

Keywords Justice · Tolerance · Hard legal case analysis · Information and communication technologies · Information ethics · Paradoxes of tolerant rules

22.1 Introduction

Today's information revolution should be considered as a set of constraints and possibilities that transform or reshape the environment of people's interaction and their democratic institutions. Whereas, over the past centuries, human societies have been related to information and communication technologies (ICTs), but mainly

U. Pagallo (✉)
Dipartimento di Giurisprudenza, University of Turin, Turin, Italy
e-mail: ugo.pagallo@unito.it

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dependent on technologies that revolve around energy and basic resources, current societies are increasingly dependent on ICTs and furthermore, on information and data as a vital resource. This dependency triggers some basic novelties in terms of complexity and legal enforcement, which impact pillars of the law and democratic processes by reshaping the balance between resolution and representation, as well as the right of the individuals to have a say in the decisions affecting them. Matters of accessibility and legal certainty, equality and fair power, protection and dispute resolution, procedures and compliance, are fruitful examples to stress what is new under the legal sun of the information era. As today's debate on internet governance further illustrates, it is far from clear how we should grasp the model that may successfully orient our political strategy in terms of transparency, justice and tolerance, so as to strike the right balance between people's representation and political resolution (Durante 2015; Pagallo 2015a, b).

However, by examining the legal challenges of the information era, we should avoid a misunderstanding. Many current troubles with democratic processes are often discussed and presented as if they were new, although this is in fact not the case. Think of Milton Mueller's analysis on *Networks and States*, in which one of the main theses is that most discussions of internet governance insist on "the issues of who should be 'sovereign' – the people interacting via the internet or the territorial states" (Mueller 2010: 268). Likewise, contemplate Nafeez Ahmed's account on the "secret network" behind mass surveillance, endless war, and Skynet, so that a secret Pentagon-sponsored group has been using digital technology over the past decades, as a way "to legitimize the power of the few over the rest of us" (Ahmed 2015). Also, reflect on current debate on the lack of transparency and of public consultation that affects both institutions, e.g. the EU Commission, and the transnational governance network that includes such organizations as the International Criminal Court, the International Organization for Standardization (ISO), the World Trade Organization (WTO), and more (Keohane 2003; Castells 2005; etc.). These open issues of democracy can be traced back to the work of the most distinguished Italian philosopher of the second mid twentieth century, Norberto Bobbio. In *The Future of Democracy* from 1984, Bobbio explored what he dubbed the "six broken promises of democracy," which cast light on such crucial aspects of today's discussions that revolve around the respect for individual sovereignty, the primacy of political representation over the protection of particular interests, the defeat of oligarchies, the increase of spaces for self-government, the education of citizens, or the transparency of governments (Bobbio 2014). From this latter point of view, it follows that many problems of current digital democratic trends are as old as democratic theory. How, then, can we distinguish between endurances and discontinuities? And moreover, how should we tackle them?

In order to address this complex set of issues, let us restrict the focus of the analysis on how jurists commonly assess cases of legal disagreement that may potentially concern either the broken promises of democracy or the new challenges of the information revolution. By leaving aside the normative theories of democracy and its justification, the paper does not take into account discussions between instrumentalism and non-instrumental values, the role of democratic citizenship,

multiple versions of democratic authority, or legislative representation. Rather, the attention is drawn to that which jurists usually sum up as their legal "hard cases" (Hart 1961; Dworkin 1985; Shapiro 2007; Pagallo and Durante 2016a). General disagreement may regard the meaning of the terms framing the question, the ways such terms are related to each other in legal reasoning, or the role of the principles that are at stake in the case. Examples of this divergence concern today's clauses of due process, the protection of fundamental rights vis-à-vis matters of national security, mechanisms of legal automation, and so on. These cases are particularly relevant for they trigger a further form of meta-disagreement on how we should grasp the hard cases of the law and hence, how the troubles with digital democracy should be tackled in the information era.

All in all, scholars may examine the legal hard cases either in the name of justice, or in accordance with the principle of tolerance. Let us call them followers of Rousseau and Locke, respectively. In the first case, justice represents the moral principle with which scholars aim to determine the purposes that all the rules of the system are envisaged to fulfil. In the case of tolerance, it is the latter that provides the foundational principle of a fair, peaceful, and democratic society. Each approach has its merits and limits: as to the merits, both stress what current cases of legal and political disagreement may have in common, e.g. the quest for consent as a matter to be evaluated in terms of justice, or of tolerance. As to the limits of each approach, what ultimately is at stake has either to do with the threat of an intolerant justice, or the risk of a toothless tolerance. In order to understand why this may be the case today, let us proceed with the thesis that (also digital) democracy rests on justice and what this means in the information era.

22.2 On Justice and Its Limits

The first way to address the broken promises of democracy and the new challenges of the information revolution regards a popular stance in the tradition of modern political thought: Justice is the moral principle with which scholars aim to determine the purposes that all the norms of the system are envisaged to fulfil. Three centuries after Rousseau's social covenant, and almost two after Kant's, consider a classic text like Rawls' *A Theory of Justice* and, in the legal domain, the idea that a "right answer" can be found for every case under scrutiny. On the one hand, the thesis is that "justice is the first virtue of social institutions, as truth is of systems of thought" (Rawls 1999: 3). On the other hand, Dworkin and his followers have suggested the uniquely right answer-approach. According to this stance, a morally coherent narrative should grasp the law in such a way that, given the nature of the legal question and the story and background of the issue, scholars can attain the answer that best justifies or achieves the integrity of the law (Dworkin 1985). By identifying the principles of the system that fit with the established law, jurists could apply such principles in a way that presents the case in the best possible light.

As an instance of this Dworkinian approach, reflect on some challenges of today's democracy on the basis of a morally coherent theory, such as the ethics of information (Floridi 2013). This level of abstraction represents all the entities and agents in the system, as well as the whole environment, in terms of (not only, but also) meaningful data. Contemplate on this basis the set of problems that regard the legal regulation of extraterritorial conduct in cyberspace, so that, pursuant to the traditional tenets of the rule of law (Bingham 2010), what "the laws of the land" should be often is hard to tell in the new context. Furthermore, even if we may agree on such laws of the land for digital democracy, there is an increasing number of cases in which the law lays down different set of obligations for online and offline interaction. A significant example is given by the right to control communication to the public in the field of copyright law, which "imposes more stringent obligations on the users of cyberspace technologies" (Reed 2012: 194). This creates the potential for litigation over whether "the laws of the land" should apply equally between the real world and another dimension of social interaction, notably cyberspace. Going back to the tenets of information ethics, the overall idea is thus to grasp these legal issues within the normative framework that governs the entire life cycle of information and determines what is right in the "info-sphere." The differentiation between online and offline interaction can be evaluated in a Dworkinian manner, by drawing the attention to the moral laws of information ethics and whether such differentiation prevents either "entropy," i.e. the destruction and corruption of informational objects, or contributes to their flourishing in the info-sphere. The more we deal with ICT-driven societies, the more their legal and political issues become a matter of access to, and control and protection over, information, the more we should pay attention to how to enrich the info-sphere, or prevent cases of informational entropy. Therefore, can a morally coherent theory attain the Dworkinian right answer for all of the ways in which traditional democratic problems have realigned in the information era?

The set of multiple issues that may spark legal disagreement shows a further set of cases in which different moral and political assumptions provide many right answers out there. No algorithm can mechanically be applied to rights and interests that should be balanced in the name of, say, Article 27 of the Universal Declaration of Human Rights (UDHR) on digital copyright and intellectual property, Article 6 of the European Convention on Human Rights (ECHR) on the due process in the information era, or the protection of further fundamental rights, e.g. privacy, vis-à-vis national security and the new frontiers of cyber war (Pagallo 2015c). Even *Law's Empire* seems to suggest this conclusion: "For every route that Hercules took from that general conception to a particular verdict, another lawyer or judge who began in the same conception would find a different route and end in a different place" (Dworkin 1986: 412). By taking into account current debates on internet governance and digital copyright, national security and data protection, and more, it seems fair to admit that no theory of justice can offer the one-size-fits-all answer for the complex set of issues the law faces today. Rather, what these cases illustrate is a class of legal issues that confront us with something new, which requires a reasonable compromise between many conflicting interests. Although this is of

course the stance Herbert Hart made popular with his work, it does not follow that we have to buy any of his theoretical assumptions on, say, the rule of recognition and the minimum content of natural law, to admit that a reasonable compromise has at times to be found in the legal domain (Hart 1961). As previous international agreements have regulated technological advancements over the past decades in such fields as chemical, biological and nuclear weapons, or the field of computer crimes since the early 2000s, many claim that a new agreement on, for example, today's laws of the war, e.g. robot soldiers, is necessary (Pagallo 2013).

The second fundamental moral principle, or Rawlsian virtue of social institutions, seems thus to be tolerance. The latter should in fact complement justice, because an open attitude to people whose opinions may differ from one's own, is that on which any reasonable compromise ultimately relies. Regardless of the field under scrutiny, such as military robotics, data protection, digital copyright and intellectual property, international cooperation, financial regulation, internet governance, and more, let us now explore how far this idea of tolerance goes in the next section.

22.3 On Tolerance and Its Limits

The "tolerant approach" to the current issues of digital democracy can reasonably be traced back to the liberal variants of contractualism, such as Locke's *A Letter concerning Toleration* from 1689, or John Stuart Mill's *On Liberty* (1859). Tolerance represents both a fundamental moral principle of normative design and a key ingredient for such legal hard cases that require a reasonable compromise between many conflicting interests. Tolerance, rather than justice, may provide the right kind of foundational principle for the design of the right kinds of norms in the information era, because such rules have to operate across cultures, societies and states vis-à-vis an increasing number of issues that concern the whole infrastructure and environment of current ICT-driven societies. The more such issues appear "hard," i.e. a source of general disagreement, the more a reasonable compromise should be attained, the more tolerance provides the foundational principle of a fair, peaceful and democratic society (Floridi 2014).

However, it is far from clear how to determine whether or not the compromises that have at times to be found in the legal domain are tolerantly "reasonable." In addition, the open issues of digital democracy raise the old dilemma of how to avoid, or solve, the paradox of tolerance, namely the idea that "unlimited tolerance must lead to the disappearance of tolerance" (Popper 2013). Scholars that insist on the need of some reasonable compromise, have the burden to prove how tolerance can set its own limits without justice. After all, contrary to the latter, which can reinforce itself through its own application, tolerance runs into the problem of its excessive scope. As Popper used to remark time and again, "if we extend unlimited tolerance even to those who are intolerant, if we are not prepared to defend a tolerant society against the onslaught of the intolerant, then the tolerant will be

destroyed, and tolerance with them" (*op. cit.*, 581). In light of current trends on global surveillance, emergency powers and the wave of terrorist attacks that have recommended an intensification of security programs at national and international levels, is there any room for tolerance and its reasonable compromises today? Don't these trends suggest that plans for the transparency of governments, i.e. Bobbio's final broken promise of democracy, will be postponed for quite a long time?

A feasible way out has been proposed by Floridi (2014). Contrary to the traditional idea of tolerance as a dual interaction between an "A" and a "B", he suggests that we should grasp the principle of tolerance as a ternary relation. "A" should not tolerate any "B's ϕ–ing" when "C"–which is significantly affected by "B's ϕ–ing"–does not provide uncoerced and informed consent. According to the traditional point of view, if someone ("A") does not tolerate something ("B's ϕ–ing"), intolerance can be justified because that 'something' (B's ϕ–ing") is deemed as unjust. By grasping the idea as a ternary relation, Floridi claims, "we now have a way of constraining toleration by means of tolerance, without a circular recourse to the principle of justice. The need for interpretation through public debate assumes that, by default, toleration is legitimate and should be exercised whenever it is not constrained by tolerance or unless the interpretation of the conditional convincingly shows otherwise" (Floridi 2014: 23).

Some troubles with the scheme are admitted by Floridi as to, say, the meaning of C to be significantly affected by B's ϕ–ing, or the notion of C's consent. For instance, consider that consent is still a fundamental principle of the EU data protection legal framework and yet, a number of reasons suggest why the notice and consent-approach is under strain: privacy notices are more often labyrinthine and it is hard for individuals to determine long-term risks of their consent, so as to balance them against short-term gains. The 2016 EU new regulation on data protection, the so-called GDPR, significantly puts forward further approaches, e.g. data protection impact assessments and the principle of accountability, in order to properly tackle the challenges of the information era (Pagallo 2017a). But, going back to Floridi's "tolerant approach," how about all the cases in which "C" is a group, or a collective, that is divided about their reaction, or tolerance, concerning "B's ϕ–ing"? What should "A" do? Since "A" has not to take sides in the name of justice, what should A's criteria of tolerance be? Does a single dissident of C preclude A's toleration, or should it be a significant minority? In more general terms, is there a way to avert the conclusion that at times, the tolerant needs to resort to some idea of justice?

The troubles with democracy in the information era have apparently led to a vicious circle. On the one hand, no theory of justice can offer an algorithm to be mechanically applied to all the hard cases of the law and no surprise then, that some present tolerance as the only way to cope with the reasonable compromises that at times should be found in the legal and political fields. After all, the information revolution has produced, and will increasingly raise, cases of general disagreement that concern multiple legal regulations aiming to govern cross-border interaction in a globalized world (Pagallo 2017b). Whilst, since the mid 1990s, states have begun to react to the challenges of the information revolution with the same tools of technology, e.g. by embedding normative constraints into ICTs, this reaction has

triggered additional hard cases and the need for further crucial compromises on, e.g., legal automation. Whether, and to what extent, should the normative side of the law be transferred from the traditional "ought to" of legal systems to automatic techniques through the mechanisms of design, codes, and architectures? (Pagallo 2012; Pagallo and Durante, 2016b).

On the other hand, tolerance has some limits of its own whenever, in Floridi's phrasing, those affected by any "x's ϕ–ing" disagree on whether or not they should provide their consent. Remarkably, this is a key point of Bobbio's broken promises of democracy that some of the new challenges of the information era have brought about as a matter of certainty, equality, and compliance. The less legal boundaries are clear in digital environments, the more this situation may lead to the illegitimate condition where states claim to regulate extraterritorial conduct by imposing norms on individuals, who have no say in the decisions affecting them. This scenario brings us back to (a variant of) our dilemma, i.e. either a toothless tolerance or an undemocratic justice. As a result, is there any feasible way out for this vicious circle between tolerance and justice?

The short answer is "yes." Let me argument why in the conclusions of this paper.

22.4 Conclusions

The aim of this paper has been to examine the ways in which jurists commonly address cases of legal disagreement that may potentially concern both the broken promises of democracy and the new challenges of the information revolution. The first perspective has to do with the popular stance of the modern political tradition, according to which a morally coherent theory could determine the purposes that all the norms of the system are envisaged to fulfil. How this works has been illustrated with the tenets of a morally coherent theory, such as Floridi's ethics of information. By conceiving all the agents and processes of the system in terms of information, the first moral law of this perspective claims that every form of informational entropy, i.e. any kind of impoverishment of being in the info-sphere, ought not to be caused. Moreover, the informational entropy ought also to be prevented or removed. This sort of Dworkinian approach to the challenges of the digital era can be helpful at times. In addition to the principle of equality and an increasing number of cases in which the law imposes different obligations for online and offline interaction–as mentioned above in Sect. 22.2–consider problems of transparency and the protection of privacy and personal data. The tenets of information ethics may provide that sort of moral coherent theory with which to attain a uniquely right answer, e.g. a fair balance between principles and norms that on the one hand constrain the flow of information and on the other, flesh out the factors on which the availability of information, or the conditions of its accessibility, namely individual, social, and political transparency, depend. The focus should be on whether informational entropy is either prevented, or removed, or whether the flourishing of the entities, which are stake with such a balancing, is promoted.

However, pace Dworkin, even Floridi would admit that the moral laws of information ethics cannot provide the uniquely right answer for every legal hard case at hand. This is why, after his informational theory of justice, Floridi has proposed to complement it with the principle of toleration (Floridi 2014). In legal terms, this open attitude to people whose opinions may differ from one's own, has been illustrated with cases of general disagreement on how we should regulate digital copyright, cyber war, national security and data protection, and more. As both a fundamental moral principle of normative design and a key ingredient for how to tackle the hard cases of the law, tolerance paves the way to the reasonable compromises that at times have to be found between many conflicting interests. Yet, the previous section ended with the example of a group, or a collective, affected by a certain "x's ϕ–ing," that disagree on how to react, i.e. whether or not they should provide their consent. If tolerance may need justice, we should avert an intolerant justice and moreover, mere injustice. Therefore, how can we determine whether a certain compromise is reasonable?

After the traditional dual approach to the principle of tolerance and Floridi's ternary relation, let us assume here a third approach. In accordance with another of its meanings, tolerance can be understood as the permitted variation in some measurement or other characteristic of an object or informational entity. On this basis, going back to the moral laws of information ethics and its idea of justice, old and new challenges of digital democracy suggest that we should tackle justice with a margin of tolerance. Although it is in the name of justice that scholars interpret the purposes that all the norms of the system are envisaged to fulfil, justice still needs tolerance, in order to cope with cases of general disagreement that constitute the legal hard cases and its reasonable compromises. So, the more legal and political interaction increasingly revolves around how to monitor, regulate, or control the flow of information in today's ICT-driven societies, the more we should pay attention to the permitted variation in the amount of informational entropy that every reasonable compromise should minimize. The more the informational entropy is reduced or prevented, the more an agreement should be deemed as reasonable. This is the yardstick with which we can both evaluate the hard cases of today's digital democracy, and build a tolerant justice.

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