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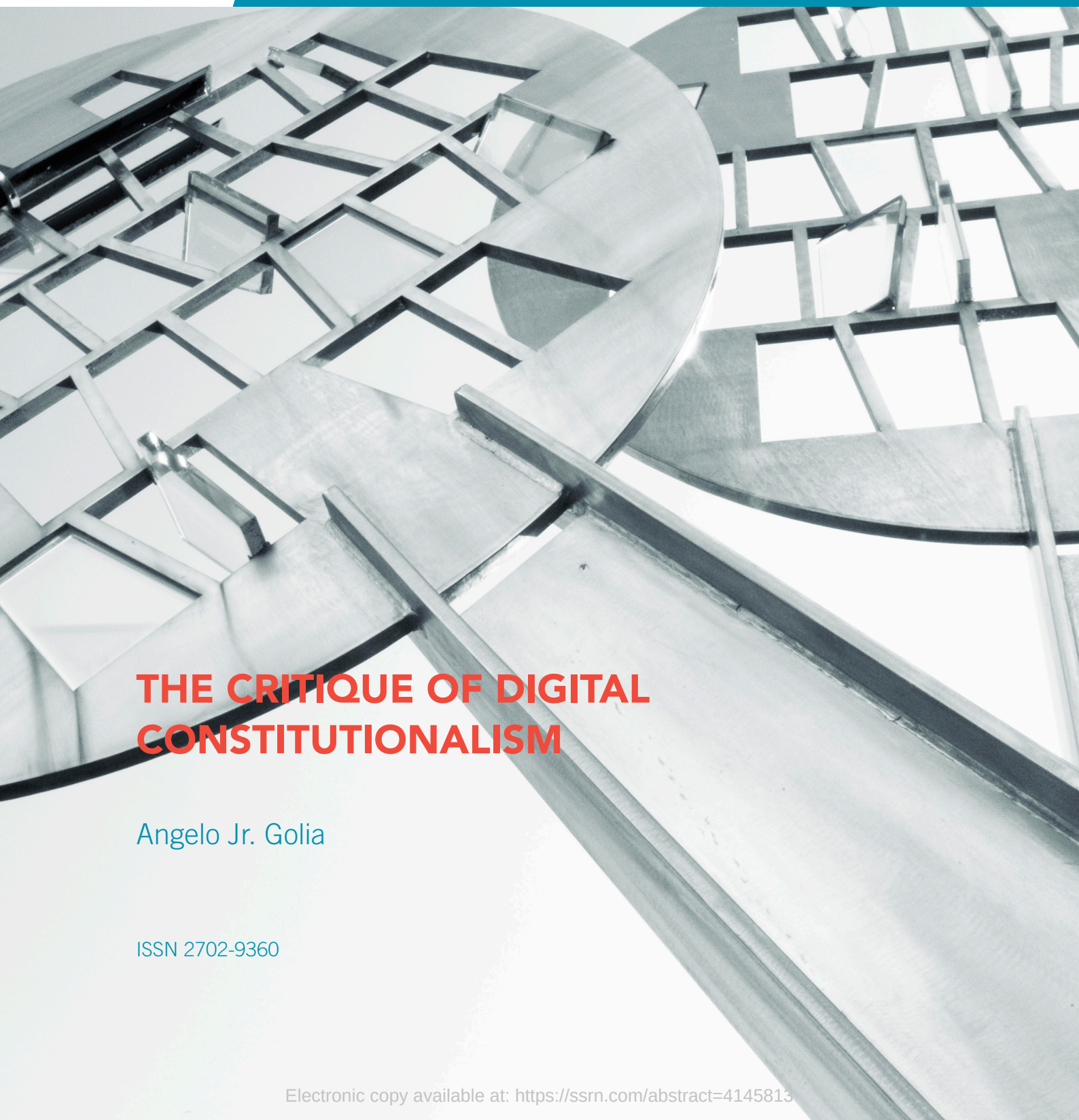

THE CRITIQUE OF DIGITAL CONSTITUTIONALISM

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ABSTRACT

This article analyses the critical potential of digital constitutionalism using the instruments provided by societal constitutionalism. The central argument is that, in order to address the challenges posed by new technologies, digital constitutionalism should embrace a more explicitly critical discourse, questioning several assumptions of liberal, state-centred constitutional theory. Digital constitutionalism could then be framed as a theory for the digital age and as an opportunity for a reckoning with the inner contradictions of modern constitutional theory. This article has three goals. First, linking different discourses within digital constitutionalism while highlighting its own critical potential. Second, offering some preliminary proposals based on such reflection. Third, bringing digital constitutionalism closer to the broader galaxy of global constitutionalism. After the introduction, section II offers an overview of societal constitutionalism, highlighting the elements of critique toward liberal, state-centred constitutionalism. Section III reconciles societal constitutionalism and digital constitutionalism, focusing on the latter's definition and three functionally differentiated systems: politics, economy, law. For each of them, it highlights analytical and normative gains and points at proposals to be further developed. Section IV concludes.

KEYWORDS:

digital constitutionalism, constitutional theory, societal constitutionalism, legal pluralism, systems theory, liberal constitutionalism, critical theory, digital platforms, surveillance capitalism, platform economy, content moderation, Oversight Board

The Critique of Digital Constitutionalism

Angelo Jr Golia*

Abstract
This article analyses the critical potential of digital constitutionalism using the instruments provided by societal constitutionalism. The central argument is that, in order to address the challenges posed by new technologies, digital constitutionalism should embrace a more explicitly critical discourse, questioning several assumptions of liberal, state-centred constitutional theory. Digital constitutionalism could then be framed as a theory for the digital age and as an opportunity for a reckoning with the inner contradictions of modern constitutional theory. This article has three goals. First, linking different discourses within digital constitutionalism while highlighting its own critical potential. Second, offering some preliminary proposals based on such reflection. Third, bringing digital constitutionalism closer to the broader galaxy of global constitutionalism. After the introduction, section II offers an overview of societal constitutionalism, highlighting the elements of critique toward liberal, state-centred constitutionalism. Section III reconciles societal constitutionalism and digital constitutionalism, focusing on the latter's definition and three functionally differentiated systems: politics, economy, law. For each of them, it highlights analytical and normative gains and points at proposals to be further developed. Section IV concludes.

I. Introduction

On 10 November 2021, the UK Supreme Court (UKSC) delivered a landmark judgment in the case *Lloyd v Google*.[1] Mr Lloyd, former executive director of a consumer watchdog, had sued for damages on his behalf and of other England and Wales residents under s. 4(4) and s. 13 of the Data Protection Act 1998 (DPA98). Between 9 August 2011 and 15 February 2012, Google had allegedly treated the data of over four million users for commercial purposes without their knowledge or consent. In order to circumvent the unavailability of a 'general' class action in English law, the suit was based on a representative procedure. Google is a US-based corporation, and Mr Lloyd had to apply for permission to serve the claim outside the jurisdiction, proving that the claim had a reasonable prospect of success.[2] Google argued that the allegations did not provide a basis for claiming compensation; and, in any event, the court should not permit the lawsuit to continue as a representative action.

After contrasting decisions by the High Court (2017) and the Court of Appeal (2019),[3] the UKSC unanimously ruled in Google's favour. According to the Court, the term 'damage' in s. 13 refers to material damage or mental distress distinct from, and caused by, unlawful processing of personal data. Therefore, Mr Lloyd would have been required to demonstrate that Google made unlawful use of personal data relating to each individual *and* that the individual suffered some damage as a result. Compensation cannot be awarded for mere 'loss of control' of personal data. Secondly, the Court found that the

* Max Planck Institute for Comparative Public Law and International Law, Heidelberg.
1 *Lloyd (Respondent) v Google LLC (Appellant)* [2021] UKSC 50, 10.11.2021.
2 CPR Part 6.37(1)(b).
3 [2019] EWCA Civ 1599.

claim did not concern the 'same interest' required under the chosen representative procedure. Particular cases will require an *individualised* assessment of what happened to individual class members, who would not be participating in the action. Damages could be claimed in a representative action only if they can be calculated on a basis that is *common to all persons* represented. If this is not the case, only liability issues could be decided in a representative action, with the individuals in question then bringing separate claims for compensation. Although this remark left the door open to future actions,[4] the following passage is telling of the UKSC's approach:

> [I]t is common experience that some people are happy to exploit for commercial gain facets of their private lives which others would feel mortified at having exposed to public view. Save in the most extreme cases, *this should be seen as a matter of personal choice* [emphasis added] on which it is not for the courts to pass judgments.[5]

The judgement was received with disappointment by privacy activists.[6] However, while the UKSC perhaps failed to capture the broader technological and societal dimension of mass data collection and monetisation by business actors, it reasserted relatively unquestioned tenets of liberal constitutionalism. Activists and policymakers may criticise the holding, but the failure to question in more depth some theoretical assumptions leaves them somehow defenceless. The relevance of this point goes beyond the field of data protection. Indeed, the case is an example of a deeper tension *within* digital constitutionalism (DC).[7]

To be sure, there is an ever-growing body of literature on DC, focusing mainly on US and European legal areas.[8] However, the discourses using an explicit constitutionalist language has hardly put to use its elements of *critique* towards liberal political-legal theory. When it comes to operationalisation, DC generally turns around few—crucial, but still somehow narrow—issues, notably free speech, privacy, safeguard of electoral processes, consumer protection, market competition, and—more recently—platform economy.[9]

In addressing these issues, DC typically builds on Western liberal constitutionalism as a sort of good matrix, whose basic principles need to be injected into the digital sphere.[10] In other words, with few exceptions,[11] the basic assumptions of liberal legal-political the-

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4 Cf. Eleni Frantziou, "Lloyd v Google: towards a more restrictive approach on privacy protection in the UK?," *Verfassungsblog*, 22.11.2021, https://verfassungsblog.de/lloyd-privacy/.

5 *Lloyd v Google* (n. 1), para. 142.

6 See, e.g., Bill Goodwin, "Lloyd v Google Supreme Court verdict brings end to privacy class actions against big tech in UK," *ComputerWeekly.com*, 11.11.2021, https://www.computerweekly.com/news/252509359/Lloyd-v-Google-Supreme-Court-verdict-brings-end-to-privacy-class-actions-against-big-tech-in-UK.

7 Provisionally understood as the legal-political discourse focusing on the relationship between constitutional law and new technologies. For the definitional issues, see below, section III.

8 Giovanni De Gregorio, "The Rise of Digital Constitutionalism in the European Union," *International Journal of Constitutional Law* 19 (2020); Oreste Pollicino, *Judicial Protection of Fundamental Rights on the Internet. A Road Towards Digital Constitutionalism?* (Oxford: Hart, 2021).

9 The trend is however changing: see, e.g., Hans-W. Micklitz et al., eds., *Constitutional Challenges in the Algorithmic Society* (Cambridge: CUP, 2022).

10 For a mapping of the debate, see recently Karen Yeung, "Constitutional Principles in a Networked Digital Society," *IACL Roundtable, The Impact of Digitization on Constitutional Law*, 08.03.2022, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4049141.

11 See, e.g., Julie Cohen, *Configuring the Networked Self. Law, Code, and the Play of Everyday Practice* (New Haven, Ct.: YUP, 2012), esp. ch. 1; Jennifer Cobbe and Jatinder Singh, "Regulating Recommend-

ory are rarely assessed critically. Among them, one may include the rigid divides between state and society and between the public and private; the focus on *political* power as the object of constitutional constraint; the rigid divide between the domestic and international/global dimensions of legal systems; the state-centred legal monism; the static conception of law, detached from the time and means of its application/dissemination; the rationality of individuals, conceived as self-authorised, pre-social actors, detached from concrete societal constraints; the over-reliance on courts for the protection of rights.

In an age where the pervasive impact of digitality is more and more apparent, this relative lack of self-reflection results in a tension between the theoretical starting points and the concrete policy proposals of DC. DC's political rationality (the *possibility to think* the given otherwise) is often not accompanied by a critical phenomenology (the *forcing* to appear).[12] Such tension is particularly problematic for DC's actual transformative possibilities.

Against this backdrop, this article aims at linking different discourses within DC, while highlighting the critical potential of DC. Further, it aims at offering some preliminary proposals based on such reflection.

The title plays on the ambivalence of the connective *of*, as DC is both the *object* and the *means* of critique.[13] As an *object*, the article assesses DC in the light of its inner tension. As a *means*, the article uses DC to assess the intrinsic limits of liberal constitutional theory in one of the most relevant societal spheres of world society. Understanding DC as a *critical* legal theory[14] may help cope with its inner tension, thus strengthening its normative thrust and giving more coherence to research and policy agendas.

In order to highlight DC's critical potential, the article resorts to societal constitutionalism (SC), one of the main theoretical frameworks within global constitutionalism literature.[15] References to such framework in the DC literature are already common, especially as concerns the emergence of new forms of normativity in the regulatory spaces opened by digital technologies.[16] Even when they do not explicitly subscribe to a species/genus

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ing: Motivations, Considerations, and Principles," *European Journal of Law and Technology* 10 (2019), https://ejlt.org/index.php/ejlt/article/view/686; Salomé Viljoen, "A Relational Theory of Data Governance," *Yale Law Journal* 131 (2022); Aziz Huq, "Toward a Theorization of Digital Constitutionalism," *The Digital Constitutionalist*, 8.02.2022, https://digi-con.org/toward-a-theorization-of-digital-constitutionalism/., speaking of a 'structural diagnostics' approach.

12 Cf. Emilios A. Christodoulidis, *The Redress of Law: Globalisation, Constitutionalism and Market Capture* (Cambridge: CUP, 2021), 1-2.

13 I borrow this from Christodoulidis (n. 12), 2.

14 I rely here on Jack Balkin, "Critical Legal Theory Today," in *On Philosophy in American Law*, ed. Francis J. Mootz (Cambridge: CUP, 2009): 'Critical theories ask how law legitimates power in both senses of the word: how it shapes, channels and restrains power and how it mystifies, disguises, and apologizes for it. In addition, a critical theory studies how the very acts of making, interpreting and applying law produce and proliferate ever new forms of power, both just and unjust.'

15 Gunther Teubner, *Constitutional Fragments: Societal Constitutionalism and Globalization* (Oxford: OUP, 2012); Angelo Jr Golia and Gunther Teubner, "Societal Constitutionalism: Background, Theory, Debates," *ICL - Vienna Journal of International Constitutional Law* 15 (2021). On societal constitutionalism as a strand of global constitutionalism, see Antje Wiener et al., "Global constitutionalism: Human rights, democracy and the rule of law," *Global Constitutionalism* 1 (2012), 7; Neil Walker, *Intimations of Global Law* (Cambridge: CUP, 2014), 97 ff.

16 See, e.g., Vagios Karavas, "Governance of Virtual Worlds and the Quest for a Digital Constitution," in *Governance of Digital Game Environments and Cultural Diversity: Transdisciplinary Enquiries*, ed. Christoph B. Graber and Mira Burri-Nenova (Cheltenham: Elgar, 2010); Lex Gill, Dennis Redeker, and Urs Gasser, "Towards Digital Constitutionalism? Mapping Attempts to Craft an Internet Bill of Rights," *The International Communication Gazette* 80 (2018); Edoardo Celeste, "Digital constitutionalism: a new systematic theorisation," *International Review of Law, Computers & Technology* 33 (2019); Nofar Sheffi, "We Accept: The Constitution of Airbnb," *Transnational Legal Theory* 11 (2020); Roxana Radu

relationship, proponents of DC often refer to elements of SC, notably in matters of transnational private regulation, (global) legal pluralism, and dispute-settlement.[17] However, DC authors use SC primarily to account for 'constitutional' norms within relatively autonomous digital spheres. More generally, they focus on the constitutive function that SC assigns to such norms, often overlooking the limiting one.[18] Such use leaves the impression that SC only justifies new forms of governmentality and powers. In contrast, this article deploys the full toolkit of SC to bring out the critical features and operationalise the transformative potential of DC. By this means, besides the two goals mentioned above, it also pursues a third and more lateral one: to bring DC close(r) to the broader galaxy of global constitutionalism.[19]

After this introduction, section II offers an overview of SC, highlighting the elements of critique toward liberal, state-centred constitutionalism. Section III aims to fully reconcile SC and DC, focusing on the latter's definition and three functionally differentiated systems, namely politics, economy, and law. For each of them, it highlights the analytical and normative gains that DC may get from its reconciliation with SC, pointing at some proposals to be further developed. Section IV concludes.

II. Societal constitutionalism as a critical theory

The state/society divide

Current SC originated from the work of Sciulli[20] and focused on the difficulty of liberal constitutional theory in detecting social authoritarianism and authoritarian drifts *in conceptual terms*, even when state structures remain liberal-democratic. Such drifts are intrinsic rather than accidental tendencies of Western modernity, rooted in processes of fragmented meaning, instrumental calculation, bureaucratic organisation, charismatic leadership. Confronted with such processes, liberal constitutionalism's concepts may address selected sets of *purposefully* arbitrary exercises of collective power by private ac-

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et al., "Normfare: Norm entrepreneurship in internet governance," *Telecommunications Policy* 45 (2021).

17 See, e.g., Oreste Pollicino and Marco Bassini, "Internet Law in the Era of Transnational Law," *EUI Working Papers - RSCAS 2011/24* (2011); Christopher Kuner, *Transborder Data Flows and Data Privacy Law* (Oxford: OUP, 2013), 160 ff.; Lee A. Bygrave, *Internet Governance by Contract* (Oxford: OUP, 2015); Gianpaolo M. Ruotolo, "Fragments of fragments. The domain name system regulation: global law or informalization of the international legal order?," *Computer Law & Security Review* 33 (2017); Monika Zalnieriute, "From Human Rights Aspirations to Enforceable Obligations by Non-State Actors in the Digital Age: The Case of Internet Governance and ICANN," *Yale Journal of Law & Technology* 21 (2019); Nicolas Suzor, *Lawless: The Secret Rules That Govern Our Digital Lives* (Cambridge: CUP, 2019), 115-125; Matthias Kettemann, *The Normative Order of the Internet. A Theory of Rule and Regulation Online* (Oxford: OUP, 2020), 185-195; Lorenzo Gradoni, "Constitutional Review via Facebook's Oversight Board. How platform governance had its Marbury v Madison," *Verfassungsblog*, 10.02.2021, https://verfassungsblog.de/fob-marbury-v-madison/.; Lucas H. Muniz da Conceição, "Digital Constitutionalism: The Intersection of National Politics and Transnational Platform Governance," *The Digital Constitutionalist*, 2022, https://digi-con.org/digital-constitutionalism-the-intersection-of-national-politics-and-transnational-platform-governance/.

18 Cf. Marta Maroni, "Lawless: The Secret Rules That Govern Our Digital Lives," *European Journal of Risk Regulation* 12 (2020).

19 Understood as the legal-political discourse addressing questions related to rights, democracy, and the rule of law *in* and *through* their transnational/global dimension: see again Wiener et al., "Global constitutionalism."

20 David Sciulli, *Theory of Societal Constitutionalism: Foundations of a Non-Marxist Critical Theory* (Cambridge: CUP, 1992).

tors, but many mechanisms of social control escape them,[21] especially inadvertently arbitrary exercises of collective power by private enterprises within civil society. One might think of the organisational design of pharmaceutical research and industry *as such* opens up to data manipulation, with harmful effects on people's health and science as a whole.[22] Similarly, the academia/science complex, based on co-optation, reputation, and (quantification of) research output, triggers practices such as publish-or-perish, ghost-writing, citation cartels, manipulation of data, mental health distress, disproportionately affecting women and subaltern groups.[23] The design of organisations dealing with sexual assault often contributes to the reproduction of power structures, victim (self)marginalisation, gender (micro-)violence.[24]

The examples could continue. The point is: counteractions to authoritarian drifts and support to nonauthoritarian social change cannot be based only on separation of powers, due process, fundamental rights, judicial review. Negative externalities and arbitrary power should also be addressed through ecologically oriented—rather than strictly rational/instrumental—reciprocal limitations among collective actors and social processes, centred around norm-producing institutions *within* civil society.

Sciulli critiqued liberal constitutionalism's relatively rigid state/society divide, centred around the individual/government relationship. In this sense, he did not overcome but rather reframed the public/private divide, individuating relationships of domination within relatively autonomous spheres of civil society and focusing on *both* purposeful *and* inadvertent forms of social control/manipulation in the relationships with 'private' governments. However, Sciulli focused on formal organisations—bureaucratic apparatuses, corporations, parties, churches—without investigating the autonomisation/transnationalisation triggered by globalisation. Indeed, notably Teubner, building on Luhmann's systems theory and an autopoietic conception of law,[25] has incorporated such dimensions, shaping SC as a strand of global constitutionalism. The next subsections highlight the points most relevant to our purposes.

Functional systems and communication media

SC focuses on politics, economy, press, science, etc. as functionally differentiated systems of modern society and on their distinct communication media[26] (power, money, information, truth, etc.). With this move, it expands the target of constitutionalism: no longer 'only' political or social power in the narrow sense, but all the communication media of the functionally differentiated society. Constitutional problems do not derive only from the power imperative of politics or the commodification/monetisation imperative of economy, but also from the knowledge imperative of science, the innovation imperative of technology, the news/information cycle imperative of the press, and the juridification imperative of law. Threats to human and ecological integrity do not derive only

[21] Sciulli (n. 20), 40-41.
[22] Sciulli (n. 20), 11-13.
[23] Zeena Feldman and Marisol Sandoval, "Metric Power and the Academic Self: Neoliberalism, Knowledge and Resistance in the British University," *tripleC* 16 (2018).
[24] Nicole Bedera, "Settling for Less: How Organizations Shape Survivors' Legal Ideologies Around College Sexual Assault" (PhD University of Michigan, 2021).
[25] Gunther Teubner, *Law as an Autopoietic System* (London: Blackwell, 1993).
[26] Here understood as the 'effect mechanisms' of the functionally differentiated society. Communication media '[…] are based on symbols which are thought to be effective in communication – e.g. symbols of money, power, truth or love -, and which as such effective symbols motivate other social actors to do something they would not have done without this effective use of symbols' (Rudolf Stichweh, "Systems Theory," in *International Encyclopedia of Political Science*, ed. Bertrand Badie, Dirk Berg-Schlosser, and Leonardo Morlino (New York: SAGE, 2011)).

from purposeful actions of individuated actors. They also derive from depersonalised processes not necessarily linked to the reproduction/accumulation of money.[27] SC then centres constitutional theory around relatively autonomous social processes, based on the (re)production of power, money, juridical authority, truth. Effective constitutionalisation takes place only to the extent that the norms emerging within and between social systems perform both constitutive/foundational and limitative functions towards such communication media.[28]

The internal/external divide

SC also focuses on the transnationalisation and autonomisation of functional systems. Constitutional questions related to formal organisations (states, corporations, international organisations) and regimes (global politics, international investment law, global science law) increasingly emerge and need to be addressed beyond nation-states' territorial borders.

In other words, SC focuses on the fact that globalisation has changed existing questions by moving them at the level of the world society, where nation-states and international politics—while remaining central[29]—determine social evolution less than in the past.[30] To be sure, such focus also has an element of critique. To the extent that globalisation consists in the competitive alignment of national—especially labour protection—systems,[31] state-centred constitutionalism at the same time enables the global expansion of capitalist exploitation and obstructs the very possibility to think and act in terms of transnational counteractions, and particularly of transnational democracy. Precisely this observation can strategically be used in a critical direction, to place the political at the basis of the reflexivity of systems.[32]

Constitutionalism beyond the state

Like many strands of global constitutionalism,[33] SC embraces legal and constitutional pluralism. It argues that, with globalisation, legal systems go through a fragmentation whereby different, variably interconnected organisations and regimes increasingly develop their legal norms. This does not mean that such 'fragments' exist in a vacuum. Rather, they observe each other and the environment according to their own legal/illegal distinctions,[34] based on distinct principles of legitimacy, in turn rooted in the communication

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[27] Gunther Teubner, "The Anonymous Matrix: Human Rights Violations by "Private" Transnational Actors," *Modern Law Review* 69 (2006); Teubner, *Fragments* (n. 15), 141; Isabell Hensel and Gunther Teubner, "Horizontal Fundamental Rights as Conflict of Law Rules: How Transnational Pharma Groups Manipulate Scientific Publications," in *Contested Regime Collisions: Norm Fragmentation in World Society*, ed. Kerstin Blome et al. (Cambridge: CUP, 2016); Gunther Teubner, "The Constitution of Non-Monetary Surplus Values," *Social and Legal Studies* 6 (2020).

[28] Teubner (n. 15), 81 ff.

[29] Gunther Teubner, "Societal Constitutionalism without Politics? A Rejoinder," *Social & Legal Studies* 20 (2011).

[30] Teubner, *Fragments* (n. 15), 42 ff.

[31] Cf. Christodoulidis (n. 12), 3.

[32] Christodoulidis (n. 12), 475.

[33] Lars Viellechner, "Constitutionalism as a Cipher: On the Convergence of Constitutionalist and Pluralist Approaches to the Globalization of Law," *Goettingen Journal of International Law* 4 (2012); Aoife O'Donoghue, *Global Constitutionalism in the Constitutionalisation of International Law* (Cambridge: CUP, 2014); Anne Peters, "Constitutionalization," in *Concepts for International Law. Contributions to Disciplinary Thought*, ed. Jean d'Aspremont and Sahib Singh (Cheltenham: Elgar, 2019), 151-153; Cormac Mac Amhlaigh, *New Constitutional Horizons: Towards a Pluralist Constitutional Theory* (Oxford: OUP, 2022).

[34] Gunther Teubner, "The Two Faces of Janus: Rethinking Legal Pluralism," *Cardozo Law Review* 13 (1992); Gunther Teubner, "Global Bukowina: Legal Pluralism in the World Society," in *Global Law*

medium to which they are oriented (power, money, truth, etc.). For example, global investment law is sustained by both formal and informal normative instruments, as well as by national and international instruments.[35] However, its concrete operation is determined by principles of legitimacy mostly oriented to the protection of investment capital, that is, to the profit accumulation imperative.[36]

In this constellation, effective constitutionalisation may occur only if the norms emerging in and among functional systems constitute *and* constrain the communication processes that, following globalisation, have been partially 'freed' from the constrictions of state-centred politics. SC argues that at the level of world society, with no authoritative third instance, such result can only be reached if the different systems 1) exercise sufficient pressures on each other (for example, political demands over economic processes and the other way around); and 2) their internal structures are open to such external demands.[37]

To sum up, SC questions the identification of law with state law and the necessary link between state and constitution. By these means, it opens to the possibility[38] of constitutionalisation processes not exclusively centred around states. From a normative standpoint, such pluralist turn means pursuing the development of a theory of collisions/interactions suited to the emergence of legal systems and social processes of qualitatively different nature.[39]

Law as an autopoietic system

SC is based on an autopoietic conception of law,[40] that is, a sociological jurisprudence[41] aiming at incorporating the fundamental paradoxes of modern law: self-validation and circularity. Under such conception, law should not be seen as a set of static norms, removed from social time. Instead, law is a social system itself, that is, a system of mean-

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without a State, ed. Gunther Teubner (Aldershot: Dartmouth Gower, 1997); Andreas Fischer-Lescano and Gunther Teubner, "Regime-Collisions: The Vain Search for Legal Unity in the Fragmentation of Global Law," *Michigan Journal of International Law* 25 (2004).

35 Cf. Jose Alvarez, "Reviewing the Use of "Soft Law" in Investment Arbitration," *European International Arbitration Review* 7 (2018),149-200; Giovanna Adinolfi, 'Soft Law in International Investment Law and Arbitration' *Italian Review of International and Comparative Law* 1 (2021), 86-112.

36 As a telling example, see most recently ICSID, *Eco Oro Minerals Corp. v. Republic of Colombia*, Decision on Jurisdiction, Liability and Directions on Quantum of 9 September 2021, ICSID Case No. ARB/16/41. Cf. Francesco Corradini, 'The Social Life of Entanglements. International Investment and Human Rights Norms in and beyond ISDS', in *Entangled Legalities Beyond the State*, ed. Nico Krisch (Cambridge: CUP, 2021), 162-192; and, despite criticisms towards societal constitutionalism, David Schneiderman, "On Suffering and Societal Constitutionalism. At the border of international investment arbitration and human rights," in *Boundaries of State, Boundaries of Rights. Human Rights, Private Actors, and Positive Obligations*, ed. Tsvi Kahana and Anat Scolnicov (Cambridge: CUP, 2016).

37 For examples in the field of scientific research, see Gunther Teubner, "Altera Pars Audiatur: Law in the Collision of Discourses," in *Law, Society and Economy*, ed. Richard Rawlings (Oxford: Clarendon, 1997); Teubner, *Fragments* (n. 15), 83-102; Vagios Karavas, "Empowerment through Technology? How to Deal with Technology Options in the Liberal- Democratic State – The Example of Egg Cell Preservation," *Ancilla Iuris* (2019), https://www.anci.ch/articles/Ancilla2019_101_Karavas.pdf; Teubner, "Non-Monetary Surplus" (n. 27), 516.

38 Golia and Teubner (n. 15), 378.

39 Teubner, *Fragments* (n. 15), 150 ff., spec. 154-162; Horatia Muir Watt, "When Societal Constitutionalism Encounters Private International Law: Of Pluralism, Distribution, and `Chronotopes," *Journal of Law And Society* 45 (2018).

40 Gunther Teubner, *Autopoietic Law: A New Approach to Law and Society* (Berlin: de Gruyter, 1988); Teubner (n. 25).

41 For a discussion, see Ioannis Kampourakis, "Empiricism, Constructivism, and Grand Theory in Sociological Approaches to Law: The Case of Transnational Private Regulation," *German Law Journal* 21 (2020).

ing, of communications, based on its own code: the legal/illegal distinction.[42] Its fundamental function is the generalisation/stabilisation of normative expectations.

The autopoietic conception further claims that both the *emergence* and the *reproduction* of legal systems are constrained by the need to perform their function and preserve their operational autonomy. In other words, law can generalise/stabilise normative expectations emerging from its social environment (e.g., moral, religious, economic norms) only if it does not immediately identify with them. Law can 'read' and solve conflicts emerging from society only through the legal/illegal distinction, continuously re-framed by law's own *internal* operations: legal procedures, acts, norms, doctrinal concepts. In this sense, law generates its own validity through the internal translation/misunderstanding of impulses coming from its environment. Re-elaborated through 'productive misreadings',[43] such impulses are given legal meaning, starting or continuing chains of communication based on the legal/illegal distinction. Legal systems emerge, 'live', and perform their societal functions by permanently re-regulating themselves, that is, through creative 'errors', paradoxes, doctrinal inventions provoked but not mechanically determined by such impulses. Legal systems re-generate their meaning within the possibilities allowed by existing patterns but in unpredictable, contingent, 'blind' ways. Modern law, then, is not merely 'responsive' but rather 'reflexive' to social impulses.[44]

Further, to perform its functions within an increasingly fragmented society, legal rules and concepts have to preserve some degree of flexibility, indeterminacy, and unpredictability while, at the same time, persisting in the face of disappointment of social expectations.[45] This openness/indeterminacy is crucial to absorb cognitive expectations and increase law's capacity to learn from the environment. Put differently: the possibility to have such internal micro-variations of meaning is essential to the reproduction of legal systems and the preservation of their societal function.[46]

Time and means of dissemination of law

Based on an idea of law as a system of social communications, SC advances a different approach to law's relationship with its means of dissemination and time. Indeed, as the production, interpretation, application of law draws also on information not conserved in legal texts (in the narrow sense),[47] legal acts are unavoidably influenced by their means—oral, printed, digital—of dissemination and the point in time when they are communicated. At the same time, each legal act (legislation, judicial decisions, administrative acts, contracts) is a communicative *event* based on the legal/illegal code, potentially rearranging the meaning of past communications, and changing future patterns of law's evolution.

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[42] Thomas Vesting, *Legal Theory* (Munchen-Oxford: Beck-Hart, 2018), 19-84.

[43] That is, the self-transformative process whereby systems use events in their environment as material for meaning production: Teubner, "Two Faces" (n. 34), 1447.

[44] Gunther Teubner, "Substantive and Reflexive Elements in Modern Law," *Law & Society Review* 17 (1983).

[45] This relates to the rise of principled law-making, directives, programs, and templates; the increasing recourse to open norms and general principles (e.g. good faith, due diligence, reasonableness) to give legal form to expectations coming from its environment; the spread, in legal scholarship, of social science approaches; the success of judicial reasoning based on balancing techniques, often aimed to persuade lawmakers rather than adjudicate legal disputes; the tendencies towards proceduralisation. See Alan Hunt and Gary Wickham, *Foucault and Law. Towards a Sociology of Law as Governance* (London: Pluto, 1994), 67.

[46] See Golia and Teubner (n. 15), 15.

[47] Vesting (n. 42), 119.

But time does not always flow at the same speed. The different social 'speeds' of time and the related perceived need to produce legal meaning matching social, technological, and environmental change have an impact on law's evolution, notably the sources of legal validity and the types of acts that take the central stage in lawmaking.[48] In an age of growing functional differentiation and accelerated technological and environmental change, legal systems are increasingly called by their environment to produce ever-newer legal meaning and to 'learn' from their own operation, even without explicit political consensus.[49] In this sense, the widespread crisis of legislative, 'general and abstract' lawmaking and the success of judicial and administrative lawmaking as the 'real' place of law's production mirrors the relative decline of treaty-based lawmaking in the international law, and in the rise of lawmaking by courts and administrative agencies, as well as of private and hybrid regulation. Such dynamics are not accidental features. Rather, they are deeply ingrained in the inner structures of modernity.[50]

Rights and democracy

As already pointed out, SC puts communication media (power, money, normativity, truth, etc.) at the centre of constitutional theory. As such they participate in the subjectification of individuals and collective actors—in their 'interpellation'.[51] Based on this assumption, SC advances a critique of the liberal theory of rights, centred around individuals as rational, self-authorised, pre-social actors, detached from societal constraints; and excluding social systems as right-holders to be protected on their own. Indeed, social control/manipulation may well emerge even when individuals can express a will 'freed' from the constraints of political power or economic need.[52] At the same time, SC highlights the need to preserve different social systems from reciprocal encroachments and colonisation[53] tendencies. As the COVID-19 pandemic has shown, the scientification of politics and the politicisation of science are equally dangerous sides of the same coin. Put differently, SC highlights the need to mobilise the trans-subjective potential of rights.[54]

What about democracy? SC rejects the view that procedures based on elections, representation, organised opposition are the sole possible model of democratic legitimation.[55] In particular, it rejects the impossibility of democracy in global/transnational settings and contests approaches aiming at compensating the lack of democratic legitimacy of non-state systems through state-centred models (e.g. mere chains of delegation/authorisation starting from national parliaments).

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48 Riccardo Prandini, "The Future of Societal Constitutionalism in the Age of Acceleration," *Indiana Journal of Global Legal Studies* 20 (2013).

49 Jaye Ellis, "Crisis, Resilience, and the Time of Law," *Canadian Journal of Law & Jurisprudence* (2019).

50 Gunther Teubner, "Breaking Frames: The Global Interplay of Legal and Social Systems," *The American Journal of Comparative Law* 45 (1997).

51 Louis Althusser, "Ideology and Ideological State Apparatuses (Notes Towards an Investigation)," in *Essays on Ideology* (London: Verso, 1984).

52 Teubner, *Fragments* (n. 15), 139 ff.; Teubner, "Non-Monetary" (n. 27).

53 Understood as the process whereby a system (e.g., economy) subjects the reproduction of the media of other systems (power, normativity, information, truth) to the reproduction of its own medium (e.g., money).

54 Teubner *Fragments* (n. 15), 145; Gunther Teubner, "Counter-Rights: On the Trans-Subjective Potential of Subjective Rights," in *The Law of the Political Economy: Transformations in the Functions of Law*, ed. Paul F. Kjaer (Cambridge: CUP, 2020).

55 Gunther Teubner, "*Quod omnes tangit*: Transnational Constitutions Without Democracy?," *Journal of Law and Society* 45 (2018).

In contrast, SC advances a theory of democracy based on polities not necessarily delimited by personal or territorial belonging,[56] or by an assigned status of citizenship, nor identified with an international community or a 'global civil society'.[57] Within these polities, democratic legitimation does not necessarily take place according to traditional representative schemes or the majority principle.[58]

Rather, the principle of representation is generalised through the *institutionalisation of self-contestation*, to be re-specified according to the specific rationality of each system.[59] Under such view, participants and other subjects affected by systems' decisions/operations practice substantive and even direct participation and/or contestation in its normative production. Therefore, various decision-making fora should mirror a plurality of democratic legitimation schemes, going also through transnational organisations, grassroots movements, trade unions, NGOs. The 'political' (*le politique*)[60] is not limited to 'politics' (*la politique*)[61] and increasingly emerges in private or hybrid arenas.[62] SC's pluralism individuates processes of democratisation in the distinct societal spheres allowing different kinds of actors to participate in processes of legal production taking place at the global level. In this way, globalisation may offer the opportunity to exploit the democratic potential of social processes beyond the institutional channels of state-centred politics. In sum, SC looks at how to institutionalise the possibility for bottom-up social variation and contestation.[63]

In such a framework, states retain a central role. Indeed, state politics remains crucial in generating external pressures and designing the internal legal infrastructures of other systems. Moreover, alternative arenas of contestation, discussion, and decision-making complement rather than replace state politics.[64] At the normative level, this view calls for reconciliation and productive use of impulses coming from states and their constitutions; and for the strengthening of the learning capacities of other systems.

III. Reconciling digital and societal constitutionalism

This section addresses DC's definition and three systems (politics, economy, law) whose communication media (power, money, juridical authority) are central in modern society. Firstly, it aims at framing existing analyses as a coherent theory with an inner critical potential. The premise is that such analyses do not explicitly put at the centre of their reflections the fact that digital technologies, on the one hand, create new possibilities for politics, economy, law to control and manipulate individuals; and, on the other hand, allow

[56] Cf. Chris Thornhill, "The Citizen of Many Worlds: Societal Constitutionalism and the Antinomies of Democracy," *Journal of Law and Society* 45 (2018).

[57] See generally Jiří Přibáň, *Constitutional Imaginaries. A Theory of European Societal Constitutionalism* (Abingdon: Routledge, 2021).

[58] See already Sciulli (n. 20), 160-161.

[59] Teubner (n. 55), 14-15.

[60] Understood as the set of collective reflections, conflicts, and decisions on social options diffused at the level of society as a whole.

[61] Understood as the social system performing the function of formalised collective decision-making.

[62] Gunther Teubner, "Societal Constitutionalism and the Politics of the Commons," *Finnish Yearbook of International Law* 21 (2012).

[63] Gavin W. Anderson, "Societal Constitutionalism, Social Movements and Constitutionalism from Below," *Indiana Journal of Global Legal Studies* 20 (2013). In global constitutionalism literature, see Antje Wiener, *A Theory of Contestation* (Heidelberg: Springer, 2014); Antje Wiener, *Contestation and Constitution of Norms in Global International Relations* (Cambridge: CUP, 2018).

[64] In global constitutionalism literature, cf. Anne Peters, "Dual Democracy," in *The Constitutionalization of International Law*, ed. Jan Klabbers, Anne Peters, and Geir Ulfstein (Oxford: OUP, 2009).

for new forms of colonisation[65] among systems (for example, digital economy towards politics or science, or digital press towards politics). Secondly, the section aims at operationalising such insights in a transformative direction. In particular, it highlights the analytical and normative gains that DC may get from its reconciliation with SC, pointing at some preliminary proposals to be further developed.

Definition

In an influential paper, Redeker, Gill and Gasser defined DC as a 'common term to connect a constellation of initiatives that have sought to articulate a set of political rights, governance norms, and limitations on the exercise of power on the internet.'[66] Relying on SC, they framed DC as the 'process of constitutional rule-making that arises from social groups like civil society or transnational business corporations' and included the limitation of both public and private power within the subject matter of DC. However, they included within the scope of DC only documents, charters, and declarations that explicitly aim to establish different types of 'Internet Bill of Rights' and focus on political questions and communities. Therefore, they deny the 'constitutional quality' of other types of norms, especially those produced by international organisations and private enterprises, such as the norms developed by Facebook/Meta.[67] Importantly, those documents overwhelmingly focus on some crucial but relatively narrow issues: freedom of expression, privacy, right of access to the internet. Therefore, their definition is still anchored to a conception of constitutional norms as a limitation to (political) power and overlooks subtler dynamics of manipulation and colonisation[68] deriving from the impact of digitalisation.

Celeste has advanced a more refined and comprehensive formulation—again explicitly based on SC. He defined DC as 'the ideology which aims to establish and to ensure the existence of a normative framework for the protection of fundamental rights and the balancing of powers in the digital environment.'[69] Such ideology should permeate, guide, and inform the constitutionalisation of the digital environment, understood as the process that 'aims to produce a series of normative counteractions to address the alterations of the constitutional ecosystem generated by the advent of digital technology.'[70] The advantage of framing DC as a purely theoretical concept lies 'in the possibility to distinguish it from its implementation, its translation into reality.'[71] Further, Celeste's notion of constitutionalisation as a process that aims to produce normative counteractions captures well the tasks to which DC is called.

However, he proposes a somehow sanitised conception of ideology: a 'structured set of values and ideals.'[72] Expanding on Althusser's work[73] and its reading by Johns,[74] DC as an ideology can be defined as the constitutional discourse which at the same time investi-

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65 See above, n. 53. Even the recent 'European Declaration on Digital Rights and Principles for the Digital Decade' (Brussels, 26.1.2022 COM(2022) 28 final), seems to be based on an individualistic approach largely overlooking potential harms to science, press, politics *as such*.

66 Gill, Redeker, and Gasser (n. 16), 303.

67 Cf. Celeste (n. 16), 86.

68 See n. 53.

69 Celeste (n. 16), 88.

70 Celeste (n. 16), 90.

71 Celeste (n. 16), 89.

72 Celeste (n. 16), 89.

73 See again Althusser (n. 51).

74 See Fleur Johns, "Governance by Data," *Annual Review of Law and Social Science* 17 (2021), spec. 4.7-4.8. See also Cohen (n. 11), ch. 1; Viljoen (n. 11); and Jenna Burrell and Marion Fourcade, "The Society of Algorithms," *Annual Review of Sociology* 47 (2021).

gates and contributes to shaping the socially constructed relationships of individuals to their actual conditions of existence, directly or indirectly mediated by digital technologies. This definition focuses on dynamics of hailing/interpellation triggered by digital technologies, that is, dynamics by which different socio-political apparatuses and processes—be they work, sex, gender, ethnicity, citizenship, or other—constitute individuals and collective actors as social subjects through digital technologies. This conceptually thicker notion of DC would bring about three analytical gains.

Firstly, it highlights that the questions of DC deal—should deal—primarily with the ways digital technologies affect and shape the social existence of individuals, collective actors, and social systems.[75]

Secondly, digital technologies and globalisation have not created but rather made more visible and urgent questions left unaddressed by state-centred liberal constitutionalism. In this regard, Celeste's insistence on counteractions to the alteration of a previously existing equilibrium gives the impression that DC deals with totally new constitutional questions, emerged only with digital technologies. To be sure, DC deals with questions that have assumed different quality and significance with digital technologies. However, at their core, such questions were already present in the legal structures of (Western) modernity. 'Analog' constitutionalism was not characterised by equilibrium but rather hid its absence. The task of DC is not to regain some paradise lost, but to open the eyes before hell.[76] This conceptual move helps 'see' the subject matter of DC: not simply the regulation of digital technologies, but rather of already existing constitutional questions re-shaped by digitality.

Thirdly, this definition offers a point of convergence for different and somehow still sparse strands of scholarship addressing the impact of digital technologies, especially those which do not speak—at least, not explicitly—a constitutional language. This would concern, in particular, the strands of 'critical data studies', 'algorithmic regulation', and 'law and political economy'. Critical data studies explore data as situated in complex 'data assemblages' of action referring to the vast systems, comprised not just of database infrastructures, but also the 'technological, political, social and economic apparatuses that frames their nature, operation and work', including processes of data collection and categorization to its subsequent cleaning, storing, processing, dissemination and application.'[77] Algorithmic regulation is a concept 'entailing sustained, intentional attempts to employ algorithmic decisionmaking in order to influence behavior or manage risk'.[78] Law and political economy is a more general strand emerged in recent years, featuring a particular attention to the material/economic relationships triggered or affected by digitality and its legal infrastructures.[79] Coalescing such strands around a broad—but still relatively thick—definition, while still keeping their specificities, might contribute to creating

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[75] Cf. Viljoen (n. 11), 654; Burrell and Fourcade (n. 74), 227 ff.

[76] Cf. Fleur Johns, "'Surveillance Capitalism' and the Angst of the Petit Sovereign," *British Journal of Sociology* 71 (2020); and Amy Kapczynski, "The Law of Informational Capitalism," *The Yale Law Journal* 129 (2020).

[77] See Rob Kitchin, "Big Data, new epistemologies and paradigm shifts," *Big Data & Society* 1 (2014); Andrew Iliadis and Federica Russo (eds.), "Special E-Issue: Critical Data Studies," *Big Data & Society* (2016), https://journals.sagepub.com/page/bds/collections/critical-data-studies; Thao Phan and Scott Wark, "Racial Formations as Data Formations," *Big Data & Society* 2021 (2021), https://journals.sagepub.com/doi/full/10.1177/20539517211046377.

[78] Karen Yeung, "Algorithmic Regulation: A Critical Interrogation," *Regulation and Governance* 12 (2017). See also Lena Ulbricht and Karen Yeung, "Algorithmic regulation: A maturing concept for investigating regulation of and through algorithms," *Regulation & Governance* 16 (2022).

[79] See, e.g., Katharina Pistor, *The Code of Capital: How the Law Creates Wealth and Inequality* (Princeton: PUP, 2019), 183-204; Kapczynski (n. 76).

a richer a debate, generative of original and effective solutions. At the same time, it would contribute to establishing a stronger dialogue with existing discourses of global constitutionalism.[80] In this sense, such move frames DC in a more comprehensive, coherent, and possibly ambitious way, that is, as *the* constitutional theory of the digital age.

Politics

The exercise of power is a traditional focus of DC. There is a vast literature on the impact of digital technologies on political processes, with contrasting views on whether they open to positive or negative developments.[81] In this context, societal constitutionalism conceives power not as coercion or merely as self-interested influence on social actors' behaviour but as the specific communication medium[82] of politics,[83] which orients the reproduction of collectively binding decisions.[84] An approach oriented towards SC, then, focuses not only on new possibilities of arbitrary exercise of power but also on the impact of digital technologies on the conditions of reproduction of power itself. In other words, SC asks DC the question: how to preserve the capacity of both national and international politics to produce collectively binding decisions under conditions of extreme social fragmentation, where consensus based on traditional procedures—especially democratic elections—is much more difficult to reach?[85]

To be sure, such issue goes beyond the preservation of a 'free marketplace of ideas' and a functioning public sphere.[86] It requires a broader reflection on the conditions through which (presumptions of) consensus to the purposes of collective decision-making may be generated. If anything, the digital revolution has debunked or at least put into question yet another assumption of liberal political theory, that is, the equivalence between correct information and social consensus. Indeed, thanks (also) to digital technologies, new and old (collective) actors can voice dissent, generate conflict, 'force' debates and move them in different directions, in ways different from those emerged in state-centred constitutional modernity.[87] In this sense, as the constitutional theory of the digital age, DC is called to incorporate into its reflections a legal-institutional analysis of the impact of digital technologies on both national and transnational collective actors and their respective strategies: political parties, movements, religious confessions.[88]

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[80] Cf. Edoardo Celeste, "The Constitutionalisation of the Digital Ecosystem: Lessons from International Law," in *Digital Transformations in Public International Law*, ed. Angelo Jr Golia, Matthias Kettemann, and Raffaela Kunz (Baden-Baden: Nomos, 2022 (forthcoming), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3872818).

[81] See Siva Vaidhyanathan, *Antisocial Media. How Facebook Disconnects Us and Undermines Democracy* (Oxford: OUP, 2018); Jaime E. Settle, *Frenemies. How Social Media Polarizes America* (Cambridge: CUP, 2018); Nathaniel Persily, *The Internet's Challenge to Democracy: Framing the Problem and Assessing Reforms* (Kofi Annan Foundation, 2019); Tiberiu Dragu and Yonatan Lupu, "Digital Authoritarianism and the Future of Human Rights," *International Organization* 75 (2021); Barrie Sander, "Democratic Disruption in the Age of Social Media: Between Marketized and Structural Conceptions of Human Rights Law," *European Journal of International Law* 32 (2021). For a mapping of the debate, see Sebastian Berg and Jeanette Hofmann, "Digital democracy," *Internet Policy Review* 10 (2021).

[82] See above, n. 26.

[83] See above, n. 61.

[84] Niklas Luhmann, *Trust and Power* (Winchester: Wiley, 1979), 109-118.

[85] Cf. Luhmann (n. 84), 167-184.

[86] See, however, Jack Balkin, "To Reform Social Media, Reform Informational Capitalism," in *Social Media, Freedom of Speech and the Future of Our Democracy*, ed. Lee Bollinger and Geoffrey R. Stone (Oxford: OUP, forthcoming), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3925143).

[87] Thomas Vesting, *Legal Theory and the Media of Law* (Cheltenham: Elgar, 2018), 469-527.

[88] In this direction, see Berg and Hofmann (n. 81), 6-8; and Vesting (n. 87), 522-523.

At the same time, DC is called to address the impact of digital technologies on the capacity of politics to control individuals and colonise other social fields. This issue does not concern only the rise of state surveillance and profiling[89] emerging—in different forms and degrees—in both liberal-democratic and authoritarian countries.[90] There are already rich reflections on predictive policing,[91] automated decision-making,[92] and 'nudging'.[93] As especially the COVID-19 pandemic has shown, digital technologies and algorithmic open to new and subtler forms of political control and manipulation of both individuals and autonomous social fields.[94] However, a SC-oriented approach to DC calls for a more comprehensive approach to the bidirectional relationship between digital technologies and the (self-)reproduction of power. More generally, the digital revolution 'asks' constitutional theory to re-think the relationship between state and society: neither a stark separation nor a complete indistinction, but rather intensification of interdependence and mutual relationships.

In normative terms, such an approach highlights the need to strengthen the cognitive openness of state (administrative) apparatuses and procedures.[95] Such openness should be directed to absorb and re-elaborate in their concrete operation needs and programmes not strictly related to self-referential decision-making capacities.[96] But besides state structures and public apparatuses, establishing and reinforcing mechanisms of cognitive openness to political impulses is even more urgent within the processes of private or hybrid digital actors such as Facebook/Meta or the ICANN.

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89 Mireille Hildebrandt, "Profiling and the rule of law," *Identity in the Information Society* 1 (2008); Frederike Kaltheuner and Elettra Bietti, "Data is power: Towards additional guidance on profiling and automated decision-making in the GDPR," *Policy & Practice* 2 (2018).

90 See, among many, Sarah Jakob, "The corporate social credit system in China and its transnational impact," *Transnational Legal Theory* 12 (2021); Larry Catá Backer, "And an Algorithm to Entangle Them All?," in Krisch (n. 36); Lucas Miotto and Jiahong Chen, "Manipulation, Real-time Profiling, and their Wrongs," in *The Philosophy of Online Manipulation* (Routledge, forthcoming); and again Dragu and Lupu (n. 81).

91 Sarah Brayne, "Big Data Surveillance: The Case of Policing," *American Sociological Review* 82 (2017); Burrell and Fourcade (n. 74), 221-226.; Céline Castets-Renard, "Human Rights and Algorithmic Impact Assessment for Predictive Policing," in Micklitz et al. (n. 9).

92 See Monika Zalnieriute, Lyria Bennett Moses, and Georgo Williams, "The Rule of Law and Automation of Government Decision-Making," *Modern Law Review* 82 (2019).

93 See Karen Yeung, "'Hypernudge': Big Data as a mode of regulation by design," *Information, Communication & Society* 20 (2017). See more generally Amnon Reichman and Giovanni Sartor, "Algorithms and Regulation," in Micklitz et al. (n. 9).

94 David Restrepo Amariles, "From computational indicators to law into technologies: the Internet of Things, data analytics and encoding in COVID-19 contact-tracing apps " *International Journal of Law in Context* 17 (2021); Anatoliy Gruzd et al., "Special E-Issue: Studying the COVID-19 Infodemic at Scale," *Big Data & Society* (2021), https://journals.sagepub.com/page/bds/collections/studyinginfodemicatscale.

95 See Julie Cohen, "The Regulatory State in the Information Age," *Theoretical Inquiries in Law* 17 (2016), arguing that a regulatory state optimized for the information economy must develop rubrics for responding to three macro-problems: (1) platform power — the power to link facially separate markets and/or to constrain participation in markets by using technical protocols; (2) infoglut — unmanageably voluminous, mediated information flows that create information overload; and (3) systemic threat — nascent, probabilistically-defined harm to be realized at some point in the future.

96 Recent analyses based on the concept of empathy in digital administration are particularly promising: Sofia Ranchordas, "Empathy in the Digital Administrative State," *Duke Law Journal* 77 (2022, forthcoming), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3946487. In the same direction, Johannes Himmelreich, "Against "Democratizing AI"," *AI & Society* (2022), https://doi.org/10.1007/s00146-021-01357-z.

Interestingly, democratisation has always been a weak spot of both DC[97] and global constitutionalism.[98] In this regard, repeated failures to replicate state-centred models of democratic legitimation show how unsuited they are to the digital sphere(s).[99] Unsurprisingly, DC literature has mostly focused on the procedural aspects of democracy, notably fairness, participation, transparency, accountability, judicial review.[100] These proposals are extremely valuable and, under the global *colére publique* triggered by recurring scandals, are slowly implemented by private 'governors'.[101] However, in order to avoid risks of co-option, the democratisation of the digital sphere must also involve the dimensions of struggle, conflict, and contestation. Here again, SC—in line with recent strands of global constitutionalism[102]—highlights the necessity to stabilise mechanisms of contestation also within the spheres variably controlled by digital 'governors'. In this regard, proposals to establish a right to contest AI—especially in its collective dimension—seem extremely promising.[103]

But who will contest? Which polity or polities will exercise such right if the cyberspace is multi-jurisdictional and multi-layered? This question touches on another crucial point of the relationship between DC and politics: the spatial one. Indeed, both the

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97 Moritz Schramm, "Where is Olive? Or: Lessons from Democratic Theory for Legitimate Platform Governance," *The Digital Constitutionalist*, 23.01.2022, https://digi-con.org/where-is-olive-or-lessons-from-democratic-theory-for-legitimate-platform-governance/.

98 See only Jürgen Habermas, "The Constitutionalization of International Law and the Legitimation Problems of a Constitution for World Society," in *Europe: The Faltering Project*, ed. Jürgen Habermas (Cambridge, Mass.: MIT, 2009).

99 One can think of ICANN's elections in 2003; and of Facebook's democratic experiments in 2009-2012: see John Palfrey, "The End of the Experiment: How ICANN's Foray into Global Internet Democracy Failed," *Harvard Journal of Law & Technology* 17 (2004); Tobias Mahler, "The Internet Corporation for Assigned Names and Numbers (ICANN) on a Path toward a Constitutional System," in *Generic Top-Level Domains:A Study of Transnational Private Regulation*, ed. Tobias Mahler (Cheltenham: Elgar, 2019), 40-53.; Kalev Leetaru, "Facebook Was A Democracy 2009-2012 But We Didn't Vote So It Turned Into A Dictatorship," *Forbes*, 13.04.2019, https://www.forbes.com/sites/kalevleetaru/2019/04/13/facebook-was-a-democracy-2009-2012-but-we-didnt-vote-so-it-turned-into-a-dictatorship/.

100 Giovanni De Gregorio, "Democratising online content moderation: A constitutional framework," *Computer Law & Security Review* 36 (2020), https://doi.org/10.1016/j.clsr.2019.105374, 11-16; Brenda Dvoskin, "Representation without Elections: Civil Society Participation as a Remedy for the Democratic Deficits of Online Speech Governance," *Villanova Law Review* (forthcoming), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3986181; Blayne Haggart and Clara I. Keller, "Democratic legitimacy in global platform governance," *Telecommunications Policy* 45 (2021), https://doi.org/https://doi.org/10.1016/j.telpol.2021.102152, 14-16, highlighting how most proposals—Facebook's Oversight Board, judicial adjudication as one of the 2015 Manila Principles for Intermediary Liability, and the human-rights-centric framework outlined in the Report of the Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression (United Nations, Human Rights Council Report no. A/HRC/38/35)—are based on a narrow conception of legitimacy as throughput legitimacy.

101 Kate Klonick, "The New Governors: The People, Rules, and Processes Governing Online Speech," *Harvard Law Review* 131 (2018).

102 Christian Volk, "Why Global Constitutionalism Does not Live up to its Promises," *Goettingen Journal of International Law* 4 (2012), 567, 571–574; Isabelle Ley, "Opposition in International Law – Alternativity and Revisibility as Elements of a Legitimacy Concept for Public International Law," *Leiden Journal of International Law* 28 (2015); Wiener, *Contestation and Constitution.*; and Anne Peters, "Constitutional Theories of International Organisations: Beyond the West," *Chinese Journal of International Law* 20, no. 4 (2021), 681-683.

103 See especially Margot E. Kaminski and Jennifer M. Urban, "The Right to Contest AI," *Columbia Law Review* 121 (2021); and Ngozi Okidegbe, "The Democratizing Potential Of Algorithms?," *Connecticut Law Review* 53 (forthcoming), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3835370.

state/society divide and the internal/external divide[104] need to be questioned in more explicit terms. Here, a closer connection with SC helps understand that DC is either a *global* constitutionalism—which 'thinks' in multi-jurisdictional and multi-level terms—or it is not.[105] As such, DC contributes to the internationalisation/globalisation of the constitutional discourses, understood also as a trajectory where the state territory is less and less considered as *the* symbolic space for power relationships and consensus-building.

DC has always dealt with issues concerning jurisdictional conflicts—especially over hate speech and data protection—and the multi-layered/hybrid governance of the internet.[106] However, a focus on the impact of the reproduction of power/collective decision-making helps 'see' how digitality often sustains trends toward supra- and transnational engagement and a centre/periphery rather than internal/external way of thinking. If states aim at effectively preserving their capacity to regulate key societal fields crucial to the building of consensus, they cannot but coordinate with other actors[107] or try to extend the effects of their domestic law beyond their territory.[108] Such focus might also help deparochialise those DC discourses framing issues of digitality as if they fell only within the scope of national constitutions.

In this same sense, a SC-oriented approach links DC and international law discourses, giving a coherent account of the (re-)emergence of states with phenomena such as the Splinternet[109] and current enforcement frenzy (national content laws, antitrust, data protection absolutism).[110] Rather than a return to the self-contained units of a Westphalian global order, such re-emergence could be read as the rise of macro-geopolitical units which increasingly act 'imperially',[111] that is, in terms of centre/periphery.[112] New fragmentations and conflicts of the digital sphere will probably take place along blurred and ever-shifting[113] spheres of influence, where relative military and economic power of

[104] Rooted in liberal theory: see John Locke, *Two Treatises of Government* (New Haven and London: YUP, 2003), § 147; William Blackstone, *Commentaries*, vol. I (Chicago: University of Chicago Press, 1979), 160 at 243.

[105] Cf. Celeste (n. 80).

[106] Point of reference: Kettemann (n. 17). See also Milton Mueller, "Communications and the Internet," in *The Oxford Handbook of International Organizations*, ed. Jacob Katz Cogan, Ian Hurd, and Ian Johnstone (Oxford: OUP, 2016).

[107] Cf. Angelo Jr Golia and Gunther Teubner, "Networked Statehood: An Institutionalised Self-contradiction in the Process of Globalisation?," *Transnational Legal Theory* 12 (2021).

[108] To be sure, this raises a range of issues from third-world and post-colonial perspectives, which help further link digital constitutionalism to global constitutionalism debates: see Jonathan Havercroft et al., "Decolonising Global Constitutionalism (Editorial)," *Global Constitutionalism* 9 (2020); Peters (n. 102), 690-693.

[109] Dramatically accelerated following the Russian war of aggression in Ukraine: see Emily Birnbaum and Rebecca Kern, "The Russian 'splinternet' is here," *Politico*, 04.03.2022, https://www.politico.com/news/2022/03/04/russia-splinternet-facebook-twitter-00014408.

[110] Chien Huei Wu, "Sovereignty Fever: The Territorial Turn of Global Cyber Order," *Heidelberg Journal of International Law* 81 (2021), spec. 675-676, contrasting China's Great Firewall and the Clean Network built by the US and its allies. See also Henning Lahmann, "On the Politics and Ideologies of the Sovereignty Discourse in Cyberspace," *Duke Journal of Comparative & International Law* 32 (2021).

[111] Cf. Angelo Jr Golia, Matthias Kettemann, and Raffaela Kunz, "Digital Transformations in Public International Law: An Introduction," in *Digital Transformations in Public International Law* (Baden-Baden: Nomos, (2022) forthcoming).

[112] Reference due to Anu Bradford, *The Brussels Effect: How the European Union Rules the World* (Oxford: OUP, 2020), 132-170; but also to Matthew S. Erie and Thomas Streinz, "The Beijing Effect: China's Digital Silk Road as Transnational Data Governance," *NYU Journal of International Law & Politics* 54 (2021).

[113] Cf. Danielle Flonk and Markus Jaktenfuchs, "Authority conflicts in internet governance: Liberals vs. sovereigntists?," *Global Constitutionalism* 9 (2020).

states, but also private digital platforms[114] and technological/infrastructural asymmetries play a central role. Moreover, such fragmentation will probably have a *functional* dimension, taking different shape and intensity depending on how close a specific issue (for example, freedom of speech) to the reproduction of political power and consensus-building is.[115]

Economy

Digital technologies have increased the capacity of autonomous self-reproduction and colonisation of the economy. Data economy has become so central that data as such are progressively regarded as capital,[116] be they 'coded' through law or not.[117] This phenomenon has increased the already alarming commodification and colonisation[118] tendencies of global, neoliberal capitalism. Here, one main problem is informational capitalism, understood as a business model based on the monetisation of information and data collected by the powerful actors of the digital economy, characterised by a compulsion to engagement growth which—combined with mono- and oligopolistic markets[119]—triggers vicious social dynamics. Informational capitalism does not only affect individuals' material and psychological conditions of existence. It also drains social systems and collective actors (political movements, business entities, media, education, and research institutions, etc.) of their functional autonomy. Its effects on mental health and on political engagement and politics are well known, also to the actors involved.[120] In some ways, digital platforms are societal 'black holes', capturing other systems in their ever-growing accretion disc. Importantly, the externalities produced by the digital economy affect the capacity of politics to produce consensus-based decisions; of science to produce socially shared truth; of non-digital economy to produce and re-distribute economic value; and so on.

For example, in the economy/politics interface, the emergence of digital and cryptocurrencies and smart contracts endangers the capacity of politics to influence economic processes through monetary policies and politically legitimated decisions, affecting the capacity to redistribute economic value to the purposes of political consensus. In the economy/press interface, the problems of journalism certainly did not start with the digital revolution,[121] but the effects of real-time web analytics, clickbait, and information

[114] Sofia Ranchordas, Giovanni De Gregorio, and Catalina Goanta, "Big Tech War Activism," *Verfassungsblog*, 10.03.2022, https://verfassungsblog.de/big-tech-war-activism/.

[115] See Fischer-Lescano and Teubner (n. 34).

[116] Jathan Sadowski, "When data is capital: Datafication, accumulation, and extraction," *Big Data & Society* 6 (2019); Chunlei Tang, *Data Capital. How Data is Reinventing Capital for Globalization* (Cham: Springer, 2021).

[117] Pistor (n. 79), 183-205; Kapczynski (n. 76), 1498 ff.; Roxana Vatanparast, "The Code of Data Capital: A Distributional Analysis of Law in the Global Data Economy," *Juridikum* 1 (2021).

[118] See above, n. 53.

[119] Dina Srinivasan, "The Antitrust Case Against Facebook: A Monopolist's Journey Towards Pervasive Surveillance in Spite of Consumers' Preference for Privacy " *Berkeley Business Law Journal* 16 (2019); Nicolas Petit, *Big Tech and the Digital Economy: The Moligopoly Scenario* (Oxford: OUP, 2020).

[120] See the scandal following the revelations of Frances Haugen in September/October 2021, proving that based on internally commissioned studies, Facebook/Meta was aware of negative impact on teenagers of Instagram, and the contribution of Facebook activity to violence in developing countries: 'The Facebook Files. A Wall Street Journal investigation', https://www.wsj.com/articles/the-facebook-files-11631713039. On the importance of trade secrets and their constitutionalisation as property rights in building the power of data companies, see Amy Kapczynski, "The Public History of Trade Secrets," *UC Davis Law Review* 55 (2022).

[121] Robert W. McChesney, "The Problem of Journalism: a political economic contribution to an explanation of the crisis in contemporary US journalism," *Journalism Studies* 4 (2003).

bubbles on the quality of journalism are well-known[122] and have led to the consolidation larger news organisations[123] and the transformation in the professional self-understanding of journalism.[124] In the economy/science interface, digitalisation and open-access runs the risk to increase publish-or-perish, reputation-seeking dynamics, predatory publishing and to reinforce the position of hegemonic actors.[125]

DC has long explored such issues. However, it has often addressed them with a piecemeal approach, inspired by liberal theory assumptions. Still, some particularly apparent problems brought by the digitalisation of the economy have been addressed quite quickly. Central banks have proved ready to defend their control over currencies against business capture in the form of crypto-currencies and crypto-finance instruments.[126] A similar development can be identified in cases where dynamic of (social) power are relatively easy to identify. Especially after the COVID-19 pandemic has exposed in all its gravity the conditions of platform workers, courts[127] and legislators[128] have been acting relatively swiftly, ensuring that such workers enjoy access to legal protections afforded to employees.

However, other dynamics remain largely outside the radar. One example is content monetisation, characterised by the potential intertwinement of commercial and political speech and remains a sort of blind spot for public regulators[129] mostly left to private governance.[130] Another significant example is the field of data ownership,[131] generally gravi-

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[122] Berta García Orosa, Santiago Gallur Santorun, and Xosé López García, "Use of clickbait in the online news media of the 28 EU member countries," *Revista Latina de Comunicación Social* 72 (2017).

[123] Nik Milanovic, "We need new business models to burst old media filter bubbles," *TechCrunch*, 28.10.2020.

[124] Mariella Bastian, Natali Helberger, and Mykola Makhortykh, "Safeguarding the Journalistic DNA: Attitudes towards the Role of Professional Values in Algorithmic News Recommender Designs," *Digital Journalism* 9 (2021).

[125] See the debate 'Open/Closed' at <https://verfassungsblog.de/category/debates/open-closed/>; and Raffaela Kunz, "Opening Access, Closing the Knowledge Gap?," *Heidelberg Journal of International Law* 81 (2021), 43-45.

[126] Yaiza Cabedo, "International Race for Regulating Crypto-Finance Risks. A Comprehensive Regulatory Framework Proposal," in *Constitutional Challenges in the Algorithmic Society*, ed. Hans-W. Micklitz et al. (n. 9).

[127] See CJEU, Judgment of the Court (Grand Chamber), *Asociación Profesional Elite Taxi*, Case C-434/15, 20.12.2017, ECLI:EU:C:2017:981; Corte di cassazione, no. 1663/2020, 24.01.2020, ECLI:IT:CASS:2020:1663CIV (Italy); Cour de cassation, no. 374/2020, 4.03.2020, ECLI:FR:CCASS:2020:SO00374 (France); Tribunal Supremo, no. 805/2020, 25.09.2020, ECLI:ES:TS:2020:2924 (Spain); UKSC, *Uber BV and others (Appellants) v Aslam and others (Respondents)*, 2019/0029, 19.11.2021, (UK); Bundesarbeitsgericht, 9 AZR 102/20, AZR 102/20, 01.12.2020, ECLI:DE:BAG:2020:011220.U.9AZR102.20.0 (Germany). See however, in California, *Dynamex Operations W. v. Superior Court and Charles Lee, Real Party in Interest*, 4 Cal.5th 903 (Cal. 2018).

[128] See, e.g., California Assembly Bill 5 (AB 5) of 18 September 201; the Spanish 'Ley rider' (Real Decreto-ley 9/2021, de 11 de mayo, por el que se modifica el texto refundido de la Ley del Estatuto de los Trabajadores, aprobado por el Real Decreto Legislativo 2/2015, de 23 de octubre, para garantizar los derechos laborales de las personas dedicadas al reparto en el ámbito de plataformas digitales., https://www.boe.es/eli/es/rdl/2021/05/11/9); EU's Proposed Platform Work Directive, Brussels, 9.12.2021, COM(2021) 762 final, 2021/0414 (COD), <https://ec.europa.eu/social/BlobServlet?docId=24992&langId=en>.

[129] Catalina Goanta, "Human Ads Beyond Targeted Advertising. Content monetization as the blind spot of the Digital Services Act," *Verfassungsblog*, 5.09.2021, https://verfassungsblog.de/power-dsa-dma-11/. For a broader discussion, see Catalina Goanta and Sofia Ranchordas, eds., *The Regulation of Social Media Influencers* (Cheltenham: Elgar, 2020).

[130] See Robyn Caplan and Tarleton Gillespie, "Tiered Governance and Demonetization: The Shifting Terms of Labor and Compensation in the Platform Economy," *Social Media + Society* (2020).

tating around valid legal consent and right to property. This approach, however, does not fully consider well-known problems of consent in privacy law.[132] Further, the collection and treatment of data by Big Tech platforms is not only a matter of concern for individual privacy and valid consent.[133]

Furthermore, even in fields 'covered' by current initiatives, the focus often remains relatively narrow. For example, the substantive scope of the guarantees provided by the EU's proposed Platform Work Directive[134] is limited to so-called 'gig' workers, even though algorithmic management is now present in workplaces and sectors, well beyond the 'core' platform businesses.[135] From yet another perspective, current discussions rarely capture the transnational dimension of the platform economy revolution, which potentially triggers races to the bottom on wages and workers' rights, related to geographical differences in skills and labour costs.[136]

A SC-oriented approach may contribute to partially recalibrating the focus. It starts from the assumption that information capitalism poses significant constitutional issues even when single, fully informed, and non-coerced individuals validly consent to the treatment of their data and, more generally, interact with digital technologies. For example, in the field of data protection, it points to the necessity to further explore models inspired by consumer[137] and environmental law.[138]

Further, a SC-oriented approach focuses on the digitalisation of the economy in its transnational dimension and on collective/social rights. This consideration applies to dif-

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[131] Sjef van Erp, "Ownership of digital assets?," *European Property Law Journal* 5 (2016); Václav Janeček, "Ownership of personal data in the Internet of Things," *Computer Law & Security Review* 34 (2018); Patrik Hummel, Matthias Braun, and Peter Dabrock, "Own Data? Ethical Reflections on Data Ownership," *Philosophy & Technology* 34 (2021).

[132] Cf. Ignacio Cofone, "Beyond Data Ownership," *Cardozo Law Review* 43 (2021, forthcoming). See also Hummel, Braun, and Dabrock (n. 131) .

[133] This emerges even in the amendments to the DSA (see below, n. 144) passed on 20th January 2022 by the European Parliament, <https://www.europarl.europa.eu/doceo/document/TA-9-2022-0014_EN.html>. The latter, falling short of a ban on targeted advertising, prohibited the use of UX tweaks to manipulate/force consent as the amendment requires platforms to offer parity in consent flows for refusing or agreeing to hand over data; of ad profiling of minors; of highly sensitive personal data (such as racial or ethnic origin, political or religious affiliation, sexuality or health data) for behavioral targeting of anyone. For legislation going in this direction in the US, see The California Privacy Rights Act of 2020.

[134] European Commission, Proposal for a directive on improving working conditions in platform work, COM(2021) 762 final, 09.12.2021.

[135] One may think of Amazon's use of automated decision-making systems in its warehouses, and of the employers' use of remote monitoring tools for formerly office-based employees: cf. Aislinn Kelly-Lyth and Jeremias Adams-Prassl, "The EU's Proposed Platform Work Directive," *Verfassungsblog*, 14.12.2021, https://verfassungsblog.de/work-directive/.

[136] See, however, Konstantinos Papadakis and Maria Mexi, "Managing Complexity in the Platform Economy: Self-regulation and the Cross-border Social Dialogue Route," *Albert Hirschman Centre on Democracy Commentary*, 16.06.2021, https://www.graduateinstitute.ch/communications/news/managing-complexity-platform-economy-self-regulation-and-cross-border-social.

[137] Serge Gijrath, "Consumer Law as a Tool to Regulate Artificial Intelligence," in Hans Micklitz et al. (n. 9).

[138] In this direction, even without a SC perspective, see Cofone (n. 132); Tommaso Fia, "An Alternative to Data Ownership: Managing Access to Non-Personal Data through the Commons," *Global Jurist* 21 (2020). In some respect, the DSA Proposal, as amended by the European Parliament on 20th January 2022 (see above, n. 133), moves towards environmental law models when it requires 'very large online platforms' to conduct and publish a risk assessment periodically and in any case before launching new services (Art. 26); to submit to regulatory oversight of their algorithms and to provide public interest researchers with access to data to enable independent scrutiny of platform effects (Art. 31), a move going in the same direction pointed by Kapczynski (n. 120).

ferent proposals targeting digital service intermediaries. Here, one can individuate DC's liberal assumptions on both sides of the Atlantic, however influenced by distinct conceptions of the relationship between state and society and their own 'varieties' of capitalism.

In the US, legislators have let the digital economy expand with little to no regulation and courts do not normally give legal relevance to the private power exercised by digital actors, leaving them grow in a sort of regulatory vacuum.[139] In hindsight, this is coherent with the emergence of Big Tech companies as veritable 'governors', sometimes with a de facto normative and adjudication systems.[140] Further, it is coherent with proposals focusing on lifting intermediatory immunity under Section 230,[141] which makes it extremely difficult to hold platforms liable for illegal content;[142] and on antitrust law as the main instrument to break Big Tech giants and even as an instrument of democratisation.[143]

In Europe, recent proposals for a Digital Services Act (DSA)[144] and a Digital Markets Act (DMA)[145] go in a partially different direction. Indeed, they aim at 'constitutionalising' the role of digital service providers in matters of data collection and content moderation;[146] and at enhancing the role of private actors in enforcement mechanisms.[147] At the same time, European courts have been more open to taking into consideration the societal role of social media companies, sometimes applying constitutional rights in inter-private relationships through the explicit or implicit recourse to the time-honoured doctrine of horizontal effect.[148]

In different ways, the two approaches still intervene externally on the private 'governors' of the digital economy. In a way, such actors are still in control, and informational capitalism remains at the core of their business model. From the perspective of SC, such

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[139] Cf. Ruth B Collier, V.B. Dubal, and Christopher Carter, "Labor Platforms and Gig Work: The Failure to Regulate," *UC Berkeley Working Paper Series* (2017), https://escholarship.org/uc/item/4c8862zj; Julian Posada, "Embedded reproduction in platform data work," *Information, Communication & Society* (2022), https://doi.org/10.1080/1369118X.2022.2049849.

[140] Cf. Klonick (n. 101), 1621; and more generally Kate Klonick, "The Facebook Oversight Board: Creating an Independent Institution to Adjudicate Online Free Expression," *Yale Law Journal* 129 (2020). Whether or not Facebook's Oversight Board may be qualified as a 'Supreme Court'—even from a legal pluralist perspective—is a matter of controversy: see Gradoni Constitutional Review via Facebook's Oversight Board.; Josh Cowls et al., "Constitutional Metaphors: Facebook's 'Supreme Court' and the Legitimation of Platform Governance," (2022), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4036504.

[141] 47 U.S.C. § 230, enacted in 1996 and providing immunity for website platforms with respect to third-party content.

[142] Veronica Shleina et al., "The Law of Facebook: Borders, Regulation and Global Social Media," *City Law School (CLS) Research Paper No. 2020/01* (2020), 14: 'no provision has done more to create the impression for the cyber libertarian exceptionalism, than this act of direct intervention by the federal government of the US and the subsequent interventions by the EU institutions. It is a mirage of a space free of interference created by a legal safe harbour i.e. the act of legal positivism.'

[143] Viktoria Robertson, "Antitrust, Big Tech, and Democracy: A Research Agenda," *The Antitrust Bulltein* 67 (2022), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3973418..

[144] European Commission, Proposal for a regulation on a single market for digital services and amending Directive 2000/31/EC, COM/2020/825 final, 15.12.2020.

[145] European Commission, Proposal for a regulation on contestable and fair markets in the digital sector, COM (2020) 842 final, 15.12.2020.

[146] In the sense that private actors are required to incorporate 'public' values and standards: see esp. Art. 12(2) DSA.

[147] Rupprecht Podszun, "Private enforcement and the Digital Markets Act," *Verfassungsblog*, 01.09.2021, https://verfassungsblog.de/power-dsa-dma-05/.

[148] See, e.g., the decisions of the German constitutional court BVerfG, 22.05.2019 - 1 BvQ 42/19, ECLI:DE:BVerfG:2019:qk20190522.1bvq004219; and of the Tribunal of Rome, *CasaPound c. Facebook*, 12.12.2019. See Matthias Kettemann and Anna S. Tiedeke, 'Back up: can users sue platforms to reinstate deleted content?,' *Internet Policy Review* 9 (2020), https://policyreview.info/articles/analysis/back-can-users-sue-platforms-reinstate-deleted-content.

an approach is partial because it is not accompanied by interventions on the internal structures and cognitive processes of the involved actors. In the case of digital companies, this approach is often ineffective or triggers unintended, paradoxical consequences (such as collateral censorship, over-blocking, and de-platforming),[149] as shown by the studies on the effects of the 2017 German Network Enforcement Act.[150]

A SC-oriented approach would focus *also* on changing internal structures and incentives. In this direction, Balkin argues against the outright repeal of intermediary immunity from liability of social media companies[151] and suggests leveraging such immunity by conditioning it on social media companies 'adopting business practices that ensure their trustworthy and public-regarding behaviour.'[152] This approach could be expanded through tax, labour, and company law instruments.

A first proposal would be introducing forms of 'digital Tobin tax', a form of taxation with progressive tax brackets tied to the number of active users and data collected by digital service providers, regardless of any related revenue. To be sure, this proposal builds on literature qualifying data as capital as such,[153] to be targeted to the purposes of taxation and economic redistribution.

A second proposal would be imposing to the private actors of the digital economy and to digital service providers within certain dimensional and economic thresholds forms of corporate governance, involving co-decision with representatives of collective (labour, health, press, environment, etc.) interests. Importantly, this proposal does not target only the business model—informational capitalism—but the legal infrastructure and the organisational models of the economic actors profiting from it.

A third proposal would be imposing obligations or at least linking incentives (tax breaks or liability immunities) related to the negotiation, establishment, and effective implementation of transnational company agreements[154] with associations of workers, artists, journalists, and other categories in the different systems where they operate. Such agreements should concern not only employment conditions but also redistribution of the profits generated to both individuals and collective entities whose data are collected and elaborated.[155] Such agreements, in turn, may be overseen and monitored by public authorities and/or public interest certification bodies possibly linked to international institutions such as the International Labour Organization.[156] In the same context, the Australian News Media Bargaining Code of 2021[157]—designed to have large technology platforms pay local news publishers for the content made available or linked on their platforms—remains an interesting experiment.[158]

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[149] For these regulatory problems in modern societies, see already Gunther Teubner, "After Legal Instrumentalism? Strategic Models of Post-Regulatory Law," in *Dilemmas of Law in the Welfare State*, ed. G. Teubner (Berlin: de Gruyter, 1985), 308-313.

[150] Cf. Alexander Peukert, "Five Reasons to be Skeptical About the DSA," *Verfassungsblog*, 31.08.2021, https://verfassungsblog.de/power-dsa-dma-04/.

[151] Such as that provided by Section 230 in the US and Art. 15 of the EU eCommerce Directive.

[152] Balkin (n. 86), 1301-1302.

[153] See above, n. 116.

[154] See again Papadakis and Mexi (n. 136).

[155] Cf. Parminder J. Singh and Jai Vipra, "Economic Rights Over Data: A Framework for Community Data Ownership," *Development* 62 (2019).

[156] A list of publications on digital labour platforms is available at <https://www.ilo.org/global/topics/non-standard-employment/crowd-work/publications/lang--en/index.htm>.

[157] Treasury Laws Amendment (News Media and Digital Platforms Mandatory Bargaining Code) Act 2021.

[158] Despite the fact that the law, as eventually enacted, essentially reinforces incumbent news organisations without affecting the perverse effects of informational capitalism on journalism and the press system: see Stillgherrian, "Australia's news media bargaining code is a form of ransomware, and someone paid up," *ZDNet*, 5.03.2021; Shutterstock, "Is the news media bargaining code fit for purpose?," *The*

It is important to emphasise that these rough proposals aim to reduce the reliance on the business model of informational capitalism; to reinvest part revenues into activities not immediately related to data economy; to internalise non-economic incentives and impulses coming from digital economic actors' social environment; and to reduce the necessity to link regulatory interventions to the violation of individual rights. Importantly, they strategically intervene on the internal structures of economic actors but are not forms of market constitutionalism.[159] Rather, they aim to unveil, sustain, and exploit contradictions rooted in material conditions of the digital sphere. By these means, they are meant to trigger and sustain processes of struggle and contestation *within* the involved systems, set pre-conditions for re-politicisation, open to non-predetermined policy outcomes, while at the same time reducing the competitive alignment of national systems of social and economic protection.[160] They search for interventions 'in relation to law, rather than under its auspices.'[161] Here again, SC may help DC become an authentic (global) constitutionalism, whereby economic processes emerged from digitalisation can be both enabled and constrained beyond a purely market-based rationality. In this sense, such a move also connects DC to the 'social' turn of global constitutionalism.[162]

Law

The impact of digital technologies on law has been studied for a long time. In the DC's discourse, the focus is mostly on legislative, judicial, and administrative (state) functions, in their relationship with individuals and their rights.[163] The literature has analysed future-proofing legislation[164] and experimental regulation,[165] as well as the impact of digital and algorithmic technologies on the due process of law, in administrative,[166] judicial,[167] and law-enforcement settings.[168] Attention is also paid to how the augmented speed and quantity of conducts in specific regulatory fields—for example, online speech—triggers a qualitative shift in the way law operates.[169]

Especially in the 1990s and 2000s, techno-enthusiasts have seen in new technologies the opportunity to either get rid of regulation altogether; or at least to make law 'comput-

Conversation, 29.11.2021, https://theconversation.com/is-the-news-media-bargaining-code-fit-for-purpose-172224.

[159] Whereby market is both the site of production and regulation of social issues. See Teubner, "Non-Monetary Surplus" (n. 27), 515-518.

[160] Put otherwise, they 'recruit constitutional reflexivity in a political role of guiding the selective withdrawal of certain areas of social action from the logic of price': Christodoulidis (n. 12), 12.

[161] Christodoulidis (n. 12), 13.

[162] Anne Peters, "Global Constitutionalism: The Social Dimension," in *Global Constitutionalism from European and East Asian Perspectives*, ed. Takao Suami et al. (Cambridge: CUP, 2018); Peters (n. 102), 688-689.

[163] Pollicino (n. 8).

[164] Sofia Ranchordás and Mattis van't Schip, "Future-Proofing Legislation for the Digital Age," in *Time, Law, and Change: An Interdisciplinary Study*, ed. Sofia Ranchordas and Yaniv Roznai (Cambridge: Hart, 2020).

[165] Sofia Ranchordas, "Experimental Regulations and Regulatory Sandboxes: Law without Order?," University of Groningen Faculty of Law Research Paper No. 10/2021 (2021).

[166] Zalnieriute, Bennett Moses, and Williams (n. 92).

[167] See, e.g., Tania Sourdin, *Technology and Artificial Intelligence: The Artificial Judge* (Cheltenham: Elgar, 2021); Monika Zalnieriute and Felicity Bell, "Technology and the Judicial Role," in *The Judge, the Judiciary and the Court: Individual, Colelgial and Institutional Judicial Dynamics in Australia*, ed. Gabrielle Appleby and Andrew Lynch (Cambridge: CUP, 2021).

[168] See above, n. 91, and Francesca Galli, "Law Enforcement and Data-Driven Predictions at the National and EU Level," in Hans Micklitz et al. (n. 9).

[169] See Julie E. Cohen, "Law for the Platform Economy," *UC Davis Law Review* 51 (2017); Evelyn Douek, "Content Moderation as Administration," *Harvard Law Review* 136 (forthcoming).

able', so that legal problems are ultimately decidable as 'right' or 'wrong' according to a strict binary relation 1/0.[170] Similarly, the application of machine-learning and AI to the legal profession would increasingly improve so-called predictive justice, so to make most human legal professionals redundant.[171] Such developments would arguably fix some features perceived exclusively as problems of law: slowness, inefficiency, complexity, relative unpredictability.

Therefore, with a degree of simplification, and leaving aside early anarcho-libertarian views, one can identify an oscillation between two paradigms.[172] First, a 'competition' paradigm, whereby the digital code and its inherent normativity stands as a competitor of law—of the legal code—and may potentially replace it as an instrument of social regulation.[173] Second, a 'hijacking' paradigm, whereby the digital code changes the nature of law and the way it operates.[174] In both cases, critical approaches have highlighted related risks, especially the fact that technologies may strengthen the role of law in cementing the hegemony of dominant groups that already control law-production; and, more generally, the fact that politics and capitalist economy exponentially increase their colonisation capacities towards other systems through (computable) law.[175]

What is the contribution of SC to this debate? First, it helps individuate different trends as part of a one and single phenomenon, pre-dating the emergence of digital technologies. Digital technologies made dynamics inherent to modern Western law emerge even more clearly. In normative terms, this view calls for an increased attention to the judicial and administrative structures which deal with and use new technologies.[176] But even more importantly, and in contrast to discourses centred around individual rights, (judicial) redress, and litigation, DC needs to re-focus on administrative law, conceived *also* as the law dealing with the redistribution of social and economic value.

Second, by focusing on the constraint and protection of law's specific communication medium (juridical authority), SC helps keep together both the 'competition' and the 'hijacking' paradigms. As concerns the constraint, even critical approaches still treat law too instrumentally, as if it was only a tool augmenting dynamics lying elsewhere (mainly in politics and economy). SC and systems theory, in contrast, highlight that juridification of society—exponentially amplified by digital and data-driven technologies—is a risk *in itself*, and not just to the extent it serves political or economic purposes.[177] The unconstrained juridification of the social world made possible by computation enormously in-

[170] See most famously Lawrence Lessig, *Code and Other Laws of Cyberspace* (New York: Basic Books, 1999). For a reconstruction, see Shleina et al. (n. 142), 13-17; Elettra Bietti, "A Genealogy of Digital Platform Regulation," available at: <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3859487>, 12-24.

[171] Pistor (n. 79), 183 ff.; Salvatore Caserta, "Digitalization of the Legal Field and the Future of Large Law Firms," *Laws* 9 (2020).

[172] See already Vagios Karavas, "The Force of Code: Law's Transformation under Information-Technological Conditions," *German Law Journal* 10 (2009). For an overview of a vast debate, see Christopher Markou and Simon Deakin, "Is Law Computable? From the Rule of Law to Legal Singularity," in *Is Law Computable? Critical Perspectives on Law and Artificial Intelligence*, ed. Simon Deakin and Christopher Markou (Oxford: Hart Publishing, 2020). Such oscillation is an inherent feature of critical theories of law, going back at least to Foucault's reflections: see Hunt and Wickham (n. 45), 22, 59-71.

[173] Pistor (n. 79), 203-204; Katharina Pistor, "Rule by Data: The End of Markets?," *Law and Contemporary Problems* 83 (2020).

[174] Mireille Hildebrandt, "Code-driven law. Freezing the future and scaling the past," in Deakin and Markou (n. 172).

[175] See Jennifer Cobbe, "Legal Singularity and the Reflexivity of Law," in Deakin and Markou (n. 172).

[176] Ranchordas (n. 96); Himmelreich (n. 96).

[177] Jürgen Habermas, "Law as Medium and Law as Institution," in *Dilemmas of Law in the Welfare State*, ed. G. Teubner (Berlin: de Gruyter, 1985).

creases the dangers deriving from the standardisation/normalisation imperative of juridical authority, even in a hypothetical socialist economy. Relatedly, especially in the light of the disciplining effects deriving from its internal dynamics,[178] law needs to remain scrutable and contestable.[179]

As concerns the protection, SC calls for the preservation of some 'imperfect' features of law. A certain degree of openness, uncertainty, unpredictability—linked to law's medial, cultural, and human features—is necessary for law to absorb cognitive expectations coming from its environment; to preserve its 'learning' capacities;[180] to trigger those micro-variations that are fundamental to preserve its capacity to regulate and evolve *with* society;[181] and to preserve its autonomy as a distinct social system not entirely exploitable by other systems.

Valuing such 'imperfect' features is counterintuitive from the perspective of liberal theory, which builds on an idea of judicial decisions as the result of if/then syllogisms; of lawmaking as the result of either individual or collective will, giving rise to determinate commands; and of certainty as consistency. However, to protect the reflexive nature of legal knowledge and normativity, one has to embrace the incomplete/contingent nature of law. In fact, 'there are limits to the computability of legal reasoning and, hence, the use of AI to replicate the core processes of the legal system.'[182] Techno-enthusiasts, who see hyper-determinism and the 'legal singularity'[183] as a positive outcome, may have some traction in the public discourse precisely because they build on assumptions deeply rooted in liberal constitutional theory. Questioning such assumptions from the perspective of constitutional theory is a (critical) contribution of DC informed by SC. In positive terms, this calls for a jurisprudence linking (without merging) the coercive effects of technology—in both its materiality and its cultural/social fallout;[184] and the normative structures and processes that are specific to law[185] and its human features.[186]

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[178] Constraints of decision, of rational justification, and of rule-making: see Gunther Teubner, "Self-Subversive Justice: Contingency or Transcendence Formula of Law?," *Modern Law Review* 72 (2009).

[179] Mireille Hildebrandt, "Law as computation in the era of artificial legal intelligence: Speaking law to the power of statistics," *University of Toronto Law Journal* 68 (2018); Christopher Markou and Simon Deakin, "Ex Machina Lex: Exploring the Limits of Legal Computability," in Deakin and Markou (n. 172): 'the application of machine learning to legal adjudication at the very least obscures the political issues at stake in the process of juridical classification. But it also undermines the effectiveness of legal reasoning as a means of resolving political issues. Legal reasoning involves more than the algorithmic application of rules to facts.' Diver (Laurence Diver, "Digisprudence: the design of legitimate code," *Law, Innovation & Technology* 13 (2021)) has coined the concept of 'computational legalism' to indicate a combination of ruleishness, opacity, immediacy, immutability, and pervasiveness, a concept that confuses rule-fetishism with acting under the rule of law.

[180] Christoph B. Graber, "How the Law Learns in the Digital Society," *Law, Technology and Humans* 3 (2021)..

[181] See already Teubner, "Societal Constitutionalism: Alternatives to State-centred Constitutional Theory?", in *Transnational Governance and Constitutionalism*, eds. Christian Joerges, Inger-Johanne Sand, and Gunther Teubner (Oxford: Hart, 2004), 26.

[182] Cf. Markou and Deakin (n. 179), relying on Teubner and Luhmann.

[183] Benjamin Alarie, "The Path of the Law: Towards Legal Singularity," *University of Toronto Law Journal* 66 (2016).

[184] Cohen (n. 11), ch. 10.

[185] In this direction, see again Vesting (n. 87), focusing on the media-cultural aspects of code's normativity; Hildebrandt (n. 174); Graber (n. 180); Diver (n. 179). For an earlier discussion, see Mireille Hildebrandt, "Legal Protection by Design: Objections and Refutations," *Legisprudence* 5 (2011).

[186] Cf. Mariavittoria Catanzariti, "Algorithmic Law: Law Production by Data or Data Production by Law?," in Micklitz et al. (n. 9), emphasising the role of human legal professionals in public bureaucracies. Such aspects are completely lost, for example, in efficiency-oriented approaches such as Cary Coglianese and Alicia Lai, "Algorithm v. Algorithm," *Duke Law Journal* 71 (2022).

The third contribution of SC concerns legal pluralism, understood *also* as a critical stance towards state-centred legal theory. Legal pluralism is by no means foreign to DC, but SC pushes it to take it more seriously. This means addressing at least four interlinked aspects as part of one analytical and normative research agenda.

First, a differentiated assessment of the impact of digital technologies on qualitatively distinct types of normative systems, or 'jurisdictions'.[187] Digital and data-driven technologies affect both state and non-state normative orders.[188] Furthermore, such technologies trigger different dynamics, depending on the type of communication medium (power, money, knowledge, etc.); the institutional form (a state, a corporation, an international organisation, a transnational regime); and their ideological/cultural environment.

Second, an assessment of the impact of the digital and data-driven technologies on different techniques of co- and self-regulation. New technologies do not only facilitate the autonomisation of non-state normative systems. They also change how state and non-state normative systems relate to each other and, importantly, how the former may inform the evolution of the latter.[189]

Third, the development of conflict-of-law approaches specifically suited to the normative conflicts arising from the application of digital and data-driven technologies.[190] Such approaches, which are already emerging in the practice of adjudicators dealing with both state-based[191] and non-state-based normative orders,[192] should be oriented not only to solve conflicts but also to trigger processes of learning[193] and effective constitutionalisation in the involved systems. The procedures and structures of the normative orders of both digital 'governors' such as Google and Facebook/Meta must be made responsive to external demands so that they can be turned into actual changes in their operations. Strategically exploiting the reflexive dynamics of the involved systems, then, is the goal of a pluralist constitutional theory suited to the reality of digital technologies.[194]

Fourth, an assessment of the fragmenting impact on legal subjectivity of different normative orders emerging from the digital sphere.[195] The normative effects of digital

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[187] Fleur Johns and Caroline Compton, "Data jurisdictions and rival regimes of algorithmic regulation," *Regulation & Governance* 16 (2022), 66, defining 'data jurisdiction' as 'a domain in which particular notions of what ought to be, and to be said and done, are propagated through the assemblage, formatting, dissemination, and use of data.'

[188] Cf. Johns and Compton (n. 187), 65.

[189] Michael A. Cusumano, Annabelle Gawer, and David B. Yoffie, "Can Self-Regulation Save Digital Platforms?," *Industrial and Corporate Change* 30 (2021); Marta Maroni and Elda Brogi, "Freedom of expression and the rule of law: the debate in the context of online platform regulation," in *Research Handbook on EU Media Law and Policy*, ed. Pier L. Parcu and Elda Brogi (Cheltenham: Elgar, 2021).

[190] See again Johns and Compton (n. 187).

[191] Jan Czarnocki, "Saving EU digital constitutionalism through the proportionality principle and a transatlantic digital accord," *European View* 20 (2021).

[192] In the field of the interaction between national courts case law and the de-platforming decisions adopted by digital companies, see Edoardo Celeste, "Digital punishment: social media exclusion and the constitutionalising role of national courts," *International Review of Law, Computers & Technology* 35 (2021). For a discussion with a focus on Google, see Guilherme Cintra Guimarães, *Global Technology and Legal Theory* (London: Routledge, 2019), spec. 69 ff.

[193] Graber (n. 180), 18-23.

[194] See most recently CJEU, Judgment of the Court (Grand Chamber), *Facebook Ireland and Schrems*, Case C-311/18, 16.07.2020 (Schrems II), invalidating the EU-US Privacy Shield, a framework that regulated Trans-Atlantic data transfers, as certain provisions of the US's Foreign Intelligence Surveillance Act and the subsequent surveillance programmes do not ensure a level of protection essentially equivalent to that guaranteed by EU law., notably Article 45(1) of the GDPR read in the light of Articles 7 and 8 of the EU Charter of Fundamental Rights (see paras 94-105 and 178-202).

[195] Cohen (n. 11), ch. 1; Johns (n. 74); Katrina Geddes, "The Death of the Legal Subject: How Predictive Algorithms Are (Re)constructing Legal Subjectivity," *Vanderbilt Journal of Entertainment & Technology Law* 25 (forthcoming), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4047345.

and data-driven technologies—whether they pass through the legal code or not—do not only contribute to the social construction of individual and collective actors. They also frame their legal position differently, ranging from their outright invisibility to indirect legal relevance to the recognition of personality with only a few legal entitlements, up to the full-fledged armoury of legal rights granted in that specific system. Most importantly, these effects are different for each of the centres of digital normativity. The systems of digital platforms such as Facebook have different social construction effects from, say, those emerging from states' digital administration, Uber, or the ICANN. Such multiplicity gives rise to continuous fragmentation, reconstruction, and mutual reconfiguration of 'relational subjects' that needs to be captured by the theory of DC.[196]

IV. Conclusion

This article aimed to highlight and better link DC's critical and normative elements, using the instruments provided by SC as a specific strand of global constitutionalism. The central argument is that, to address the challenges posed by new technologies, DC should embrace a more explicitly critical discourse, radically questioning several assumptions of liberal, state-centred constitutional theory. In this sense, DC should be framed as a theory for the digital age and, more broadly, as an opportunity for a long-overdue reckoning of modern constitutional theory with its inner contradictions.

However, unveiling and sustaining the visibility of such contradictions is not an end in itself. Feeding legal/constitutional negativism—or planning a sort of constitutional obsolescence—would be a sterile and self-defeating strategy, both in analytical and normative terms. Rather, highlighting the contradictions has also a transformative outlook, so that constitutionalism may transcend itself and address constitutional questions largely left unresolved if not hidden: private societal power, (transnational) legal pluralism, democracy beyond the state.

How does this argument relate to the UKSC's decision recalled in the introduction? A self-aware, DC should not focus on criticising decisions such as the UKSC's, as in a way it is already too late. Instead, it should focus on its analytical and normative premises, as well as the structural and procedural preconditions leading that court to decide in that way. What legal structures allowed or pushed a digital 'governor' such as Google to the illegitimate treatment of users' data? Why did the violation of users' rights have to be redressed through a representative procedure designed for different purposes? Why did a constitutional question have to be decided through the instruments and the language of tort law—as compensation for the breach of individual rights—instead of, say, administrative law? Why does a company dealing with such a huge amount of data and with such a significant societal role have the same model of corporate governance as other business enterprises? All these questions should be at the core of DC. This article called for less criticism and more (self-)critique, through the instruments provided by SC as the strand of global constitutionalism best suited to the challenges of digitality.

[196] Cf. Karl-Heinz Ladeur, "Die Zukunft der Medienverfassung," in *Die Zukunft der Medieverfassung*, ed. Karl-Heinz Ladeur et al. (Tubingen: Mohr Siebeck, 2021); Viljoen (n. 11); and Geddes (n. 195).

Cover: Imbalanced World, 1996, Veronika Dell'Olio (photo: Miriam Aziz)

"Essential to our concept was the establishment of a connection to the work and objectives of the institute. In view of the diversity of the research tasks concerned, we have attempted to highlight an overarching idea that can be understood as the institute's mission. We see this as the ideal of peaceful relations between peoples on the basis of an internationally validated notion of justice…. The depicted sculpture…[symbolizes] an imbalanced world in which some peoples are oppressed while others lay claim to dominance and power. The honeycomb form of the circular disks denotes the [international] state structure. Glass parts … [represent] the individual states …. [The division] of the figure … into two parts [can] be interpreted as the separation of the earth into two unequal worlds. The scissors-shaped base, on the one hand, makes the gap between them clear, on the other hand, a converging movement of the disks is conceivable…. The sculpture [aims] at what is imagined – the possibility of the rapprochement of the two worlds." [transl. by S. Less]

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