Societal Constitutionalism in the Digital World: An Introduction

Gunther Teubner and Angelo Jr Golia
This paper introduces the symposium issue of the Indiana Journal of Legal Studies dedicated to ‘Digital Constitution: On the Transformative Potential of Societal Constitutionalism’, where a group of scholars, using societal constitutionalism as a background theory, presents concrete proposals for a digital constitutional law. In this way, the symposium issue seeks to answer three interrelated questions. What is the message of societal constitutionalism for the emerging digital constitution? How can fundamental principles of nation-state constitutions be generalized and re-specified for global digitality with a transformative outlook? What would new institutional arrangements and interpretive practices look like? In this introduction, we aim to overcome three reductive tendencies stemming from traditional constitutionalism’s legacy (section II). We argue that digital constitutionalism needs to look beyond (1) the still dominant state-centricity of constitutional principles, (2) their exclusive focus on political power, and (3) their narrowly individualist interpretation of constitutional rights. This deconstruction opens the view to the main constitutional threats posed by digitalization—in particular, what we call the double colonization of the digital space—and to possible counterstrategies inspired by societal constitutionalism (section III). Subsequently, we outline the content of the contributions to this symposium, grouped into four areas: (1) re-formulation of constitution- and law-making; (2) digital economy; (3) institutions of constitutionalism; (4) digital justice (section IV). Finally, we point to future developments as well as to the links to other strands of literature that focus on the relationship between digital technologies and (constitutional) law (section V).

**KEYWORDS:**

digital constitutionalism, societal constitutionalism, transformative law, constitutional theory, law & political economy
Societal Constitutionalism in the Digital World: An Introduction*

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I. Exploring the transformative potential of digital constitutionalism through societal constitutionalism

Traditional state-centered constitutionalism does not keep pace with the inherent dangers of the digital revolution. The digital code increases the often-discussed (self-)destructive potential of the capitalist economy, democratic politics, autonomous science, technology, militant religion. Digitalization is accelerating the inner expansive tendencies of functional differentiation: the simultaneous politicization, monetization, scientification, juridification of society. Surveillance capitalism, informational power, social media’s political and religious radicalization are only some unconstrained communicative dynamics that are amplified by the application of the digital code.

Against these trends, digital constitutionalism, an emerging strand of constitutional scholarship, raises the question of whether fundamental principles of constitutionalism—notably separation of powers, democracy, fundamental rights, rule of law—can also be established in the digital world. Such principles need to...
be reformulated so that they can react to digital communication’s (self-)destructive potential. Digital constitutionalism, then, goes beyond state-centered constitutionalism in two ways. It cuts through the national/transnational as well as the state/society divide. Thus, it combines nation-state, global, and societal perspectives.5

Digital constitutionalism can be seen as part of the discourse on societal constitutionalism, which in the past two decades has developed within the broader galaxy of global constitutionalism.6 As a theory of legal and constitutional pluralism, societal constitutionalism has been exposed to extensive debate.7 It is indicative that one of its first comprehensive formulations used the digital sphere as a case study.8

Up to now, societal constitutionalism has been mainly used as an analytical framework to frame issues of digital constitutionalism.9 However, its normative and transformative dimensions still need to be explored. Indeed, the relevant literature has rarely developed concrete legal policies based on that framework. The risk is to render both societal and digital constitutionalism incapable of a critique that engages with societal power in the digital sphere and sets clear normative standards.

The primary goal of this symposium issue is to explore the transformative potential of digital constitutionalism through the lenses of societal constitutionalism. Using societal constitutionalism as a background theory, a group of scholars presents concrete proposals for a digital constitutional law. In this way, this symposium issue seeks to answer three interrelated questions. What is the message of societal constitutionalism for the emerging digital constitution? How can fundamental principles of nation-state constitutions be generalized and re-specified for global digitality with a transformative outlook? What would new institutional arrangements and interpretive practices look like?
In this introduction, we aim to overcome three reductive tendencies stemming from traditional constitutionalism’s legacy (section II). We argue that digital constitutionalism needs to look beyond (1) the still dominant state-centricity of constitutional principles, (2) their exclusive focus on political power, and (3) their narrowly individualist interpretation of constitutional rights. This deconstruction opens the view to the main constitutional threats posed by digitalization—in particular, what we call the double colonization of the digital space—and to possible counterstrategies inspired by societal constitutionalism (section III). Subsequently, we outline the content of the contributions to this symposium, grouped into four areas: (1) re-formulation of constitution- and law-making; (2) digital economy; (3) institutions of constitutionalism; (4) digital justice (section IV). Finally, we point to future developments as well as to the links to other strands of literature that focus on the relationship between digital technologies and (constitutional) law (section V).

II. Digital constitutions beyond traditional constitutional theory

Against state centricity. To be sure, traditional state constitutionalism still has considerable potential to protect against digital authoritarianism in the political system. China’s “Social Credit System”\(^\text{10}\) as well as US-American predictive policing,\(^\text{11}\) both of which use digital technologies to suppress potential threats to state power, are exemplary cases. In order to preserve the democratic potential of digital technologies against repressive politics, state constitutions need to establish new protective rules, e.g., free and continuous access to the Internet and preservation of anonymity under certain conditions.\(^\text{12}\) However, it is wrong to reduce digital constitutionalism to a set of rights, governance norms, and limitations on the exercise of the states’ power on the Internet. State-centric constitutionalism fails to address the (collective) power exercised by private actors. Against repressive tendencies in non-state sectors of society, i.e., in market transactions, formal organizations or transnational regimes, constitutional protection needs to reach far beyond the power threats of the state world.

Today, the digital space is the new non-state sector of global society that needs comprehensive constitutionalization. This does not only require new constitutive rules, that is, complex institutional structures sustaining the emergence and action

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of relevant actors, including higher-level normative texts\textsuperscript{13} and intricate networks of organizations and procedures.\textsuperscript{14} Even more urgent is the need for new \textit{limitative} rules, produced by both state and non-state law, directed against the digital power of private actors, notably anticompetitive practices of Silicon Valley and BigTech companies.\textsuperscript{15}

\textit{Beyond (social) power}. However, there lurks a second and a more subtle reductionism. While digital intermediaries, as the new centers of power beyond the state, are the legitimate target of political critique, it is not sufficient to focus exclusively on power in this context.\textsuperscript{16} The preoccupation with social power obscures the excesses of other expansive communication media (money, knowledge, juridical authority)\textsuperscript{17} that—even in situations when social power centers are absent—require constitutional limitation.\textsuperscript{18} Constitutional strategies ought to develop limitative rules not only against the negative externalities produced by the power imperative of politics but also—and particularly—against the externalities of the profit imperative of the economy, the reputation imperative of science, the innovation imperative of technology, the news imperative of the information media, the health imperative of the medical system, and the juridification imperative of the law.\textsuperscript{19}

Digitality itself is the new communicative medium against whose externalities constitutional protection is needed. Most conspicuous among them is the trend that digital technology creates its own social realities. This “hyperreality” has the potential to monopolize communication in other (life-)worlds, totalize its own reality

\begin{itemize}
\item \textsuperscript{13} On this point, see again Celeste, supra note 9.
\item \textsuperscript{14} Cf. Oren Perez & Nurit Wimer, Algorithmic Constitutionalism (in this symposium issue); and Nofar Sheffi, \textit{We Accept: Bit-by-Bit Constitution} (forthcoming).
\item \textsuperscript{15} See Samuel Stolton, \textit{EU braces for Big Tech’s legal backlash against new digital rulebook}, POLITICO, 2022; Kasia Borowska, \textit{The Monopoly On Technology And How To Defeat It}, FORBES, 2020; Zephyr Teachout, \textit{Break ‘Em Up: Recovering Our Freedom from Big Ag, Big Tech, and Big Money} (Macmillan 2020); Nicolas Petit, \textit{Big Tech and the Digital Economy: The Monopoly Scenario} (Oxford University Press 2020).
\item \textsuperscript{16} Here understood not as coercion or merely as self-interested influence on social actors’ behavior but rather as a specific communication medium (see note 17 below) that makes accepting Alter’s actions as the premises of Ego’s actions probable. In the functionally differentiated society, power is the specific medium of the political system. It can potentially also be realized in other systems, but without being able to obtain the capacity to reproduce that it has in politics. Indeed, power reproduces itself in the form of obedience to a command. In other words, it is realized when the action sequence command-obedience is combined with a sequence of threat of sanction (if you do not obey, I will punish you); cf. Claudio Baraldi et al., \textit{Unlocking Luhmann. A Keyword Introduction to Systems Theory} 175 (Bielefeld University Press. 2021).
\item \textsuperscript{17} 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, \textit{Systems Theory}; in \textit{INTERNATIONAL ENCYCLOPEDIA OF POLITICAL SCIENCE} 2579-2588 (Bertrand Badie et al. eds., 2011), https://doi.org/10.4135/9781412994163.
\item \textsuperscript{18} For this argument in more detail, Isabell Hensel & Gunther Teubner, \textit{Horizontal Fundamental Rights as Conflict of Law Rules: How Transnational Pharma Groups Manipulate Scientific Publications, in Contested Regime Collisions: Norm Fragmentation in World Society} 139-168 (Kerstin Blome et al. eds., 2016).
\end{itemize}
construction at the expense of other ones.\textsuperscript{20} With the virtual, we enter not only upon the era of the liquidation of the real and the referential, but that of the extermination of the other.\textsuperscript{21} In its relation to law, the digital code creates autonomous normative orders and tends to undermine law’s normative order. Since the rigid calculations of algorithms induce a fusion of unilateral rule-making, rule-application, and rule-enforcement, they risk destroying the civilizing and humanizing aspects of the rule of law, particularly the hermeneutics of legal argumentation.\textsuperscript{22}

Beyond individual rights. Here the third reductionism of traditional constitutionalism comes in— the exclusively individualist dimension of constitutional rights. Of course, a Bill of Rights for individual users of social networks is important in combating digitality’s damaging effects on privacy, mental health, and political engagement of citizens.\textsuperscript{23} “Digital vulnerabilities” is a political project exploring how digital technologies exacerbate pre-existing human vulnerabilities or create new ones.\textsuperscript{24} However, ‘the real fundamental rights issue lies at the trans-individual, discursive level: Platforms are expansive social systems, which may thwart society’s autonomous self-reproduction.’\textsuperscript{25} Thus, societal constitutionalism, reaching beyond the individual dimension, focuses on the equally crucial institutional dimension of constitutional rights. This means protecting the integrity of vulnerable social configurations and less powerful collective actors (protest movements, trade unions, independent media, education and research institutions) against their encroachment. For instance, ‘as a fundamental right, academic freedom guards the individual autonomy of the scholar, but also facilitates functional differentiation of societal systems, in this case, protecting science against unwanted intrusions from politics, economics or religion.’\textsuperscript{26} And similarly vulnerable institutions are emerging in socio-digital spaces as well, e.g., Wikipedia, the open-source movement, digital


\textsuperscript{21} Jon Baldwin, ‘Self-Immolation by Technology’: Jean Braudillard and the Posthuman in Film and Television, \textit{in} The Palgrave Handbook of Posthumanism in Film and Television 19-27 (Michael Hauskeller et al. eds., 2015).


\textsuperscript{24} What Camilla Crea et al. define “digital vulnerability”: see at \url{https://www.dirittocomparato.org/wp-content/uploads/2022/07/7-CALL-FOR-INTEREST_DIVE.pdf}. See also Irina Domurat, \textit{Rage Against the Machine: Profiling and Power in the Data Economy}, in this symposium issue.


commons, public software repositories, and social movements of platform workers, all of which, in their still fragile autonomy, require constitutional protection.

III. Double colonization, the new digital political economy, and counter-strategies: resistibility and contestability

Up to this point, we have focused on constitutional problems created by digital technology itself. In addition, societal constitutionalism identifies future threats that lurk elsewhere, that is, in the negative effects of digitalization on the poly-contextural structure of contemporary society. When the two dominant functional systems, politics and the economy, are digitalized comprehensively, their surplus pressures, profit and power, are massively reinforced by the equally strong surplus pressures of digitality. Internally, digitalization intensifies the endogenous growth dynamics in the political and economic systems. Externally, it aggravates their expansive tendencies directed toward other social systems. Both trends result in the double colonization of the digital space: the power-profit complex produces a digital totalitarianism which impedes the potential plural evolution of digitality. It reduces the poly-contextural structure of the digital space to the duopoly of powerful sectors: a “public sector” driven by digitalized power and a “private sector” driven by digitalized profit. This dominating duopoly—which could be called the new “digital political economy”—has the potential of structurally corrupting the new but still fragile socio-digital institutions which are emerging in the other social domains: science, education, health, and art. The new dystopia is the fusion of homo oeconomicus and homo politicus into homo digitalis, whereby inclusion, emancipation, and effective participation of social actors in different social fields is made more and more dependent on whether and to what extent such actors

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28 We understand ‘polycontexturality‘ as a characterizing feature of modern societies: the plurality of mutually irreducible social perspectives. They are incompatible with one another and can be overcome only by rejecting certain values, which in turn leads to different binary distinctions. See Gotthard Günther, Life as Poly-Contexturality, in Beiträge zur Grundlegung einer Operationsfähigen Dialektik 283-306 (Gotthard Günther ed., 1976).

29 For early warnings against the dangers stemming from the dominant coupling of ‘government’ and ‘commerce’, see Lessig, supra note 22, 4 ff.

30 Cf., from a Habermasian perspective, Wang, supra note 20.

31 As it is mostly inspired by the poly-contextual features of modern societies, we understand this concept in a way close to Fleur Johns, Governance by Data, 17 Annual Review of Law and Social Science 4.1, spec. 4.7-4.8 (2021). See also Julie Cohen, Configuring the Networked Self. Law, Code, and the Play of Everyday Practice ch. 1 (Yale University Press 2012); Salomé Viljoen, A Relational Theory of Data Governance; 131 Yale Law Journal 573 (2021-2022); and Jenna Burrell & Marion Fourcade, The Society of Algorithms, 47 Annual Review of Sociology 213 (2021). Therefore, it is not necessarily aligned to current ‘law and political economy’ (LPE) approaches: see, among many contributions, Katharina Pistor, The Code of Capital: How the Law Creates Wealth and Inequality 183-204 (Princeton University Press 2019); Kapczynski, supra note 2. See also infra, section V.

32 See Verschraegen, supra note 26, 179: ‘The intrusion of economic rationality into science can create a form of ‘structural corruption’ (as opposed to personal corruption), not only exercising pressures for the privatization and commercialization of research results, but also affecting the research process and results themselves.’
contribute to the accumulation of power and profit through digital means. In normative terms, combating this dystopic scenario implies three constitutional strategies.

A first strategy is to develop constitutional restraints on digitalized politics. As said above, when digitality re-inforces state power, the repressive potential of political systems is intensified. Against that, traditional state constitutionalism will have indeed to fulfil its century-old promise: consolidate the rule of law, strengthen constitutional rights, and fight anti-democratic practices. However, for the new dangers of digitalized state power, key principles of state constitutionalism need to be transformed into their societal counterpart. Their generalization into broader constitutional strategies and their re-specification for digital power is needed. Digital constitutionalism will have to put severe limits on biometric surveillance, automated decision-making, and the technologies of ‘hypernudge’ which use Big Data for regulation by design.

A second strategy is to set constitutional limits on algorithmic profit-making. The economization of the digital medium is the blind spot of traditional constitutionalism which attempts only to limit state power. Digital technologies have increased the commodification tendencies of global capitalism. The combination of oligopolistic markets and data-driven business models has dramatically expanded the possibility for economic actors to affect society through the code of economic accumulation. In particular, the strategies of informational capitalism combine the pressures of the profit motive with digitality’s pressures of attention maximization. Empirical studies have produced ‘powerful observational evidence of destructive dynamics, including the fast diffusion of misinformation, manipulation campaigns, ideological (self-)segregation, and extremism’ which are produced by digital attention maximization. This requires new constitutional measures against the technological network protocols that are self-enforcing.

Today, constitutional counter-strategies are slowly emerging. The Digital Services Act (DSA) adopted by the European Union is an extremely significant regulatory experiment whose concrete effects will only emerge in the future. It prohibits the use of UX tweaks to manipulate or force consent and requires platforms to offer parity in consent flows for refusing or agreeing to hand over data (Art. 25); ad profiling of minors (Art. 28); of the use sensitive personal data (such as racial or ethnic origin, political or religious affiliation, sexuality or health data) for behavioral targeting (Art. 26 para. 3). An additional important element is data access and scrutiny into algorithmic background operations, in order to make how the profit motive overlays “innocent” technical operations transparent. In this sense, the DSA moves towards constitutional restraints of the digitalized economy when it requires

33 Cf. THOMAS VESTING, GENTLEMAN, MANAGER, HOMO DIGITALIS: DER WANDEL DER RECHTSSUBJEKTIVITÄT IN DER MODERNE spez. ch. 9 (Velbrück 2021).
34 Brayne, supra note 11; Burrell & Fourcade, supra note 31, 221-226; Castets-Renard, supra note 11.
37 Cohen, supra note 2.
38 González-Bailón & Lelkes, supra note 3, 11.
very large online platforms’ to periodically conduct and publish assessments concerning systemic risks, particularly before launching new services (Art. 34), with related mitigation obligations (Art. 35); regulatory oversight of their algorithms and to provide public interest researchers with access to data to enable independent scrutiny of platform effects (Art. 40).

Besides the features of specific instruments such as the DSA, dispute-settlement bodies need to start reviewing the “private” regulations of the “digital governors” with far-reaching controls, mirroring the constitutional review of state legislation performed by state courts. In this sense, it is crucial to frame the digital platforms’ terms of use not simply as standardized contracts but as forms of unilateral law-making power. Indeed, platforms increasingly exercise their power ‘through non-negotiable, one-sided and deliberately opaque ‘terms of service’ contracts.’ Therefore, courts need to impose strict scrutiny standards on digital private government regimes. Most importantly, they must rely on more than legal consent of individuals because it does not take into consideration problems of asymmetric information, unequal bargaining power, and collective negative externalities. Thus, private law controlling the fairness of contractual provisions is—to be—transformed into a constitutional review of the non-state law emerging in the digitalized economy, a new and increasingly important type of constitutional review performed by both state and non-state judicial bodies. From this perspective, strategic litigation, activated by both individual and collective actors, based on both state and non-state rules, is an additional precious instrument to trigger the emergence of both constitutive and limitative constitutional norms within the digital sphere.

Moreover, antitrust law needs to come in and develop constitutional rules to protect the integrity of information processes within digital networks, e.g.—again—prohibiting unfair ‘dark patterns’ and other manipulative digital practices. Another proposal, inspired by northern European corporate law models, would establish forms of co-decision with external representatives of collective interests (health, education, culture, etc.).

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42 For an exemplary case going in this direction, see most recently CasaPound v. Facebook, Tribunal of Rome, judgment no. 17909/2022 of 5 December 2022.
44 Cf. Patrik Hummel et al., Own Data? Ethical Reflections on Data Ownership, 34 Philosophy & Technology 549 (2021); Ignacio Cofone, Beyond Data Ownership, 43 Cardozo Law Review 501 (2021); Martin Tisné & Mariette Schaake, The Data Delusion: Protecting Individual Data Isn’t Enough When the Harm is Collective (2020).
45 Cf., in the field of public international law, Vera Strobel, Strategic Litigation and International Internet Law, in Digital Transformations in Public International Law 261-284 (Angelo J R Golia et al. eds., 2022); and, for the non-state normative system of Meta, Angelo J R Golia, The Transformative Potential of Meta’s Oversight Board: Strategic Litigation within the Digital Constitution?, in this symposium issue.
46 Corina Cara, Dark Patterns In The Media: A Systematic Review, 7 Network Intelligence Studies 105 (2019).
science, environment) within the corporate boards of digital service providers. All this would amount to a societal constitutionalism “by procedure” imposing a mandatory procedural framework for the self-limitation of digital processes.\(^{47}\) Here again, another instrument of the European Union’s recent regulatory efforts, the Digital Markets Act (DMA),\(^ {48}\) presents interesting developments, notably the provisions involving third parties and competitors in the monitoring and compliance functions (Arts. 27 and 28).

A third strategy focuses on the institutions of a “digital civil society”. It aims to protect the non-state/non-profit sectors of the digital space in constitutional terms. Against the double colonization by profit and power, the integrity of science, journalism, education, medicine, and art needs constitutional protection.\(^ {49}\) Thus, the digital third sector requires constitutive rules for developing stable socio-digital institutions: hacker communities, digital NGOs, digital commons, Wikipedia, open-source. However, the so-called tragedy of the digital commons reveals self-destructive tendencies even within digital civil society.\(^ {50}\) The average user of information technology is exploiting common resources until they can no longer recover. Users do not pay attention to the consequences of their behavior. The tragedy of the digital commons has a second consequence—the pollution of the infosphere, i.e., the indiscriminate and improper usage of technology and digital resources and the overproduction of data. Excess information leads to corruption of communication and information overload. Both tendencies are the legitimate field of constitutional self-limitation which needs to be supported by external pressures from politics and civil society.

But most importantly, the digital third sector needs strong rules against the external pressures of both profit and power surpluses. The integrity of science is affected by negative externalities produced by the digital political economy when digitalization and the so-called economic re-interpretation of open access are increasing publish-or-perish, reputation-seeking dynamics, predatory publishing and reinforcing the position of hegemonic actors in science.\(^ {51}\) Large publishing companies, like Elsevier, Wiley and Springer are in a position to invisibly and strategically ‘exert control, over key university decisions—ranging from student assessment to research integrity to financial planning.’\(^ {52}\) Likewise, the integrity of journalism is endangered by real-time web analytics, clickbait, and information bubbles, dynamics that have already led to important changes: consolidation of


\(^ {49}\) For the protection of science, especially from the perspective of international human rights law, see Raffaela Kunz, *Threats to Academic Freedom under the Guise of Open Access* (2022); Verschraegen, supra note 26.


\(^ {51}\) See Raffaela Kunz, *Opening Access, Closing the Knowledge Gap?* 81 *Heidelberg Journal of International Law* 23, 43-45 (2021); and, more generally, the debate ‘Open/Closed’, available at https://verfassungsblog.de/category/debates/open-closed/.

\(^ {52}\) SPARC landscape analysis, 5.
larger news organizations\textsuperscript{53} and transformation of the professional self-understanding and self-organization of journalism.\textsuperscript{54}

The constitutional counterstrategies inspired by societal constitutionalism are expressed by two key concepts: resistibility and contestability. They represent two sides of a coherent strategy against the double colonization of the digital space by the power-profit complex. This strategy has the potential to transform digital constitutionalism from an academic concept into a socio-political movement.\textsuperscript{55} Resistibility implies civil society’s defense against the political economy of digitality. Against the colonizing tendencies of digitalized politics, it will have to create social counter-power, mainly by protest movements and civil society groups. This is not just wishful thinking. Indeed, ‘the use of algorithmic governance in increasingly high-stakes settings has generated an outpouring of activism, advocacy, and resistance.’\textsuperscript{56} Against the excessive economization of the digital world, profit-threatening strategies are the most promising instruments which law and politics could impose. Contestability will imply, internally, the protection of self-contestation. Digital platforms will have to allow procedures for internal opposition and whistleblowing. Externally, the expansion of access to justice is needed, against algorithmic politics and digitalized economization. Ultimately, this symposium issue appeals to ‘institutional imagination’ in the sense of Roberto Unger.\textsuperscript{57} It has a critical, normative, and transformative outlook and aims to offer concrete proposals within the broader context of digital constitutionalism.

IV. The symposium’s contributions on four macro-issues: constitution-making, digital economy, institutions of constitutionalism, digital justice

We now briefly outline the content of the individual contributions of this symposium issue. All the authors had already engaged with issues of digital law and politics. Expanding on their previous works, they address crucial issues of digital constitutionalism through the lenses of societal constitutionalism and come up with concrete proposals. In particular, the contributors examine experimental approaches. Via case studies in different fields, they point to shortcomings and work out alternatives. Moreover, they critically reflect on how new solutions impact both hegemonic and subaltern positions affected by digital technologies. The symposium issue is organized into four sections, each addressing substantive and procedural problems of digital constitutionalism.

\textsuperscript{53} Nik Milanovic, \textit{We need new business models to burst old media filter bubbles} (2020).


\textsuperscript{55} In this symposium issue, Celeste, \textit{Internet Bills of Rights}, rightly observes that numerous proposals for digital Bill of Rights which have emerged in recent years are indicators for a social movement that produces constitutional counter-strategies.

\textsuperscript{56} Hannah Bloch-Wehba, \textit{Algorithmic Governance from the Bottom Up}, 48 Brigham Young University Law Review 69 (2022), presenting three case studies on how social and labor movements are responding to dramatic shifts in digital governance.

The first section addresses the constitution-making by the digital code. Edoardo Celeste analyzes the potential of so-called “Internet Bills of Rights”. They generalize and re-specify constitutional norms in the digital sphere, creating the transformative potential of societal constitutionalism. In particular, Celeste highlights how, even though they are not legally binding sources, they represent a flexible instrument whereby their promoters are free to experiment with new legal solutions gradually and more democratically, including actors beyond the worlds of politics and business.

Giovanni De Gregorio focuses on the digital code as a matrix of constitutional normativity and deals with it in the general framework of constitutionalism as a normative project. Starting from the observation that artificial intelligence (AI) systems create their own norms by defining generative layers of normativity in the algorithmic society, he argues that automated decision-making systems autonomously develop norms by experience and learning within an opaque technological space that tends to escape the logic of the rule of law. Within this context, he discusses the European Union’s proposed Artificial Intelligence Act as an example of how the rule of law can limit delegation in the digital age.

Oren Perez and Nurit Wimer also address the constitutional impact of AI on regulation, but they focus on the content moderation of digital platforms. They examine the Facebook content moderation regime, already partially controlled by algorithms. Starting from a critique of current approaches based on ethical engineering, they develop “algorithmic constitutionalism” as an original approach to AI governance. They demonstrate how it can be applied to the Facebook content moderation regime and describe the difference between societal and algorithmic constitutionalism. Indeed—and paradoxically—the attempt to subject the AI algorithm to external control opens the door for the AI agent to intervene in that process, potentially undermining its very purpose. Finally, they explore the implications of their argument for the DSA.

The second section deals with the politics of data property and law’s role in shaping the interface between economy and digitality. Dan Wielsch observes that, in contemporary economic systems, data are taking their place alongside labor and capital, which raises questions about the need and the legitimacy of creating exclusive rights to data or “data ownership”. However, legal theory does not only have to develop an adequate concept of “data” and to explicate the social functions of related property rights. It also has to align a potential data ownership with the broader idea of social ordering through property rights, taking into consideration the normativity of social orders constituted through the exercise of rights and ensuring that those affected by such orders can participate in shaping them. Concerning the function of individual rights for social practice—he argues—two further questions arise: the implications of the normativity of this practice for the rights and, correspondingly, the participation of the right holders in social practice. Ultimately, and to the extent private rights would allow for changing the rules of social order, they become political rights.

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58 Celeste, Internet Bills of Rights.
60 Proposal for a Regulation of the European Parliament and of the Council Laying Down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act) and Amending Certain Union Legislative Acts, Com/2021/206 Final.
61 Dan Wielsch, Political Autonomy in the Digital World. From Data Ownership to Digital Constitutionalism.
Irina Domurath deals with algorithmic profiling as an example of datafication and machine colonization. She examines the emergence of an EU digital constitution from the perspective of societal constitutionalism. Via an internal critique of societal constitutionalism, she questions its assumptions concerning the capacity of societal actors and non-legal media, such as public outrage and litigation, to exert the pressure needed for changes from within. She resorts to the insights of the emerging ‘Law and Political Economy’ (LPE) scholarship to understand the structural power of companies that inhibit the built-up of external pressure and to justify the adoption of a counter-concept of structural digital vulnerability.

LPE scholarship is a point of reference also for Roxana Vatanparast, who addresses yet another side of the relationship between digital technologies and the economy: digital money. Focusing on its governance and democratic potential, she explores the opportunities provided by the pluralism of digital money and polycentric governance to embed values that might otherwise be not valued in market societies. In particular, she refers to two case studies, namely digital money built by and for stateless populations utilizing blockchain technology; and digital fiat currency that has the privacy-preserving features of cash and promotes financial inclusion. She argues that the pluralism of digital currencies that utilize public and not-for-profit institutional architectures has a higher democratic potential than forms of digital money driven by profit and extractive motives.

The contributions of the third section explore different ways to re-frame the fundamental institutions of constitutionalism (rights, democracy, separation of powers, procedures) in the digital sphere. Using net neutrality as a case study, Christoph Graber argues for a reconstruction of fundamental rights as institutions. They should bundle normative expectations related not only to the protection of individual positions but also to the defense of institutional autonomies against society’s self-destructive tendencies. Starting from existing statutory guarantees of net neutrality in certain jurisdictions, he argues for the development of constitutional structures and processes—the next step to be expected according to the theory of societal constitutionalism. From a normative perspective, he explores how net neutrality protection should be institutionalized as a fundamental right. In particular, he argues that two preliminary issues need to be addressed: first, how to adequately conceptualize the relationship between the social and the technological; second, how fundamental rights should be conceived beyond state-centrism. He concludes that a sociological reflection of fundamental rights as institutions of society will serve as a benchmark for evaluating future developments of constitutional legal doctrine.

Monika Zalnieriute takes a different path. Resorting to critical and decolonial scholarship, she questions proceduralist solutions often offered in the digital constitutionalism scholarship. She criticizes what she calls ‘procedural fetishism’ as a strategy of digital imperialism to hide and re-enforce US dominance, colonial exploitation, and environmental degradation. A new digital constitution—she argues—would have to shift its focus from procedural and soft law initiatives toward substantive accountability and tangible legal obligations of the tech companies.

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62 Domurath, Rage Against the Machine.
63 See again Pistor, supra note 31, 183-204; and Kapczynski, supra note 2.
64 Roxana Vatanparast, Digital Monetary Constitutionalism: The Democratic Potential of Monetary Pluralism and Polycentric Governance.
65 Christoph Graber, Net Neutrality: A Fundamental Right in the Digital Constitution?
Even more urgently, digital constitutionalism needs to recognize colonial practices of extraction and exploitation, paying attention to the voices of indigenous communities of the ‘Global South’. Only with these mutually reinforcing efforts will a new digital constitution debunk corporate and state agendas of procedural fetishism and establish a new social contract for the digital age.

Raffaela Kunz addresses such issues from yet another perspective. Focusing on Open Science as a case study, she observes how awareness about the dark sides of digital technologies has been rising in recent years. Leading academic publishing companies have long started to tap into the data analytics business, with negative consequences for the consolidation of an oligopoly in the academic publishing industry and large-scale corporate influence on science. Against this background, she argues that traditional constitutionalism cannot capture the subtle yet systemic risks that science faces in the digital age. Societal constitutionalism is not only a useful analytical lens but also helps to respond to these threats. It provides valuable lessons for debates on digital constitutionalism and the effective protection of fundamental rights in the digital age.

The fourth and final section examines the interface between digital technologies and judicial adjudication, both in the private and public spheres. Tania Sourdin explores AI’s problematic impact on states' judicial functions. She observes how the emerging relations between judges, courts and AI technologies challenge conventional governance theory, as they require to focus on social interaction to explore how judicial responsiveness might support the development of ethical approaches that care for vulnerable populations. Societal constitutionalism—she argues—opens a new approach to justice, which promotes human well-being, which in turn supports disruptive technologies in the justice sector. She also reflects on the challenges presented by this approach, which are readily apparent in justice conceptions that focus on ‘fast’, ‘low cost’ justice delivery, in the absence of justice itself.

In the final contribution, Angelo Jr Golia focuses on the Oversight Board (OB), the independent adjudicative body established by Meta to make consequential precedent-setting content moderation decisions on Facebook and Instagram. He proposes a potential strategy to make digital platforms responsive to external demands concerning their broader societal impact. Starting with an analysis of Meta’s normative system from the perspective of societal constitutionalism, he assesses the actual extent of juridification and constitutionalization. Aiming to put informational/surveillance capitalism “on trial”, he then outlines a litigation strategy concerning the mental health distress of young people and, by these means, ultimately uses Meta’s normative system to thematize broader, systemic effects of social networks in constitutional terms.

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68 Sourdin, *Robo Justice.*

69 Golia, *The Transformative Potential of Meta’s Oversight Board.*
V. Red threads: definitional issues, materiality and conflict, regulatory approaches, systems theory

One of the most important and challenging tasks of digital constitutionalism is to make visible the convergence of different strands of scholarship that deal with the impact of digital technologies on fundamental rights, democracy and the rule of law. Such a convergence is possible especially with those approaches which do not speak—at least, not explicitly—the language of constitutionalism. This opens broader conversations, both within and without constitutional scholarship. Against this background, in this final section, we highlight some red threads and link them to parallel debates. In particular, four red threads are emerging, concerning definitional issues, digital materiality and conflict, regulatory approaches, and systems theory.

A first red thread relates to digital constitutionalism’s identity. Indeed, its inner complexity is well reflected in its own (lack of shared) definition.70 The contributions to this symposium reveal a variety of meanings and normative orientations in the definition of ‘digital constitution’ and ‘digital constitutionalism’.71 In contrast to over-hasty critique,72 these nuances—this internal ambiguity, if you want—is not necessarily negative. Nor is it an instrument to co-opt the symbolic capital of constitutionalism. Instead, it allows multiple discourses with a shared normative outlook to co-exist, interact, and potentially compensate each other’s limits. This internal variety also facilitates critical engagements and contributes to debunking co-option attempts.73 What matters is the shared ambition to build legal instruments that protect and constrain the dynamics of the digital code in its relation to power, money, faith, juridical authority. To formulate it in a more traditional way, the goal is the translation and implementation of constitutional principles into different, newly emerged societal fields. However, the normative horizon of any constitutionalism, be it state-centered, global, or societal, defines the project.74

The project can be seen as both, a conceptually ambitious “digital constitution” or a more modest “constitutionalism for the digital”. A serious engagement with digital technologies presupposes consideration of a plurality of normativities, which variably interact, overlap, conflict, and influence each other. Only within this process may a “digital constitution” emerge. But—importantly—such emergence is contingent and by no means necessitated. It needs to be actively pursued by different strategic actors, including engaged scholars. Any concept of

70 For an overview of the definitional issues, see again Celeste, supra note 4.
71 See especially the contributions by De Gregorio, The Normative Power of Artificial Intelligence; Zalnieriute, Against Procedural Fetishism; Perez & Wimer, Algorithmic Constitutionalism; Domurath, Rage Against the Machine.
73 Cf. Zalnieriute, Against Procedural Fetishism; and, more generally, Angelo Jr Golia, Beyond Oversight. Advancing Societal Constitutionalism in the Age of Surveillance Capitalism (2021). In the same direction, with acute observations in relation to the EU DSA, see Marta Maroni, ‘Mediated transparency’: The Digital Service Act and the legitimisation of platform power, in (IN)VISIBLE EUROPEAN GOVERNMENT: CRITICAL APPROACHES TO TRANSPARENCY AS AN IDEAL AND A PRACTICE (Paivi Leino-Sandberg et al. eds., forthcoming).
74 See again De Abreu Duarte at al., supra note 5.
transformative digital constitutionalism will aim at laying the analytical and normative preconditions for such emergence.

There is a second red thread: (digital) materiality and conflict. Indeed, thinking digitality through the lenses of societal constitutionalism allows for linkages with the material preconditions of the digital constitution in two senses. First, the socio-technical substratum of digital technologies influences its constraining effects, the actual possibilities for transformation, and the contestation of norms and policy solutions. Thus, technology facilitates as well as hinders the emergence of constitutional norms.\(^75\) Second, societal constitutionalism requires looking at the concrete—indeed, material—socio-economic relationships sustained by the legal infrastructure of the digital ecosystem. Processes of value extraction amplified by digitality, redistributive effects at national and global levels, capacity of politics, science, law as distinct social fields to resist colonization by economic rationality—these are all points of contact with the LPE scholarship, as several contributions of this symposium issue show.\(^76\) As mentioned above, countering the negative effects of the conflation between a “public sector” driven by digitalized power and a “private sector” driven by digitalized profit—what we called the new “digital political economy”—should be one of the transformative goals of a digital law informed by societal constitutionalism.

Here, we submit that the specific contribution of societal constitutionalism lies in poly-contexturality as one of its analytical starting points.\(^77\) Indeed, against the risk of exclusively focusing on the economy/politics interface, societal constitutionalism insists on the multiplicity of mutually irreducible social perspectives reproduced by digitality and their collisions. In normative terms, this calls for fine-tuned approaches that account for the specific dynamics of different social systems—among them, law, science, religion—thus orienting normative and policy solutions towards the reflexivity specific to each social field.\(^78\)

This leads to a third red thread, namely the contribution to the regulation scholarship.\(^79\) This symposium helps dispel some mischaracterizations of societal constitutionalism.\(^80\) It is plainly wrong to say that societal constitutionalism only focuses on private ordering for the emergence of constitutional normativity. It is similarly wrong to assert that it is inspired by a neo-liberal ideology that legitimizes


\(^77\) See Günther, *supra note 28*.


\(^79\) For a significant contribution to this debate, see recently Petter Törnberg, *How Platforms Govern: Social Regulation in Digital Capitalism*, 10 BIG DATA & SOCIETY 1 (2023).

private powers and supports exclusively private self-regulation and the retreat of states’ regulation. In contrast, societal constitutionalism calls for the inclusion of normativities emerging from all social fields, including state-based politics.81 Importantly, this does not necessarily mean “less government”. Rather, even state regulation, if oriented towards effective constitutionalization, needs to be translated into self-constitutionalization. In order to perform its constituting and limiting functions, digital constitutions need to respond to the specific communicative structures/processes of digitality. More concretely, legal-political rules need to be reconstructed by the digital code. In other words, regulatory strategies aimed at an effective constitutionalization of the digital sphere may require more or less state regulation. However, such constitutionalization cannot be based exclusively on politically legitimated norms, even when they derive from authentically deliberative processes. In the end, societal constitutionalism asks for a strategic interaction of qualitatively different kinds of norms,82 as affected by the digital code.83 From this perspective, it is not surprising that several contributors—adopting insights coming from societal constitutionalism—called for a more significant role for states, ranging from the expansion of their positive obligations84 to the establishment of clearer and “harder” prohibitions.85 Likewise, the problematization of the rule of law—a classic principle of modern constitutionalism—formulated by several contributions86 and the strategies for its re-specification in different contexts are another example of how societal constitutionalism contributes to combining distinct normativities, principles of legitimacy, and regulatory approaches. As mentioned above, the normative effects stemming from digital technologies and algorithms need to be reconciled with the rule of law in a different way from what happened in “analog” constitutionalism.87 In positive terms, the contributions show the importance of looking for solutions linking the coercive effects of technology88 with the normative structures and processes that are specific to law89 and its human features.90

The fourth and last red thread emerging from the symposium is the relationship with systems theory. Does systems theory provide an analytical framework for a

81 Cf. Golia & Teubner, supra note 6, at 388.
82 Id., at 388-395.
84 Cf. Kunz, Tackling Threats to Academic Freedom Beyond the State.
87 See esp. Perez & Wimer, Algorithmic Constitutionalism.
88 Cohen, supra note 31, ch. 10.
89 In this direction, see again Graber, How the Law Learns, supra note 75; Mireille Hildebrandt, Code-driven law. Freezing the future and scaling the past, in IS LAW COMPUTABLE? CRITICAL PERSPECTIVES ON LAW AND ARTIFICIAL INTELLIGENCE 67-84 (Simon Deakin & Christopher Markou eds., 2020); Thomas Vesting, Legal Theory and the Media of Law (Elgar 2018), focusing on the mediacultural aspects of code’s normativity.
90 In most recent literature, cf. John Tasioulas, The Rule of Algorithm and the Rule of Law, VIENNA LECTURES ON LEGAL PHILOSOPHY (2023); Mariavittoria Catanzariti, Algorithmic Law: Law Production by Data or Data Production by Law?, in CONSTITUTIONAL CHALLENGES IN THE ALGORITHMIC SOCIETY 78-92 (Hans Micklitz et al. eds., 2022), emphasizing the role of human legal professionals in public bureaucracies. Such aspects are lost, for example, in efficiency-oriented approaches such as Cary Coglianese & Alicia Lai, Algorithm v. Algorithm, 71 DUKE LAW JOURNAL 1281 (2022).
digital constitution? Societal constitutionalism—as developed in the last two decades—builds on Luhmann’s theory of social systems and, at the same time, thinks in the normative terms of constitutionalism. Some contributions of this symposium show that Luhmann’s theory of functional differentiation opens new perspectives for a transformative reconstruction of digitality. The contributions reveal a further aspect of systems theory which thematizes the risks of datafication. Here, it is an open question is whether constitutional theory should concentrate only on the effects that the datafication has on already-existing communication media or on the effect it has on the digital code itself, as a new communication medium. This is the perspective of “bit-by-bit-constitutionalism” which identifies constitutional processes in the digital architecture itself. From a more speculative perspective, the symposium calls for socio-legal research to investigate whether the impact of digitalization is so significant that it will trigger a departure from functional differentiation as the primary form of societal organization. Put otherwise, data-driven social processes such as the re-socialization of power—the capacity of non-political, non-state collective actors to increase the probability of Alter’s acceptance as the premises of Ego’s actions—may go as far as to provoke the emergence of new, unprecedented forms of societal differentiation. These questions certainly cannot be answered only by constitutional theory. However, such broadening the horizon is necessary for any constitutionalism that aims to rise to the level of complexity required by the involved issues and, potentially, to offer normative solutions for a digital constitution. Perhaps, the symposium will contribute to this debate.

91 Cf., for the terms of the debate, Dirk Baecker, Digitization as Calculus: A Prospect (Research proposal, 2020), available at https://www.researchgate.net/publication/344263318_Digitization_as_Calculus_A_Prospect.
92 See again Kunz, Tackling Threats to Academic Freedom Beyond the State; and Graber, Net Neutrality.
93 See especially Domurath, Rage Against the Machine; Kunz, Tackling Threats to Academic Freedom Beyond the State; and Graber, Net Neutrality.
94 See supra note 17.
95 Sheffi, supra note 14.
96 Which replaced segmentation and stratification in modern societies: see Baraldi et al, supra note 16, 65-70.
“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]

Art in architecture, MPIL, Heidelberg