Some narratives constructed by German MPs regulating digital innovation

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Abstract. This contribution investigates the narrative work being done by members of parliament (MP) of the German Bundestag in parliamentary speeches concerned with legislation on digital technologies. Bringing together the book Code and other Laws of Cyberspace by Lawrence Lessig and narratives as conceptual lens, I focus on some selected narratives and some conflicts they make apparent. A general underlying struggle between the allegedly right levels of chaos and order could be identified and broken up into several sub-narratives. The paper shows how, in trying to craft coherent narratives, MPs find themselves caught up in difficult dilemmas of trying to balance out some dimensions of state sovereignty like societal wellbeing and economic success. I argue that political work may benefit from taking up traditionally unusual narratives and ensure conceptually richer and more reflected debates within and about digitalisation in parliamentary processes.

1. Introduction

Are 25 years a long time? A glance at a watch or a calendar alone cannot answer that question, as the answer necessarily depends on the context the question was asked in. The context of this contribution is a revisit of the hallmark book Code and other Laws of Cyberspace (Code from now onwards) written by Lawrence Lessig in 1999—25 years ago. In said book, Lessig introduced what should become a certain dictum in the digital world and somewhat of a maxim in some of its numerous communities until today: Code is Law. It describes the idea that how computer code is written and what it enables or disables, essentially acts like law in digital spaces. Now, in Code, Lessig, a lawyer who later went on to among other things found Creative Commons, discussed property (rights), state authority in digital spaces, and how different code architectures have very different repercussions on these aspects within digital practices. Yet down to the present day, his thoughts do not seem to have lost all that much of the relevance it had more than two decades ago, as not only recent discussions of blockchain advocates show (Quinn, 2022). In that sense, 25 years, even though I am talking about 'the digital' here,

does not seem to be an incredibly long time. However, not only those who have used the internet in the 1990s (I did not) know that what has been and is sometimes still called the cyberspace is far from being the same that it was when Code was published. Not just the aesthetics but code architectures, practices, written and unwritten rules and what very generally is considered 'normal' on the web has changed immensely. So, in that sense, 25 years actually seem to be a very long time after all.

1.1. Approaching Lessig

My main focus in this revisiting of Lessig's work is on the narratives involved in the political process of the lawmaking concerned with the internet and digitalisation in a broader sense. If *code is law*, but state regulation does partially steer which code gets written and implemented and which not, the narrative foundations of these acts of regulation need to be considered. This paper then aims to investigate some of the narratives around laws concerned with digital innovation in the German context.

Narratives have increasingly become an analytic tool not only in the social sciences, with a number of authors having identified a Narrative Turn (see for example de Fina and Georgakopoulou, 2015). Numerous terms exist that one could utilise in the analysis of narratives—super narratives, master narratives, visions, hypes, trends, ideologies, agendas, expectations, frames, and others. For varying reasons, none of them neatly describe my analytical focus. Yet all of them are narratives in some sense, which I, on the most basic level, understand as the structuring of ideas, values and knowledge (Herman, 2009, p.2) in order to make sense of the complexities of the world. What has, however, loosely guided my research process was the notion of Sociotechnical Imaginaries. Coined by Jasanoff and Kim, they are defined as "collectively held, institutionally stabilized, and publicly performed visions of desirable futures, animated by shared understandings of forms of social life and social order attainable through, and supportive of, advances in science and technology" (Jasanoff, 2015a). Lawmaking on digital topics is an apt example of a process that involves such sociotechnical imaginaries. They necessarily play a role in crafting and negotiating new legislation in parliamentary processes and in turn get reinforced by the new laws passed, 'embedding' them further in sociocultural and -technical thought, practices, and infrastructure (see also Jasanoff, 2015b). The goal of this work however is specifically not the identification and description of one such imaginary. I will only use this concept to guide my thinking on the topics at hand.

To Lessig, "[t]he point about politics is process. Politics is the process by which we reason about how things ought to be" (Lessig, 1999, p.59), describing well my angle of attack here: Digitalisation is often seen as a mostly technological process, concerned maybe with network coverage or throughput rates. Obviously, that is part of it. However, what oftentimes gets overlooked is how digitalisation is just as well about the power of narratives, the power of how the stories we construct about past, present and future very much are (un)making our shared realities. These narratives cannot come to be without the ideas of what we value and how things 'ought to be' on a broader level. Hence when Lessig argued that code is law and how commercial and political motives have played and will play a considerable roll in the shaping of digital realities, this very much includes the narrative work of these actors as well.

Let me illustrate this with an example very close to Lessig's account. On the one hand, there were (and still are) those that conceive of 'the internet' as a space and place predestined to do business. Their vision was and is to utilise digital infrastructures– perhaps not only, but with certainty–to enable commercial activity. Other individuals, collectives and organisations much rather wanted and want to keep more of what the internet was in its very beginnings, a space of mostly unregulated and oftentimes completely anonymous exchange between people. Both visions or (parts of larger) sociotechnical imaginaries were built on very opposing narratives about what a 'desirable future' looks like, and what actors would contribute in what ways to achieve it. These different envisionings of possible sociotechnical futures are what gives these actors direction for action. Their internalised stories–narratives in some form–induce, incite and impel *change*.

As described in some detail below, my material consists of the protocols of plenary talks given in the *Bundestag*. I investigate these not to analyse the actual laws that get debated there but, as implied, shed light on broader narratives and imaginaries being utilised on various instances of lawmaking. For example, making laws that enable or disable anonymity on the web, as Lessig discussed (1999, p.25ff.), necessitates a reason why, and the reason why, whatever it is, has to be woven into a larger vision of the future that the law is leading society towards. In Judy Wajcmann's words:

"[W]e need to ask why a technical reason was found to be compelling, when it could have been challenged, and what counts as technical superiority in specific circumstances. [...] A range of social factors affect which of the technical options are selected, and these choices shape technologies and, thereby, their social implications" (Wajcman, 2015, p.28)

Wajcman only seconds Lessig here, who made the point numerous times that law, just as technological innovation, is anything but neutral. Laws are not just *there*, and no law could be described as *logical* or *natural*. They do not just come into being, as they are always part of situated and larger stories, beliefs, ideas, assumptions, and are hence never neutral or objective. What the law is, how it is constituted and what it entails is always situated in time, space and narratives (see for example pages p.25, 60, 97f., 212-234).

1.2. Aims of this contribution

In general, this contribution aims to further perspectives at the intersections of STS, the digital, law and politics, at which considerable work has been done before (see Jasanoff, 2004, Jasanoff and Kim, 2009, Jasanoff and Kim, 2015, Fourcade and Gordon, 2020, Bareis and Katzenbach, 2021, Grundmann and Stehr, 2012, Owen, 2015, Ralf Kopp, 2019, and many others). However, parliaments as means to make public political processes in order to justify state action, often remain understudied.

As the question was opened up on the conference, I also want to clarify that my work is not suggesting the notion that law is or ought to *follow* politics, as past debates particularly in Austria have discussed (Galaktionow and Gupta, 2019). My point is merely to open up perspectives on the parliamentary part of the entire legislative process, not least because parliaments constitute a democratic institution acting under particularly close scrutiny of media and publics (Vliegenthart et al., 2016).

What's more, this work more generally is also about what STS has always been about: Opening up discussions about technological developments, asking how and why they come to be and what consequences a development may have, to question technodeterministic thinking and further the idea that sociotechnical development is indeed an open-ended process.

However, I also want to make clear that this contribution is meant to be exploratory, as it is based on a corpus of a size that is manageable for this kind of analysis and form of publication. I thus do not perceive of it as concluding thoughts, but really as a starting point for further work on related topics and contexts.

2. Material & Methodology

2.1. Material

This paper is based on the qualitative analysis of ~100 talks given in the Bundestag between 1984 and 2021. They are part of a larger corpus consisting of around 1800 talks, all concerned with digitalisation in some sense which have been broken up into incidents of a length between 1 and ~30 lines. With *Code is Law* being the conceptual lens, I extracted those incidents that specifically touched upon ideas of the *role of politics in digitalisation processes* as well as *specific* or *vague future visions*. Looking into incidents with these co-occurrences enabled me to attain some insights on how politicians interpreted their role in the process of digitalisation and put this into relationship with some of the visions of a digitalised future that they deem 'desirable'. Overall, 764 single

incidents were considered for the analysis, of which most was conducted via the software ATLAS.ti (ATLAS.ti, 2024).

2.2. Methodology

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Figure 4. Table from ATLAS.ti showing the number of incidents with relevant co-occurrences; specific visions in first column, vague visions in second column, political work in first row and respective years all rows after.

Concerning my methodology, I loosely relied on a Grounded Theory (GT) approach, although I did adapt the process to my situation (Charmaz, 2014, Morse et al., 2016, Strübing, 2018). Classic examples of GT studies do enter the field rather disinterested and react to what topics prove useful along the way, expanding the material until a point of 'saturation' is reached. Now, I was able use an existing and pre-coded corpus, looking at it with a fresh conceptual lens, looking for aspects I did not consider before. I thus recoded the selected incidents, developed new codes and identified some recurring concepts, themes and narratives that I describe in the following sections. These are all original findings for this contribution (see also chapter XXX for limitations).

3. Analysis

This paper presents a focused analysis of selected narratives within the Bundestag discussions on digital innovation. While counterexamples exist, the narratives described do provide significant insights into the narrative strategies employed within the German parliament.

The analysis is structured along one key narrative or conflict described in section 3.1. I will then lay out four sub-narratives discussing specific aspects of the key narrative. I follow up with a brief intervention on narratives resisting those described before. Each part consists of some representative quotes either from Code or an MP's speech and some reflections on the narratives invoked. Quotes from MPs have been translated from German to English, all original talks are available in German via the Bundestag's website (Deutscher Bundestag, 2024). To add some context when quoting direct excerpts from the speeches, I added the speaker's name, indicate special roles filled by the speaker if applicable (e.g. minister or chancellor), and the date the speech was delivered.

3.1. An underlying conflict

There is one conflict in the narrative work done by the MPs that I found central to several more specific narratives, one Lessig did very much imply, too. It is the question of how much order is needed and how much chaos is bearable in social and/or sociotechnical systems.

Of all the actors involved in the making of society and digital technology particularly, a myriad of different assessments of the right and sensible levels of order and chaos are present. From the invention of the law itself, the man-made straightening of rivers, up to the appearance of industrial assembly lines and recent discourses on gender, the struggle for order and the wish to be in control of one's circumstances has been a phenomenon throughout human history.

Now, chaos and order are very abstract concepts and are closely tied to the more palpable, yet less analytically clear categories of security and freedom. Security (Sicherheit in German) however, is a term that is mentioned numerous times in the protocols that were included in this analysis and it is a topic that is hidden everywhere in Code as well, even though as a word its only used about ten times in the entire book. Somewhat generalising, I oftentimes found the political talks to reveal the idea that it is order that leads to positively perceived forms of security, and that in turn freedom leads to a negatively perceived form of chaos. It is the regulatory work of law then that is believed to bring this conflict into balance—to establish just enough order so that security is ensured and to prevent chaos in so far that freedom is not curtailed too much.

Lessig tried to spark this very debate already in 1999. Forestalling parts of my conclusion, this debate and how it is led to this very day in parliamentary discussions is somewhat stagnant in its lines of argument, making it exceedingly interesting for such an analysis.

3.2. Controlling Code

"Cyberspace, the story went, could only be free. Freedom was its nature. [And t]hat cyberspace was a place that governments could not control" (Lessig, 1999)

"LADIES AND GENTLEMEN, WHAT WE ARE DOING WITH THESE MEASURES IS NOTHING ELSE BUT TRANSFERRING ESTABLISHED AND PROVEN MEASURES FROM THE SO-CALLED ANALOGUE WORLD TO THE SO-CALLED DIGITAL WORLD. IN THE ANALOGUE WORLD, WE ARE SETTING MINIMUM REQUIREMENTS FOR FOOD AND HOUSEHOLD APPLIANCES. WE DO THE SAME FOR BANKS AND FINANCIAL SERVICE PROVIDERS IN THE AREA OF RISK MANAGEMENT. [...] FOR A LONG TIME, WE HAVE [FOR EXAMPLE ALSO] BEEN OBLIGING PROPERTY OWNERS TO GRIT THEIR SIDEWALKS IN WINTER TO PREVENT ACCIDENTS INVOLVING PEOPLE. NOTHING ELSE IS WHAT WE ARE DOING NOW IN AREA OF IT." (DEUTSCHER BUNDESTAG, 2024, FEDERAL MINISTER OF THE INTERIOR DR. THOMAS DE MAIZIÈRE, 20 MARCH 2015)

The first more specific aspect that was very recurringly appearing in many talks was the idea of *controlling code*, meaning primarily the idea that what is being done with code and what code does is something *in need* to be controlled by state. What can be done with code often should be constrained and restricted, oftentimes explicitly in the name of safety and security for diverse stakeholders (citizens, companies, the state, etc.). What I found particularly interesting about this idea are its conceptual roots, which seem to be twofold:

- 1. Politics and politicians in Germany very much took on the narrative of the 'free internet' summarised by Lessig in the quote above. Just like many 'netizens' did (and do), MPs perceive(d) the internet as something that was inherently chaotic and unruly. As Lessig noted (Lessig, 1999, p.IXff.), modern states of the Westphalian tradition are averse to most spaces and places deemed unruly. However, since 'the internet' was very obviously a different space than peoples private, tangible premises, and because it really did not care too much about national borders, the question was, how state could justify exercising similar controlling power in digital spaces.
- 2. The current conceptual framework in Germany treats the digital and analogue realms as equivalent in both character and thus in their appropriate approach by lawmakers, suggesting that rules governing the analogue world can be *directly applied to the digital*. Lessig has critiqued this approach, arguing that it oversimplifies and poses potential dangers (Lessig, 1999, p.3ff.). This conceptualisation, however, has facilitated the implementation of restrictive control architectures in digital environments.

Combine this conceptual eradication of differences between analogue and digital spaces with the strong belief that everything digital is inherently averse to any kind of government(tality), and the preconditions are set actually for two different readings of the idea of controlling code. In the first one, the actor in control is the state, which ought to be controlling code via legislation. In the second reading, the actor in control is the code itself, that is code architectures, enabled to be *controlling people* or their behaviour.

In light of Lessig's observation that states tend to ally with commerce, the first reading is the precondition for the second reading. That is because only the idea that code can and should be controlled by state enables the preconditions for architectures of code not only being controlled, but at the same time enabled to be controlling code in the sense of being in control of online practices, norms and behaviour that favours the agendas of said alliance of states and commerce. I will look into this alliance in the next sub-narrative.

3.3. Code and Commerce

"If commerce is going to define the emerging architectures of cyberspace, isn't the role of government to ensure that those public values that are not in commerce's interest are also built into the architecture? [...] Isn't it absolutely clear that there must be limits to [the] presumption [t]hat public values are not exhausted by the sum of what IBM might desire?" (Lessig, 1999,

p.59)

"If we want to maintain the entire value chain in our country, we have to be pioneers, as we have been with all other industrial revolutions[.] ... We have always been pioneers, we have always played along very well. Now Industry 4.0 is coming, which means the smart factory is coming. That means total networking, self-organization in production. People, machines, systems, logistics, products, even customers and business partners are networked with each other. Completely different service models, smart services, will emerge because everyone will communicate and cooperate with each other. I believe this is a huge opportunity. [...] Change is not the risk. If we don't back the change, then we will be left behind. Let's do what we did in other industrial revolutions: Let's be pioneers." (Deutscher Bundestag, 2024, Jens Koeppen, 13 November 2015)

Lessig laid out in much detail how state and commercial actors would likely forge a certain alliance of convenience aiming for an internet that favours order over chaos and thus particularly facilitates commercial actions while hindering a more organic development of architectures, norms and practices. He should be proven right, as today's internet and almost every technology containing digital aspects is driven by commercial interests (just think of the 'Big Five', Google, Amazon, Apple, Meta and Microsoft and their collective power over much of any international digital structure). The question here, too, is how this was narratively constructed or at least made possible as desirable future.

In my analysis, the sub-narrative that emerged as perhaps the most dominant one enabling the political support for the commercialisation of digital (infra-)structures is that of competition. As very creatively constructed in the quote above, commercial success is seen as both, a natural aspiration and, specifically in the German context, as a historically grounded obligation (Miller, 2015). Relative success in the past is often used as a reason to strive for similar or greater success in the future, thus naturalising a modern understanding of human and national trajectories as progress necessarily being a pursuit towards the *better* (Reckwitz, 2021).

I want the description of this narrative not be understood as fundamental critique. I am not in a position to assess how much orientation towards commerce is useful. The point here is simply that what Lessig saw as the most probable future is in fact very much reflected in the narrative constructions of the Bundestag speeches given in the 2000s and 2010s:

"Of course, the Internet does not stop at national borders. It is therefore important to find and implement European and international solutions and standards for this area. Germany should set a good example here and take on a pioneering role. After all, a high level of IT security not only means an increase in public safety, but also a location advantage for the economy and companies. We should therefore examine regulations for increasing the security of IT products by introducing a quality seal in the further legislative process." (Deutscher Bundestag, 2024, Gerold Reichenbach, 9 March 2017)

3.4. Sovereignty

"Ladies and gentlemen, IT security is an indispensable prerequisite for digitalisation. [...] Without security in the network, without a maximum of what we can do to protect our systems, everything that will define us in the future will be null and void. Industry 4.0 is null and void without IT security, and cloud technology would be completely pointless without cyber security." (Deutscher Bundestag, 2024, Christina Kampmann, 20 March 2015)

"In the area of digitalization, I am particularly concerned about a Europe-wide digital identity, which we are now establishing in Germany via the chip in the ID card and making it accessible as a wallet in the smartphone. I believe that this could really achieve European sovereignty." (Deutscher Bundestag, 2024, Federal Chancellor Dr. Angela Merkel, 23 June 2021)

The last aspect of the greater narrative of order that I want to include is the idea of state sovereignty (which here, simplifying things somewhat, includes the idea of European sovereignty). The discourse around sovereignty does go very much into what Lessig called the struggle between East Coast Code and West Coast Code (Lessig, 1999, p.53f.).

Concerning East Coast Code, German politicians saw and still see most unregulated spaces as something in need of ordering. In short, chaos is perceived as an imperfection, which is often rooted in a sense of risk that unregulated spaces implicate for everyone involved in these spaces (regardless of chaos sometimes being a feature more than a problem). Examples are numerous, from discussions about a 'NetNanny' in the 1990s (Deutscher Bundestag, 2024, Hans-Otto Wilhelm, 26 September 1996) up to the everlasting discourse on data security. Although the concern made explicit is often about creating security for people and/or companies, I suggest a different reading: Unregulated spaces, specifically those of digital nature, are (uncounsciously?) perceived as

undermining state authority. Regulations enabling 'architectures of control' can thus be interpreted as a means to establish state authority. The struggle for sovereignty leads to the normalisation and facilitation of kinds of code architectures that very much reflect what Lessig predicted. As the idea of state sovereignty is becoming much more complex and multidimensional as our world gets more complex and 'networked', digitality is subtly perceived of as a threat to sovereignty. Especially in Germany, and it holding a self-image as organised, orderly country, the subtle call for state sovereignty has become a central narrative figure.

3.5. Trust but verify

"When commerce writes code, then code can be controlled, because commercial entities can be controlled. Thus, the power of East over West increases as West Coast Code becomes increasingly commercial." (Lessig, 1999, p.53)

This section and narrative are concerned with ideas of chaos, touching on important narratives about what actors can and should be trusted in digital spaces. As Lessig expected for example in his elaboration on trusted systems (1999, p.122-139), a certain level of trust is necessary for any interaction, both analogue or digital. However, the talks analysed for this contribution exhibited considerably more trust towards commercial actors and their endeavours than they did towards private citizens and their motifs. This is not to say that the narratives employed were framing citizens as generally erratic or even criminal (although just the *possibility* of criminal acts are often an instrument used to demand more order and control). However, it is to say that since spaces created and practices applied by commercial actors are in more need of effective architectures of control, their intentions align much better with state's concerns about unregulated digital spaces, just as Lessig implied. The protocols now show that commercial freedom, on the one hand, is seen to be enabled more by order than by chaos. Civil freedom, on the other hand, may not be seen as equivalent to pure chaos, but is described to be in need of a different mixture of chaos and order. Eventually, trust in the benefits of commercial expanse is oftentimes larger than trust in the benefits of citizens liberties:

"If you talk to young entrepreneurs who have set up their start-up in Silicon Valley, for example, they say that they didn't go there because the infrastructure is particularly good. In reality, the opposite is the case: a 5 Mbps connection costs \$50 in San Francisco–not to mention the road infrastructure. The companies located there have only one interest, namely to develop their business model without major bureaucratic hurdles and to be able to scale up in a huge market. Europe can do that too. That is why we need to work on implementing this digital single market in Europe." (Minister of Transport and Digital Infrastructures Alexander Dobrindt, 9 September 2016)

Now, interestingly enough, this placing of commercial interests above civil interests in the past and the digital realities this allowed to manifest is in recent years actually becoming a challenge for German politics itself, as shown in the following quote:

"What I will never understand in the German debate is why, in the end, there is so much more willingness to provide Apple, Google, Facebook or even Alibaba with your own personal data every day than when your own state sets a framework for using data for the benefit of the individual—anonymized or pseudonymized—for research and added value for all patients. Then there is a basic mistrust. As long as this is the case and there is a basic trust in large American corporations and a basic mistrust in our own state, we will not make any progress in digitalization." (Deutscher Bundestag, 2024, Minister of Health Jens Spahn, 3 July 2020)

Here, then Minister of Health Jens Spahn laments people trusting companies more than the state, as these commercial players have become so ubiquitous and their code, *their law*, enabled by state regulation, so widely accepted by the people online that state authority is perceived to be negatively affected by the amount of trust towards commercial code/law. In a similar instance, then Minster of Justice Katharina Barley spoke of a fight 'David vs. Goliath' in which for her Goliath represents "the concentrated economic power and the companies" and David representing everything and everyone else, including the international community of states (Deutscher Bundestag, 2024, Minister of Justice Dr. Katharina Barley, 23 March 2018).

3.6. Resistance

"CDU/CSU and FDP want to invest indiscriminately in everything that has 'artificial intelligence' written all over it, without taking into account the ecological and social follow-up costs. The AI race is thus leading to a material battle with gigantic energy consumption, which is further accelerating climate change. In this way, the potential of digitalisation, which undoubtedly exists, is being wasted. It could help to bring about socio-ecological change. However, this requires a departure from these wild fantasies of growth." (Deutscher Bundestag, 2024, Jessica Tatti, 14 February 2020)

To end the analysis, I want to stress that the insights presented before are not exhaustive. This paper is a short overview over some narratives employed in the political discourse. The narratives shown are not unanimous consensus in any political party, but they are being discussed and challenged even within governing parties and coalitions. However, most explicit critical voices do usually come from oppositional parties. "For far too long, the narrative of digitalization has been a narrative of progress driven by industry and interests, along the lines of 'there's the technology, there's the progress'. We can see that this is not the case" (Deutscher Bundestag, 2024, Dieter Janecek, 14 February 2020) for example, is a way of critiquing a modernist framing of progress and it being driven primarily by technology and commercial development that, judging by my analysis, is very unlikely to have been uttered by a politician of any non-oppositional party.

To conclude the analysis, the key conflict of order and chaos and its several subnarratives do recur over decades of parliamentary debate and can thus be a useful tool in analysing not only past, but also future debates on the topic. An in depth look into resisting narratives and imaginaries will require further work.

4. Conclusions

4.1. The underlying conflict

Modern states and their governments around the world lead a complicated relationship with everything digital (Kohl, 2017). It is particularly in those debates around digital technologies that politicians in Germany time and time again found and find themselves caught up in conflicts and dilemmas weighing among others three target dimension of new policy against each other:



Figure 2. Three key target dimensions of political work as derived from the material

Politics, or so it assumes, aims at digital innovation that balances the three aspects with each other. Naturally, how not only Lessig has shown, policy frameworks that are able to maximise effects for each of these dimensions is seldomly possible (think of intellectual property rights, think of data privacy, think of taxing trans-border e-commerce, et cetera). These inescapable conflicts lead to difficulties in creating narratives and policy that can be perceived as coherent, holistic and advantageous for the great diversity of actors oftentimes being affected. Hence, to develop digital imaginaries that are deemed desirable by state, commerce and citizens alike, and to craft policy frameworks that steer towards that shared imagination demands exceptionally sophisticated narratives. Seen this way, the narrative analysis very much supports the topicality of Lessig's perspective: Code understood as law requires intense processes of (e)valuation. This contribution was able to show the role narratives play in these processes.

The narratives employed in German politics are based to a considerable part on valuations of security and order while working under the assumption that more of both is generally beneficial for all entities using digital technology (except those with explicitly criminal motives). MPs thus often perceived themselves as negotiator between a

principle of *precautionary security*, achieved mainly by control-favouring regulation—the thought that people have to be saved from chaos and unruly spaces—and the idea of *precautionary freedom*, achieved by self-regulation of (online) cultures and architectures—the thought that useful regulations will to a much larger part grow organically.

I propose that the combination of the narratives that I described above lead to a kind of security-spiral that the MPs oftentimes feel obliged to keep running down in a perpetual pursuit of just enough order in a space—the digital—that they perceive as naturally chaotic. The ensuing narratives often convey an image of the Bundestag considering its role as that of the metaphorical person whose only tool is a hammer (here: laws calling for more control/order) and who is hence tempted to treat everything (here: various digital contexts) as if it were a nail.

The question now arises, what this means for political actors. Is politics doomed to be a negative sum game? I want to look at it differently. As I have mentioned before: The ordering of chaos, the desire to replace chance with strategies, and the trailing calls for both more freedom and security, are part of human history. To me, thus, there simply is no 'problem to be solved' definitely, at least not by politics. Lessig in his account, however, did somewhat criticise inconsequential or simplistic regulatory solutions offered by the (US American) government (Lessig, 1999, p.59). This concern may well be transferred to the German context, past and present.

4.2. Discussion: A call for new narratives

The 'solution' to me thus appears to be more of a change of thought rather than a specific action; politics may benefit from more refined and value-conscious debates around what is at stake at a given time and debate. Assumptions, values, and rationales underlying certain political decisions should thus always be precisely nameable by politicians and made transparent to publics on a conceptually richer level than it is at times, as seen in the examples; confounding digital and analogue environments, ideas of European sovereignty being achieved through a chip in ID cards, or that any digital endeavours by industrial companies will be 'null and void' without strong state regulation may be unpacked and scrutinised more. Because ultimately, it is both code and law that create digital realities together. Here I want to circle back to the works of Lessig and Jasanoff and Kim, and one of the things they repeatedly mention: that every seemingly technical decision is in the end one that is based on values, which get expressed via various narratives. One key takeaway that I had during my work on this contribution is that this part of the discussion is very often either cut short or left entirely implicit.

However, in politics, and particularly in liberal democracies, political work happens in a heavily contextualised environment and more often than not, long-acting measures are

more difficult to introduce to public discourses. Here, a dilemma of expectations appears. As the incorporation of digital technology has become and is still becoming more and more a standard in a manyfold of things, it is only logical that the state too is by many people expected to build up digital competences and enable more 'digitality'. It is not only that economical players craved security in the digital space, people, too, now expect the state to be digitally responsive. The already quoted former minister of the Interior Thomas de Maizière said that "People in Germany trust that they live in a safe country. They know that there is no such thing as absolute security. They demand and expect us to do what we can to protect them. This is just as true in normal life as it is on the internet" (Deutscher Bundestag, 2024, Federal Minister of the Interior Dr. Thomas de Maizière, 12 June 2015). MPs have made similar points numerously and I do think that this assumption is not very far-fetched, as the idea of Germany as a traditionally safe and secure country is a central figure of argumentation not only in parliamentary debates (see Hummelsheim-Doss, 2017).

Further problematising my own argumentation for more complex public debates to some extent, I am convinced the point can be made to urge MPs to revisit the conceptual 'code' they are running on without having to be pressed for that by external influence. Put differently, (lay) experts observing the discourse and the structures around digitalisation practices may be more careful in framing increased external engagement to be the one key solution for a more balanced governing of the digital. It shifts the discursive power to the actors currently central to the shaping of digital architectures and their decision to listen to other perspectives or not. While diverse engagement is undoubtedly useful, MPs and other decision makers may take more seriously the responsibility and power some positions come with by continually reflecting their underlying narratives and imaginaries.

Why is this important for this revisiting of Code? The debates Lessig sought to initiate continued over the past 25 years, and they largely did so in in ways Lessig expected (Lessig, 1999, p.205ff.), and it is well possible for them to continue in a similar manner. Those participating in these upcoming discourses should not aim to 'find a solution' but— as Lessig implied—enable open debates and transparently weigh different stakes and interests. Employing a more open-ended thought processes means for German politicians to increasingly allow narratives to be considered in law-making around digital innovation that do not align with traditional understandings of state, progress and orderliness. Openness to unusual narratives and ideas should not only be possible in times of public outcries or overt crises. It is only then that the code written that becomes 'law' in digital environments may reflect and balance out various needs and wants, societal, political and commercial.

It is in our hands—yet some hands more than others—to let another look back 25 years from now not be all too disillusioning by normalising more meaningful and reflective discourses as we keep 'muddling through' (Lindblom, 1959) our so-called digital age.

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