Guest editorial

Shifting spheres

1. Observing transformation

There is nothing unusual about shifting spheres. A shift denotes a variant of change – usually a constant, uninterrupted movement of a certain duration which amounts to a switch, and since everything changes and nothing does not – from rivers to bodies to societies – spheres are of course also affected, even if their determination is somewhat more difficult [1]. However, it can at least be said that a sphere is a space that can be distinguished from other spaces – just as well (or badly) as the state of the object affected by a shift can be distinguished from the state it was in before it shifted. For one thing should be clear: a shift can only be observed if it occurs on something – for example, on a sphere – that remains the same in all of its changes [2].

Each of these two terms plays the featuring role in a prominent social theory: "shift" to the theory of paradigm shift by Thomas Kuhn (2012), "sphere" to the theory of the public sphere by Jürgen Habermas (2018). Both books were published in the very same year, 1962, both feature the term 'structure' in their titles, and in both cases, we are not so much dealing with historians – as the species that devotes itself to the extensive and detailed study of historical sources – insomuch as with scientists who wanted to extract something from these sources. Kuhn was a physicist who 'shifted' (he does indeed use the exact word in his preface, p. xxxix) to the history of science in search of the nature of scientific change, and Habermas is a sociologist who was concerned with the elaboration of an epoch-specific concept, which required the "stylized highlighting of characteristic features from a much more complex social reality" (2018, p. 13, transl. M.H.). The similarity can be extended even further if one considers that the shift Kuhn describes takes place in a – kind of – sphere, namely, that of science. Habermas claims the title for the shifting public he is investigating – although unsurprisingly, as the English language always already concedes a spherical character to the concept of the public.

But their interest is not only in different objects undergoing change; they also draw very different conclusions from these investigations, and place the emphasis on different aspects. Kuhn asks about the structure of the shift, Habermas about the structure of what is shifting. (Of course, Habermas also talks about the structure of the shift and Kuhn about the structure of that within which the shift occurs. However, there is a clear difference in their preference, not least because Habermas already claims knowledge of the nature of change, whereas Kuhn aims to investigate it.) And while both present a discontinuity thesis – i.e. that of a clear break that separates a before from an after, however problematic such an assumption of a 'societas-facit-saltus' maybe –, they characterize this break in different ways. Kuhn speaks of scientific revolutions – i.e. upheavals (wherein worldviews are overthrown instead of kings) – while Habermas' narrative begins *after* the (French) revolution, and describes a social dynamic to which the public sphere is exposed, as it were, helplessly.

From Kuhn's perspective, science is a succession of tradition-bound, cumulative (continuous) periods punctuated by non-cumulative (discontinuous) ones, and he claims the wide applicability of this scheme: "Periodization in terms of evolutionary breaks in style, taste, and institutional structure have been among their (the historians, M.H.) standard tools" (2012, p. 207). His insight was, in short, that there is no context-independent evaluation of scientific progress. The context – or sphere – of science determines which claims are accepted as valid and which are not; science does not describe reality as it is, but

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as it appears from the perspective of a specific paradigm. Preliminary theories are thus no longer true (that is effectively what his theory of incommensurability argues); they become historical fossils [3].

It is possible that it was Kuhn who introduced "shift" to the social sciences in the first place, probably inspired by an already well-established 'shift use' in the natural sciences – the redshift in the spectrum of light for instance or the gravitational shift of Mossbauer radiation. The term, however, marks not so much the sudden, abrupt, non-cumulative change Kuhn is concerned with, but rather a cumulative one. This is why it makes most sense to reserve the concept for the critical transition phase before science starts to boil, so to say – when anomalies accumulate that the current problem-solving program, as a side-by-side (pará) of possible explanations (deíknymi), is no longer able to explain, until they finally exceed the critical level and one paradigm is replaced with a new one: the 'long time coming phase,' with Sam Cooke, that appears as a "growing sense [. . .] that an existing paradigm has ceased to function adequately" (p. 92f.), which is then followed by a crisis until the shift triggers a switch (a replacement of paradigms), and the change that has been a long time coming finally arrives. The duck-rabbit optical illusion, made famous by Wittgenstein, and considered by Kuhn "a useful elementary prototype for what occurs in full-scale paradigm shift" (p. 7) may therefore not the best of all examples to illustrate such a shift: you either see the duck or the rabbit; there is no shift from one to other. It is arguable, therefore, that the term shift is much more appropriate in the case of Habermas than in Kuhn's, who is concerned with the suddenness of a new view of the world, a moment of Ah hah! All of a sudden, scientists see "new and different things," even though they use the same old, same old instruments, as if the scientific community had been beamed to another planet (p. 111). Here, the reference to the switch in visual gestalt makes sense: "What were ducks in the scientist's world before the revolution are rabbits afterward" (p. 111f.). But the shift itself is a rather slow, continuous process. Enough followers of the old paradigm have to have died. It is not the whole system that tilts; they are not all beamed up at once – i.e. they do not all die at the same time but rather one after another until the new paradigm can finally be considered established (an interesting parallel to the phase transition of water from its fluid to its gaseous state btw, with molecules taking the place of scientists). However, unlike paradigm, shift is not a concept. Although the question of the concept's consistency is still up for debate, paradigm is at least a candidate for one, in the sense of a fundamental cognitive framework condition for individual scientific theories that allows them to see what they see.

Kuhn's originality lies in applying this standard historical tool to the history of science itself. Not only that, he encouraged scientists from other disciplines to use it as well. His postscript reads almost like a challenge that Habermas has met with his book: "I shall close by underscoring the need for similar, and above all, for comparative study of the corresponding communities in other fields" (p. 208). Indeed, Habermas's study too is oriented toward a certain community – only, he is not particularly interested in answering the question that Kuhn asks: "How does one elect and how is one elected to membership in a particular community, science or not?" (p. 208) The reason, as we will see, is to be found in his theory design, which conceptualizes the space his particular community gathers to be generally accessible, rendering the question of membership to be more or less irrelevant.

2. The structural transformation of the public sphere

Used in ancient times to describe the bowls orbiting the earth to which the planets, fixed stars, sun and moon were attached, Habermas uses the term "sphere" to mark an abstract social space for public discussion and opinion – in other words, a social milieu. The fact that he did not want to adopt this concept, which has been well-established in sociology at least since Durkheim (1988 pp. 44–56, pp. 245–260), is probably again related to his theoretical intentions. Understanding the public sphere, for instance, in Durkheim's sense as the coupling of outer position (connection of certain relationships: kinship, community or professional group) and inner habitus (the internalization of certain moral rules) would have prevented the possibility of transcending it and leaving these group limitations behind.

"The public itself presents itself as a sphere," he notes; "the private is opposed to a public area" (p. 55, transl. M.H.). Area and sphere are easily interchangeable here; the public presents itself as an area, the private is opposed to the public sphere. However, before we go on, it is important to note that the public certainly does not 'present itself' as anything. It is Habermas who ascribes to it this capacity for self-presentation. In fact, it is of course Habermas who presents it as a sphere to us in the first place.

What gives the metaphor the aura of a concept is the opposition of private/public. Presumably, the already existing determinative composition of the private sphere as a personal 'living environment' providing the possibility of retreat – which, in the Middle Ages was only possible for a few aristocrats and wealthy citizens, and depended not least on the possibility of a heatable living space, to which these early retreat rooms owe their name (Latin: *caminata*, German: Kemenate, in English interestingly: women's chamber) – led Habermas to counter this with its opposite. The *agora* – the marketplace – in Ancient Greece, where the citizens of the polis traded goods, met friends, conducted business deals, and debated about the concerns of the *polis*, lent a certain plausibility to this idea.

Already in his criticism of *Die Logik der Sozialwissenschaften*, Gotthard Günther (1979) had accused Habermas of vagueness and inaccuracy, especially with regard to the concept of action. The idea of a thing, he reproaches him with recourse to a Hegel quote, is by no means a concept. In the first article of this special issue, Peter Fuchs also denies 'sphere' any conceptual quality, quoting from Goethe's *Faust* at the end: "Denn eben wo Begriffe fehlen/ da stellt ein Wort zur rechten Zeit sich ein." (For at the point where concepts fail/At the right time a word is thrust in there.) What Fuchs does not mention is that it is Mephisto who speaks these words, to appease a student who is struggling to find adequate concepts. One must not torment oneself too anxiously, he assures him, even with a word, a system can be prepared. The renunciation of precise words (concepts) in favor of mere 'hosts' or metaphors like sphere would therefore be diabolical, an invitation to carelessness and in Mephisto's case: to highlight the futility of scientific endeavor.

It is quite possible that Hans Blumenberg (1960), who pointed out that metaphors are no less important for human thought and behavior than clear definitions, would have objected here. For Blumenberg, the wide field of mythical transformations that had found expression in a multiform metaphoric was of great importance; he considered this forefield of the concept more vivid, more sensitive to the inexpressible, less dominated by fixed forms of tradition. He was most interested in the so-called "necessary metaphors," which he called 'absolute.' To claim that status, they need to prove to be "resistant to the terminological demands" (1960, p. 11). Blumenberg names 'light,' Fuchs 'entanglement'; and in the view of the latter, 'system' also belongs in this category. Can 'sphere' claim the status of such a metaphor? From Fuchs's perspective: "Absolutely not," as it can be easily 'unraveled.' However, even if we consider it an unclear form of thinking that is in the forefront of concept formation but never went beyond it, and we agree upon that it obfuscates rather than clarifies, it certainly did have a stimulating effect both for research in social theory and social history as well as for research in literature and cultural studies. Apart from its seductive suggestive power, there is thus a generic element to it. Beyond the immediate point of illustration for which Habermas drew upon it, 'sphere' has influenced, if not dominated, the entire field of theorizing the public, and has thus been of paradigmatic importance. According to Blumenberg, this sufficiently qualifies for the status of absolute metaphor. And if what a metaphor provides is a vivid image of an object that fundamentally defies any illustration – in our case, the public – then 'sphere' could lay claim to this title anyway.

So much for the concept. Let us now take a closer look at how Habermas models the transformation of this sphere. His "master narrative of the emergence of modern civil society" (J. Whaley) places its emergence during the transition phase from a traditional, courtly society to a modern, civil (or bourgeois) society and attributes it with a historically novel characteristic: it was the first public sphere in the long history of different public spheres that enabled citizens to influence the affairs of the state; it is 'authentic' in exactly this sense. Habermas illustrates his point with reference to the character of salons and literary societies, as well as coffeehouses. Such institutions, he says, demonstrated the potential for differences of class and wealth to be suspended for the purposes of open critical discussion; as socially permeable forums of communication, they were able to mediate between the two domains. Eventually, leaving the salons and coffeehouses behind, no longer dependent on particular spaces for its realization, the public sphere became an institution of its own.

As Emily Erikson points out in her contribution to this issue, which examines the possibilities of a non-spatial sphere concept: "that the public is an open space is perhaps its most defining feature in contemporary life." This is also what the classical legal discourse provides for: exclusion of control over access. To take this characteristic away from it would lead the concept of the public ad absurdum. (Whereby the renunciation of access control is of course only a partial aspect of what we consider as the public because this also applies to public parks or public transport, etc.) This is why Habermas' elaboration of the epoch-specific public sphere, which he understands to be the role model for all public spheres to follow, provides for precisely this openness; and even though the spaces in question were indeed more open than before because differences in rank played a lesser role, access to these spheres was initially only granted to aristocrats and citizens – very few of whom were women, even if, as we will see, they played a very special role.

It is precisely here that he had to accept probably the greatest criticism. As Nancy Fraser compellingly counters, "This network of clubs and associations – philanthropic, civic, professional and cultural – was anything but accessible to everyone. On the contrary, it was the arena, the training ground and eventually the power base of a stratum of bourgeois men who were coming to see themselves as a 'universal class' and preparing their fitness to govern." (Fraser, 1990, p. 114) Others are even more vehement in their assessment: "Not only does Habermas ignore the ways in which this sphere was founded on the exclusion of women, who were confined to the private, he does this while acknowledging other exclusionary aspects of the bourgeois public sphere [. . .] he appears to be *selectively* blind of gender subordination" (Allen, 2012, p. 822, italics in the original). The reduction to gender issues, however, falls short of the mark. The public arena of supposedly free and open discourse restricted participation also according to class and, at times, ethnicity; in it, "some voices were legitimate – and legitimated – while others were constrained" (Gitelman, 2006, p. 13). To use two expressions that are common today, one could speak of an 'echo chamber', in which certain themes and a certain conversation habitus reverberated – or, in appreciation of Habermas's sphere metaphor, of a 'filter bubble,' which was equally permeable to the views of aristocrats and citizens, but reliably filtered out everything that did not meet their norm of rationality (from Fraser's perspective: alternative publics). By giving this filter bubble of the new bourgeois elite a representative function for the entire population, Habermas wilfully neglected the fact that it was still part of the stratified order, legitimizing the spirits of a top-down rationality that still haunt society today.

On the other hand, the recourse to the ancient concept of the 'sphere' makes sense here; the harmony of the spheres becomes the harmony of the one sphere, except in this case, the unique sound of consensus we hear does not come from any physical movements, but rather from the debates that orbit around the center of normative rationality. What reflects the tenor of this sound – which this time is physically perceptible to the human ear – is not the quality of life on Earth, but rather the quality of governance. Yes, there were other public spheres before – for example, a short-lived, representative one and a Plebeian counter sphere during the French Revolution (see Michael Hofmann's contribution in the interview with Lehmann and Volkmer in this issue) – but none of those lived up to the public sphere's potential. As should come as no surprise from a member of the Frankfurt school, parallels with Hegel's concept of history – according to which history is the process whereby the spirit discovers itself and its own concept – are evident.

Whether this sphere was indeed something constitutively new is a question still up for debate. From Luhmann's point of view, it was indeed. Although he does not speak of a public sphere, but rather of public opinion, he agrees that something new had taken place there: public opinion emancipated itself from the admission to interaction regulated by stratification as its gatekeeper. The new distinction between public/private re-entered itself: public was formed as a public by privates, and the privates were thought of as citizens who could distinguish between private and public. Luhmann comments, "Thus the 'bourgeois society' was able to establish itself as a society of cylinders and chamber pots" (2002, p. 279, transl. M.H.) – with the cylinders as the decisive authorities that represented the will of the people by exercising the divine right of reason, even if the pots were indisputably just as important, if not more so.

Habermas also takes a look at the history of ideas on the public from Hobbes to Kant to Hegel to Marx to John Stuart Mill to Tocqueville up to that point in the 18th century when the self-understanding of the critical function of the bourgeois public sphere finally emerged [4]. It is at a strategically wise point in his presentation: shortly after he had described and appreciated the emergence and apparent triumph of the bourgeois public sphere and shortly before this sphere falls victim to Comte's (1923, p. 6) fateful tendencies of dissolution. The reader is asked to pause for a moment of philosophical contemplation. Here Habermas also anticipates – at the level of theory – what will occupy him for the rest of the book: the sphere's fall. What is more, he also addresses – and defends – what his critics will later accuse him of: the ideological character of this sphere. Did not Mill also advocate that the people should be represented by persons of character and talent to stop the tyranny of public opinion (2018, p. 218)? And Tocqueville took it even further, hinting at the origins of the 'deep state' (p. 221).

Only then does Habermas turn to the portrayal of the 'structural transformation' that gave the book its title, which, in its scientific sobriety, hardly does justice to the event. What was affected by this transformation was the very nature of this sphere: its ability to "substantially change the execution of violence and domination as a negative constant of history" (p. 359, transl. M.H.) via the principle of critical publicity. Unfortunately, the "substantial change" concerned the sphere, and not that constant; and the reason for that was what Habermas calls the 'dialectic of a socialization of the state' (p. 226), as a consequence of which its basis – the separation of state and society – was finally destroyed. The new social sphere that emerged subsequently was a different one; public and private, cylinders and chamber pots, could no longer be easily distinguished. The public sphere, not having succeeded in establishing itself, fell apart. The rest of his book is dedicated to the conditions of this disintegration in all its gruesome detail.

Habermas makes sure to provide the corresponding height of fall, and by doing that, applies a literary principle to history: the public sphere can only fall so low because the poet first and foremost elevated it. It almost feels as if he adhered to the drama-poetic principle of Aristotle or rather to its revival from the 16th-century onwards: the theatrical norm of the

French Classical period (the *Doctrine classique*), which made a distinction between aristocratic and non-aristocratic protagonists. The aristocrats in particular – kings first and foremost – were suitable as protagonists because their degree of elevation above the rest of humanity ("degré d'élévation") gave their fall greater effect in the course of the plot. For Batteux (2010, p. 54), "the touching events" in "mediocre circumstances" were too ordinary for the audience to attract attention. In quite a remarkable structural transformation of a literary principle, Habermas succeeds in giving this role to the rising public sphere instead.

One possible way of telling the story of this institution is this: "Once upon a time in the expanding capitalist society of the 18th century, entrepreneurs had become powerful enough to achieve autonomy from state and church. They demanded wider and more effective political representation, which lead to political reforms and a greater freedom of the press. At the same time, the wider availability of printing facilities allowed for the reduction in production costs, so that more and more people could afford to buy newspapers and access information. The result was the emergence of the 'bourgeois public sphere,' an arena independent both of government and business interests, dedicated to rational debate, 'accessible and open to inspection by the citizenry.' However, the public sphere did not live happily ever after. Capitalism expanded, commercial interests became again prominent in politics but also in the mass media system, where media corporations – instead of just informing the masses – began to appeal to the widest possible variety of audiences to generate maximum advertising revenue. From then on, the public sphere only led a miserable shadow existence."

Its story is, therefore, by literary standards, a tragedy – and a modern one that cancels out its own beginning and closes the circle, too, as precisely those forces that ultimately make the formation of it possible also bring it down. If one subtracts out all the details, it was capitalism that both created the public sphere and, after a short period of time – in which it blossomed and produced a beautiful landscape of rationality, dialogue and participation – destroyed it. Capitalism gave life and then took it, turning coffeehouses into *Starbucks* stores and critical publicity into public relations. It could well be that it was this narrative that contributed considerably to the success of the book, which turned out to be a bestseller (see Michael Hofmann in this issue). It assumes the short-term, temporary blossoming reality of an ideal – a kind of *kairos* of the public sphere – and it sometimes feels as if Habermas addresses it like Goethe had addressed the fleeting moment: "Stay awhile, you are so beautiful!" (Verweile doch, du bist so schön!) However, as Goethe's contemporary William Blake knew: "He who binds to himself a joy/ Does the winged life destroy." The important thing is to kiss the joy as it flies (Blake, 1988, p. 470).

To what extent the formation and transformation of the public sphere described by Habermas represents an inadmissible exaggeration is an admissible question; I have tried to already answer it here and there *en passant* in a rather ironic way. However, did Habermas also subject his very concept to a structural transformation of its own, or at least adapt it to new situations? The heuristics developed by Heiner Schultz for the purposes of conceptual historiography may be helpful here. It distinguishes four possible forms (i.e. ideal types of change or constancy):

(1) reality and concept remain constant;
(2) both change simultaneously (either harmoniously or they drift apart);
(3) concepts change but reality does not (it is simply conceived differently); and
(4) reality changes, the concept remains the same (Koselleck, 2010, p. 88ff).

In the case of the public sphere, the fourth variation seems most likely to apply: The concept has more or less remained the same.

Although the later writings are only partially successful in their attempt to redress some of the main conceptual difficulties that emerge in this early account, Habermas did put the idea of a uniformly encompassing public space into perspective (1992). He for instance admits that if he would have worked from the beginning with a concept of competing publics instead of an over-stylization of the one bourgeois public, a very different picture would indeed emerge. However, he adds, almost a little defiantly, differentiations within the bourgeois public are very well possible even with his original model (2018, p. 15). He also readily admits that he has excluded from his book the case of the exclusion of certain groups whose role is constitutive for the formation of the public sphere; and the milder case of exclusion – disregarding other subcultural or class-specific public spheres competing with the hegemonic bourgeois public sphere – he mentions in the preface, but does not deal with in the book either. What he has revised is the presentation of the shift, which he initially located in a Hegelian-Marxism framework that allowed him to contrast state and society; he also later distanced himself from his commitment to the legal dogmatics of Wolfgang Abendroth – to whom, as his dedication shows, he was intellectually and personally indebted (2018, p. 5, 27) – thus paying tribute to the fact of functional differentiation; legal-administrative interventions, he acknowledges, have pathological effects and diminish the performance of social systems. Last but not least, he also gives a greater role to the audience – the legendary passive consumers (pop music listeners) of critical theory (p. 29 f.), obviously inspired by Stuart Hall's (1980) intervention. It should be also noted that he partially anticipates the engineering of consent that digitalization makes possible today, the matter of which will be addressed further at the end of this introduction. If the internet gurus of the 1980s and 1990s had taken his analysis of a "vermachtete Öffentlichkeit" (power-dominated public) into account, we may have been spared the naïve hopes of the net as the realization of a (yet another) public space free of power interests. We will later see that it is above all the emerging network society that will put his concept to the test.

It would therefore be an exaggeration to say that his concept of the public sphere has no history. We can still state with Nancy Fraser that he "resituated, but never abandoned" (Fraser, 1990, p. 56) it. In his own words: "Nevertheless, I still adhere to the intention that has guided the investigation as a whole" (2018, p. 33, transl. M.H.). In other words, reality changes, but the concept of the sphere remains stable – something that Koselleck also assumes of the conceptual world of Marxist philosophy of history (2010, p. 89). Do we find in Habermas the same discrepancy between a changing reality and a rigid conceptual world as in Marxism? Inasmuch as he is concerned with recommending a certain type of sphere, certainly. Although he knows different variants of it, he sees its potential only fully realized in the 'authentic' bourgeois public sphere around which his study is centered. It is the lost promise of its critical potential he wants to recover – even if in the concluding sentence of his self-assessment, he himself rates his study 'defiant' and 'merely postulating' (p. 50) [5]. Remarkable, however, is one detail that nearly goes unnoticed in a first perusal of his self-critique of 1990: the concept of sphere no longer occurs in connection with that of the public (he mentions Hegel and his "sphere of morality" instead, p. 36). It has disappeared.

This 'faithfulness to the concept' derives from its normative character: Habermas has faith in the possibility of a realization of a specific ideal. For him, democracy is only legitimate and in continuity with the principles of the liberal constitutional state if it accepts the imperative of a politically functioning public sphere. It is this will to believe, as William James (1960) described it, as a commitment to a norm of the public that gratifies his commitment. It 'pays off' through this very obligation and does not depend on the norm being implemented, but rather the opposite, as norms are a matter of counter-factual expectations. The concept of the public sphere as a critical institution committed to the value of consensus – which, again, is supposed to be achieved through a rational public debate on topics of mutual interest – institutionalizes in this sense first and foremost expectations. While the history of the sphere – its triumphant rise and tragic fall – may also have contributed to the book's success, the success of the concept itself is more likely to be due to the fact that it expects support ("A healthy democracy has to have such an organized sphere at its disposal.") and receives that support because, as Fraser writes, the concept is of political and theoretical importance for "those of us who remain committed to theorizing the limits of democracy in late capitalist societies" (Fraser, 1990, p. 56) – i.e. those who put their intellectual labor toward the service of a socially defined goal (for Fraser, socialist democracy, and for Habermas, radical democracy). While his generalization is indeed historically grounded (as Geoffrey Eley has again pointed out, with Habermas proudly quoting him, 2018, p. 13), it remains, for this reason, a risky endeavor, as Habermas himself contends – not so much because his study is empirically deficient, but rather because he undertakes this extraction (abstraction) with recourse to a normative design that safeguards it in advance against disappointment [6].

In *Kritik und Krise* (Critique and Crisis), Reinhart Koselleck (1956) tells a similar story, albeit from a completely different perspective. In the Age of Enlightenment, his version goes, a critical public was established in the private sphere. In this space excluded from politics, a bourgeois public emerged that put the absolutist state on trial and finally destroyed it [7]. So far, so similar. Habermas – one of its first reviewers (1960) – reworks this narrative:

> [. . .] using most of its building blocks: the concept of the absolutist state, the idea of the absolutist state, the idea of moral criticism as the primary weapon against the state, the dichotomy of private and public, and the understanding of the Enlightenment project as a fundamental critique of authoritarian structures (Hohendahl, 1995, p. 31).

However, Koselleck's aim was not to provide this new elite with a constructive character; by proving that this new class of merchants, bankers and businessmen believed themselves to be morally above all doubt, he considered their supposedly non-partisan, universalistic claims to lie at the heart of the problem – the crisis he observes in his book. Unlike Habermas, Koselleck uses the analysis of classical philosophical texts to demonstrate how the seemingly apolitical utopias of the bourgeois cultivated and consolidated their power. For him, the general public created by publicity was not only not inclusive, but also accompanied by a constitutive exclusion of private interests which could not be conclusively justified. Because exclusion always allows for the possibility that other interests may rise up against a proclaimed generality, the unity of the public (sphere) was permanently threatened by disintegration [8]. Koselleck considers the crisis of democratic politics to be a result of this design, which is due to a blind "rule of utopia." It retains the sovereignty crisis of absolutism from which democracy emerged and the reason is reason, i.e. a self-understanding that denies the sovereign character of its own rule and declares it to be the rule of reason – transfiguring it as rule-free rule. Especially in view of the current situation, one can hardly deny his thesis a certain plausibility; indeed, it seems that it is these highly moral utopias created by the bourgeois elite that we are still struggling with today – even if only because they are responsible for the brutal hang-over that the liberal ideal, in its frenzy of freedom and progress, has given us. To borrow a phrase from Adorno, who had already warned in the 1950s of the "bourgeois revenant" that then took on such elegant shape in Habermas's work: "The bourgeois live on like ominous ghosts." (2001, p. 48).

Habermas's theory of the public sphere inverts Koselleck's central message by conceptualizing the public as a political, constructive element, countering the cultural-critical, pessimistic, sometimes apocalyptic story with a positively colored, hopeful one that emphasizes its democracy-promoting character. Even more, it gave the bourgeois elite back the 'salvation orientation' along with the righteousness that Koselleck had taken away. One could say, therefore, that Habermas contrasted Koselleck's "pathogenesis" (subtitle) with an 'physiogenesis' of the bourgeois world. What he saw misleadingly discredited by Koselleck as "civil war," he himself described as a principle of public discussion. In his view, for all his other scientific accuracy, Koselleck had simply 'misunderstood' the century.

Concretizing the abstraction undertaken by Habermas, Koselleck (2010) in a later work subjected the semantics of the three bourgeois worlds of Germany, England and France to a cohort comparison between 1700 and 1890. He agrees with Habermas on a few key points:

- that all groups forming in these three countries sought to constitute themselves as a "self-confident unit of action" (p. 437) – as a sphere, so to say –:
- that this was accompanied by a world of concepts (semantics) that made economic relations and political objectives the starting points for this group formation; and
- that the state recognized this newly emerging intellectual elite that dared to criticize its actions – even if only indirectly at first – as a threat, forcing them underground.

He nevertheless points out that in Germany, for example, this emerging group did not define itself as a subject of class conflicts, but rather as a mediator; people were proud of their own achievements, he argues, "and of the moderating influence on society as a whole" (p. 433). In France, on the other hand, the concept of the citizen marked a claim to leadership or served to defend a *de facto* leadership role. Above all, however, these larger units of action (i.e. spheres) in which citizens of different origins joined together, but without directly striving for a classless society, only emerged for Koselleck at the moment when Habermas saw them demolished (p. 437). For Koselleck, the liberation from "utopian excessive demands" was their essential constitutive moment; for Habermas, it was their dedication to them.

3. Organizing the public sphere

In 1974 Habermas wrote an 'addendum' to his book in the course of an English summary, in which he addresses the status of the transformed public sphere in the welfare state in greater detail. (It is this text that is used in most seminars today, simply because it is shorter and, in some ways, more readable, thanks to the collaboration with Sara and Frank Lennox). The textual change from the metaphor of the sphere to that of the 'public body' here is striking. In the 20th century, he summarizes the final chapters of his book, the *public body* expanded beyond the bounds of the bourgeoisie because of the diffusion of press and propaganda (1974, p. 54). The *public body* lost both its exclusivity and coherence that the social institutions had granted it. As a result, the *public body* in Western democracies – i.e. in the social welfare state – became a *field*.

Note the conceptual transformations: a sphere (being a body) became a field – a field for the competition of interests, "competitions which assume the form of violent conflict" (1974, p. 54). Habermas lists, in chronologically correct order, three different metaphors important for the history of science: first the spheres of antiquity, then the *corpus* metaphor (which saw politics as the head or soul of society) [9], and finally, the field metaphor (as a space-filling property that Faraday had introduced to the natural sciences with regard to magnetic effects). They all make equal sense. The body metaphor for instance has established itself in law (in German: 'Organ') as a term that denotes several legal persons authorized to act as a single representative entity, which is exactly how Habermas would like the sphere to be understood; and when this entity consists of a large company or group of companies, we talk of a 'corporation' (German: Körperschaft). The suggestive power of the field metaphor is also indisputable, giving us a vivid impression of various social lines of force (in the form of interests) that together make up such a field, even if it remains unclear what kind of magnet is supposed to generate it (capitalism, I guess). However, one thing is clear: unlike the public sphere or the public body, a social field does not exert direct forces [10]. Within this field, laws can no longer originate from the consensus of private individuals, since a ‘refeudalization’ of the public sphere has taken place: “large organizations strive for political compromises with the state and with each other, excluding the public sphere whenever possible” (1974, p. 54). They still need some kind of “plebiscitary support” from the mass of the population through what Habermas calls demonstrative publicity (“demonstrative Publizität”).

Another word deserves attention here: the “substance” of the public sphere, he says, is being undermined (p. 55). Another “matter-phor,” this time to denote the special physical properties of a particular material (sphere, body, field), which has passed into our everyday usage as an adjective, where it usually emphasizes an important property of the object in question (“essential” sometimes takes its place). Nevertheless, it is worth taking a closer look at this detail. Going back to Aristotle, who contrasts it with the ‘accident’ as a deviation that cannot harm it, Habermas seems to use it here in a very similar way, suggesting the timeless, identity principle of critical publicity which guarantees the constancy of its ‘form of being.’ Such an Aristotelian substance can be undermined – its critical function be ‘weakened’ – but not itself contaminated or polluted. Meaning: None of the changes harm the sphere’s true being, or ‘nature.’ [11] And although the Latin term *accidens* does not signify a mistake, but merely something random, it seems that Habermas also actually sees the transformation of the sphere as an accident in the everyday sense of the word: an unplanned event that has inconvenient or undesirable consequences. From an evolutionary point of view, however, the picture is exactly the opposite: it is the accidents that create the different ‘forms of being’ of the public sphere. They make it what it is – i.e. as what it appears to be.

It is the recourse to a kind of sphere-self that grows out of the uncertain ground of linguistics “ to be able to save at least a normative concept of rationality from the disaster of the transcendental subject” (Luhmann, 1994, p. 56, transl. M.H.) that allows for distinguishing between good and bad forms: those that correspond to the true nature of the public sphere and those that corrupt (undermine) but fortunately cannot contaminate it. The norm scheme used here is that of conforming/deviating, and unfortunately, the ‘next public sphere’ deviates [12]. From Habermas’s perspective, a distinction can be made between the corrupt and the perfect variant of the public sphere (an echo of Horkheimer’s distinction between true and corrupted reason, as a kind of “eclipse of the public sphere”). His theory provides that it is not he, the theorist, but rather communication itself that suggests a certain variation to be valid. It appears as an ethics reinsured in linguistics, and the transition to a functionally differentiated society – the “full realization of modern society” (Luhmann, 1994, p. 42) – deprives it of its basis [13].

Making things public now only serves policies of special interests; it is about winning prestige for people and affairs, which is an instrumentalization Habermas rejects. But back in 1974, there was still hope. Because of the social welfare state that extended the idea of making information accessible not only to state organs but to all organizations dealing with it, the defunct public body had the potential to be restored by organized private individuals; “Only these organized individuals could participate effectively in the process of public communication [. . .]” (p. 55) to use, for instance, the channels of the public sphere existing within parties. Only a rational reorganization by private individuals – by rival organizations committed to the public sphere – would be able to slam the brakes on the train toward disintegration.

At the beginning of the 21st century, Habermas still tries to convince the public of the urgency of this task, as many media organizations affected by the process of digitization had begun to crumble. In an article provided by a major German newspaper (the *Süddeutsche Zeitung*), Habermas reminded the state of its duty to protect such media houses. Leaving the media to itself would be too dangerous: "no democracy can afford a market failure in this sector" (Habermas, 2011, transl. M.H.). Today, the *SZ* charges its readers a fee in exchange for the information that would allow them to fulfil Habermas's role of active citizen. According to him, the market can only serve this function as the stage upon which subversive ideas can emancipate themselves from state oppression as long as economic laws do not penetrate into the 'pores' of the cultural and political content distributed through it – a condition that seems to have long been met.

4. Luhmann's transformation alternative

The alternative to Habermas's attempt was presented in 1980 by Niklas Luhmann in a chapter of the first volume of *Gesellschaftsstruktur und Semantik* (Social Structure and Semantics), an individual study which openly reveals itself as an answer to Habermas. It too bears "transformation" in its title, and it makes decisive references to central assumptions of his concept of the public sphere, implicitly denying it – almost as if Luhmann were replying, "Let me show you how it is done." Like Habermas, he locates the phenomenon to be examined in the transition from one social order to the next. However, he speaks of a stratifying social order instead of an aristocratic one, replaces the normative concept of 'civil society' with a colder and more comprehensive one which focuses on functions, as well as the blurred concept of a sphere with that of interaction – which he understands as one of the three system types of the social, alongside organization and the 'large' functional areas or systems (politics, economy, law, science, mass media, etc., cf. Luhmann, 1984).

Both agree that something changed. Both tell the story of that change. And just like Habermas, Luhmann is concerned with the changes in a certain sphere that can be historically determined at the border of this social transition. But he does not understand this sphere as a unit capable of action, able to help democracy achieve its true purpose. The shift that interests him is a semantic one that took place in the milieu of the upper classes and had its origins in the secularization of the aristocrats. He thus turns to the second point Koselleck (2010) was interested in: in how far semantics acted as a starting point for these new "self-confident units of action." Threatened by social change, the aristocrats – both in Habermas's and Luhmann's story – had detached themselves from the court of the monarch, his sphere, and moved to the cities; one could rightfully call them "citizens," too. However, the salons were not their natural environment; therefore, it was not only a matter of the changes in behavior appropriate to that class but also of their experience of this behavioral change. Of course, the same was also true for the citizen-businessmen (the bourgeoisie), who owed their rise to the upper strata of society not to *courtesy*, but to their profits. Both classes entered into a kind of (un)holy alliance. For Luhmann, their interactions and semantics functioned as a seismograph that registered the structural transformation from the stratified to the functionally differentiated order – the decaying, courtly and the new, rising bourgeois society (1980, p. 84).

At first the salons, as Habermas also points out, still had a courtly character. The bourgeois avant-gardists learned to debate in public from the nobility, who – trained by court life – set certain standards of elegance. Here, however, it was no longer necessary to win the favor of the prince; it was all about winning the favor of the host. Origin and wealth were replaced by acquired qualities that could compete with those bestowed by birth. Luhmann points to the role of women, to whom he attributes a catalytic function in the course of this transformation process: “Women are included [. . .] in a leading role. They determine the access to their circle of contacts, which in turn mediates further contacts.” (1980, p. 99, transl. M.H.) One of the best-known catalysts is Anne Louise Germaine de Staël-Holstein, commonly known as Madame de Staël, in whom many see a precursor of contemporary feminism. “The semantics which brings together reason, measure and passion,” says Luhmann, “is the result of the factor woman” (1980, p. 99, transl. M.H.). Habermas also assigns an important role to women, but only in a half-sentence, which reports their absence from the coffee houses, “while the salon style, as the rococo period in general, was dominated by women” (Habermas, 2018, p. 93, transl. M.H.).

The gender issue aside, the “parity” that took place here was independent of status. Citizens and nobles appeared both as ‘mere’ humans, adds Habermas (2018, p. 97). Among equals, as we all know, one can communicate not only more easily but also more effectively. Luhmann confirms the ‘parity’ observed by Habermas in the receding emphasis on difference in rank, although he is more cautious when it comes to questions of accessibility: “the salons of the 18th century adjust their interaction to equality of all participants and filter only at admission” (Luhmann, 1980, p. 135). What religion loses in directional value for interaction, art wins.

This new milieu is structured, but it cannot act. From Luhmann’s perspective, the public sphere of Jürgen Habermas appears as an attempt to extend the characteristics of the interaction situations taking place here to society. While he agrees that these interactions do reformulate what society should be like, he disagrees with Habermas about projecting that interaction back onto it and taking the social rationality possible here as the yardstick by which social conditions appear to be deficient (1980, p. 129). From this perspective, what Habermas describes appears as a moment of transformation of social differentiation during which upper-class communication – as integration mode of the stratified society – loses its function. In the course of this change, a new ethic of interaction establishes itself: a socialization moral that – combining virtue and happiness – can be observed as a correlate of this loss (1980, p. 84). The hope was that debates would happen rationally, as any opinions from outside – by authority or tradition – no longer applied. Only what is discussed in public is now valid (Luhmann, 2002, p. 279). Indeed, Luhmann says, as rankings can no longer regulate communication, a ‘rational model’ for a new society is created here.

The strands of their two narratives can be connected without much effort at this point, even if they emphasize different features. While Luhmann points at the replacement of class attributes by ‘compensators’ such as tact and conflict avoidance, only to add at the same moment that these are all bound to the behavioral possibilities of an upper class (1980, p. 136), Habermas stresses that this process amounts to a “tactfulness of equality.” [14] But this new social type of conversation needs to be filled up semantically (p. 104). It is achieved through a combination of rules, aimed at fine-tuning behavior, and the knowledge that rules do not matter in the end, a compromise that favors spontaneity, the “justesse de l’esprit” (the right to be wealthy in wit). It is this transformation Luhmann is interested in.

Not surprisingly, Habermas does not give the literary public – the active consumers, so to speak – a decisive role, as it is not, he notes, an “autochthonous bourgeois” (2018, p. 88f.) public yet. It almost sounds like an accusation when he writes that it preserves a “certain continuity to the representative public of the princely court” (p. 89). The aristocrats, it seems, stand in the way of the purity of the bourgeois sphere. What is most important to him is that social conversation finally becomes public criticism. And this, he states, is what eventually happens. The reasoning consumers act for Habermas as pacemakers for the bourgeois public sphere, as “only the categories gained from the self-understanding of the literary public allow the political public to turn the principle of publicity against the established authorities” (2018, p. 121).

However, as long as the criticism is 'only' literary, it cannot fulfill the political function and thus do justice to the role Habermas intends for it. It *must* therefore be 'transformed': "the political task of the bourgeois public is the regulation of the civil society (in contrast to the *res publica*)" (1980, p. 116f.). It should defy the established monarchical authority – not the bad writers, composers, conductors, actors. It has to be a confrontation with one's own government – exactly what the Greek model of the public sphere lacks – not with works of art. His will may be done, at least in his book: "Thus the reasoning that ignites in works of art and literature soon extends to economic and political disputes [. . .]" (2018, p. 93).

Luhman agrees to the extent that criticism, which used to be only an application of morality, is now also aimed at society. Having initially taken literature as a starting point to procure idealizations and prototypes for its semantics, the upper-class interaction now switches to the self-value of sociality. However, a clear awareness or even a theory about the structural reorganization of society is not possible here either. Even more so, when the transformation of interaction morality is finally completed – a transformation process that, according to Luhmann, lasted a good hundred years – the upper classes suddenly realizes that they lack the terminology to discuss the urgent problems of the early 19th century: problems of world trade, impoverishment and political control.

A description of the Viennese coffeehouses by Stefan Zweig (2017) can help us understand the specific quality – and also the political limitations – of the literary public better. Zweig describes and even praises – not unlike Habermas – the coffeehouse as an "institution of a special kind" (2017, p. 57), as an "educational institution for everything new" also characterized by inclusion: "it is actually a kind of democratic club, accessible to everyone for a cheap cup of coffee, where every guest can sit for a little money, discuss, write, play cards, receive his mail and, above all, consume an unlimited number of newspapers and magazines [. . .] In this way, we knew everything that was going on in the world first hand, we learned about every book that was published, every performance, wherever it took place, and we compared the reviews in all the newspapers [. . .] " (2017, p. 57, transl. M.H.) The relationship between the newspapers and magazines – i.e. the early forms of mass media – and the life world of these clubs becomes clear: the interactions taking place there access the knowledge that the media make available, thus ensuring the imputability and reflexivity of knowledge for this 'sphere' and for other interaction systems of this kind – "the knowledge of the knowledge of others" (Luhmann, 2018, p. 892). Luhmann, too, understands this safeguarding as an "equivalent of institution-building" (p. 892), and he points out that normative permanent attitudes or institutions also run via functioning assumptions. There is, he says, "a lot of fiction" in these interactive communications (p. 893) – "operative fictions "that assume familiarity or a certain thematic relevance –, but they must be taken as reality [15].

The key feature of this special institution, agrees Zweig with Luhmann, was the fact that it operated in the realm of the "only currently relevant" (p. 892). Even where no 'common ground of the past' could be assumed, it was able to ensure an "institutionally analogous preparation of interactive communication" (p. 892f.). For the continuation of interaction, no reflection on "unity, sense and purpose" is needed (which is what Habermas demands from the public sphere, 2018, p. 177); a commonality of knowledge, a 'Bescheidwissen' (know-it-all) is enough. This is exactly what the 'collective of interests' that met in the coffeehouses had to secure: "What one person overlooked, the other noticed for him, and since we wanted to outdo each other childishly and ostentatiously with an almost sporting ambition in our knowledge of the latest and most recent, we actually found ourselves in a kind of constant jealousy of sensations [. . .] because not knowing something foreign that someone else knew was degrading to us" (Zweig, 2017, p. 58). The meanings that characterize interaction are, according to Luhmann, those that symbolize this “complementarity of expectation”: betting, fighting, exchanging knowledge. Zweig speaks of a collective “greedily surpassing curiosity” (2017, p. 58) that was “enthusiastic about enthusiasm” and about discussing public (i.e. published) matters: “whoever has been public, whether as an actor or conductor, who has published a book or written in a newspaper” (p. 59). Without the mass media, which guaranteed this production and renewal of common topicality, this critical publicity would not have been possible. And it certainly would not have been possible, as Habermas points out, without the concert halls and theatres, either. Once court and residence theatres are open to the ‘mob,’ a new audience is created from among the lower classes. As long as music and theatre remained bound to the functions of a representative public – and music, in particular, was primarily a background soundtrack for princely splendor, the glorification of lords and princes – the public could not fulfill this function. A double movement thus created the consumer: music became both a commodity (you pay for it) and free or ‘absolute’ (it serves only itself, no external purpose). The other arts follow suit. Art competence is no longer the privilege of the high estates; the discussion of art “becomes the medium of its appropriation” (Habermas, 2018, p. 103).

Unlike Habermas, however, Zweig does not idealize these interactions of an intellectual elite, but rather draws attention to “mutual imitation,” the “sporting desire to outdo one another” and the “childish vanity to feel arrogantly elevated above the banal environment of relatives and teachers through preoccupation with art” (2017, p. 60). Someone who understands this sphere as a zone of ideal interaction that rises above the banausian environment, as it were, can of course not grant it these qualities. Zweig also directs the attention to a decisive characteristic of these interactions: the pressure of time. This pressure (understood in a nonpejorative sense) was regarded by Talcott Parsons (1963, p. 42) as one of the most important mechanisms of interaction. In such a system, one is more than elsewhere under the compulsion to act. In the presence of others, “dozing off without action” (Luhmann, 2018, p. 174, transl. M.H.) is not possible. This has consequences for social theory. In the precursor of his grand meta-narrative *Theory of Society*, Luhmann once again – one might suspect addressing Habermas – puts his considerations of the concept of the public sphere in a nutshell: “In the postulate of the public, the compulsion to act from elementary face-to-face interactions and the specific responsibility for them is transferred to the social system with a deliberate blurring of the difference between these levels of system formation” (2018, p. 175, transl. M.H.). While interactions are public by definition, society cannot be. It is this reflexive social attunement that constitutes them, and rarely a value like ‘rationality.’ This is exactly why, from Luhmann’s perspective, interaction systems are not suitable for the task Habermas has in mind for them – simply because the resources of these systems of physical co-presence are limited (2002, p. 285). Habermas’s public sphere concept – I am paraphrasing Luhmann here, who does not address it directly – “is thus borne by the illusion that the problems of the social system can be solved at the level of interaction, and the dependence on social classes is hidden in the conditions of rationality” (1980, p. 136).

As if to confirm Habermas’s doubts about the literary public, Zweig stresses the apolitical nature of the coffeehouse interactions: “however, fascinated by art (that one aspect of life), we did not realize that these transformations in the aesthetic space were only oscillations and harbingers of much more far-reaching changes that would shake and eventually destroy the world of our fathers . . . the world of security [. . .] however we young people [. . .] looked only at books and pictures. We had not the slightest interest in political and social problems” (pp. 79, 85, transl. M.H.).

Can the public imagined by Habermas be understood as a reaction to the increasing differentiation of interaction and society? (1980, p. 126) Luhmann observes the double tendency of:

- a demarcation from functions of society as a whole; and
- an increase in interactive 'sociality' (p. 126).

A separation here, a condensation or internal differentiation there. Two necessarily interrelated tendencies that will become apparent time and time again in the course of social differentiation (e.g. politics as separation, the nation state as a moment of condensation). In this sense, Luhmann understands these interaction systems as the precursor of functional systems: "one already finds a structure here that will later be realized primarily in functional systems, namely, a connection between operative closure, overproduction of possibilities and internal selection on the basis of self-organization" (Luhmann, 2002, p. 279, transl M.H.). The benevolent Luhmann of the year 2000 could not have offered more praise or recognition of that insularity that Habermas characterizes as a sphere.

He identifies another special feature of interaction that is particularly evident these days: it does not allow for a harsh 'no.' "Interaction is not designed to lead to results through binary schematization (This is reserved for the functional areas.)" (Luhmann, 1980, p. 137, transl. M.H.). Cooperation and conflict in these systems intermingle (Luhmann, 2002, p. 279). What Habermas envisages for the 'interaction sphere' is thus reserved for the functional areas. In other words, the consensus demanded by Habermas is in fact 'sphere-damaging.' Common results are not part of its repertoire. The symmetry that structured the salon conversations appears as a "rationality condition of a special kind" (Luhmann, 1980, p. 139); it serves as a recipe for reducing status differences. The functional systems, on the other hand, are structured by asymmetric interaction. It finally outstrips the interaction symmetry. The practical significance of this symmetrical interaction, which Habermas emphasizes, is minimal in Luhmann's view. For him, very little can be decided on these rationality islands of interpersonal sociability. However, the 'no' that interaction cannot take, society can. In interaction, reciprocity disciplines communication. In society, we have to deal with "more than reciprocity".

Especially at this political juncture, it could be helpful to remember the principles of the transition from hierarchical to functional order. As in the time of the laborious learning of religious tolerance, we would have to learn again to work with understandings that are not designed as a penetration of real opinions. "The theory of salon conversation also soon found itself replete with communicative proscriptions and obligations to remain silent that were needed to keep social intercourse going" (Luhmann, 1995, p. 341). In the 18th century, therefore, topics were excluded that could provoke opposing viewpoints and contradictions – especially those regarding religion. In the USA of today, it might be strategically advantageous to avoid the topic of politics. We should confidently leave the task of achieving results by means of a yes-no schematization to individual, appropriately coded functional areas.

To recapitulate the presentation of structural transformation described by Luhmann: The transition from a stratified to a functionally differentiated order allows for a greater differentiation of interaction systems, initially still on the basis of upper class (not everyone is admitted to the salons, but the coffee houses also allow access for lower classes). It is a change, Luhmann and Habermas agree; it changes what is possible on the interaction level. However, the construction of the public as a sphere extrapolates these specific interaction conditions that are possible here to the perfectibility of human relations in general, including the perfectibility of politics and economy, and thus imposes something upon them that they cannot achieve. What Habermas understands as a promise appears to Luhmann as ideology, "in the sense that different interpretations correlate with different social positions within the system" (1984, p. 66, transl. M.H.). The interpretation of the public sphere as an exemplary 'island of rationality' correlates with the position of the upper classes that "expect as progress that the condensed and refined rationality they practice will – by osmosis or by education – become the common good of mankind" (1980, p. 153, transl. M.H.). Cylinder civilization, so to say, is promised a future empire. However, the rationality they process stems from stratified social formations: it is not rationality 'for all.' Through a negation of this origin, which Luhmann apparently sees at work in Habermas, even if he does not explicitly mention it, the concept loses its hold: "An interaction of this typology and this ambition exceeds what could be institutionalized in the social system" (1980, p. 155). What comes into view here are, with Plessner (2018), the limits of (the upper class) community. It is this institution of society that the concept of the public sphere developed by Habermas denotes, but the realization of it fails because the basis of behavior cannot be generalized. It should therefore come as no surprise that these utopias eventually shatter. For French literature, Gumbrecht (1980) even provides the date: 1794.

Habermas was well aware of the accusations that "denounced" (2018, p. 342) the idea of the bourgeois public sphere as ideology. However, Mill's insight that "the unity of public opinion lacks the objective guarantee of a socially realized concordance of interests, of the rational demonstrability of a general interest" (2018, p. 215 f., transl. M.H.) seems to have had little influence on his own theorizing. The public sphere, he clarifies almost defiantly and not undramatically as early as the opening pages, is "more and other things than a shred of liberal ideology" (2018, p. 57 f., transl. M.H.). While secret societies may have fallen prey to their own ideology (p. 96), his public sphere remained intact. The ideas of freedom, love and education that grew out of the experiences of the small family's private sphere were not "ideology *par excellence*" (p. 112). Because the liberal model corresponded to reality, the identification of the bourgeois class with the general interest was credible (p. 159). Only from the rich bourgeois, he states, anticipating his later Tocqueville reference – which claimed that public opinion, determined by the passions of the masses, needs 'purification' by the insights of materially independent (rich) citizens (p. 217) – were an effective representation of the general interest to be expected (p. 159) because they had no need to step out of private existence to exercise their public role. The class interest of the rich bourgeois – the homme-citoyens – "must have coincided with the general interest at least to such an extent that this opinion [. . .] could be regarded as the public" (p. 159, transl. M.H.). In other words, he goes out of his way to reject the accusation, which would cause his entire edifice to collapse. However, because he cannot reject ideology altogether, he gives the ideology of citizens a very special quality (just as he assigns a new, special quality to the bourgeois public sphere): it was actually ideology, but not *par excellence*, not ideology at its best, i.e. worst, as the ruling class had (on the basis of this domination of one class over the other) "credibly absorbed into itself as its objective meaning the idea of its own abolition" (p. 159, transl. M.H.). A re-entry, almost, but only via the diversions of the institutions developed by this domination, which become a "light-footed compulsion" (p. 159). His final definition – indeed, justification – of bourgeois ideology is a masterly performance: it conceives ideology as a false consciousness that has a moment of utopia in it (p. 160). We look at the inversion of Adorno's famous sentence: There is a right consciousness in the false one. In public opinion, Habermas concludes this remarkable train of thought, the interest of the ruling class can take on the appearance of a general interest, as domination identifies with its dissolution in mere reason. In this way, he succeeds in giving the 'unity of public opinion the objective guarantee, i.e. rational demonstrability of a socially realized concordance of interests,' that Mill had denied it. More precisely: the appearance of this concordance.

So far, so brilliant. Habermas himself had ‘rationally demonstrated’ something here. The main problem remains: to extrapolate bourgeois rationality to society. As mentioned above, such macrostructure-free interaction simply cannot be institutionalized (Luhmann, 1980, p. 158) – exception: by means of paradoxical communication, as we have seen above. “The fields [sic] of interaction that can be assembled and aggregated from any given perspective,” Luhmann sums up in *Social Systems*, “at best direct attention to function systems or perhaps to regional delimitations (nations), but not to the encompassing system of societal communication” (Luhmann, 1995, p. 430). Habermas had no use for the concept. The index of his book lists ‘interaction’ only once: it appears as an ‘interaction process’ toward the end, in the chapter dealing with the concept of public opinion. Habermas refers to it to reject the notion of interaction as insufficient to characterize what public opinion is (Habermas, 2018, p. 349).

In *Die Politik der Gesellschaft*, Luhmann finally uses the concept of the sphere himself, but only to reserve it for politics, which he describes in view of the consequences of the French Revolution as a “sphere of differentiated autonomy” (2002, p. 280), to the delimitation of which the semantics of ‘public opinion’ contribute. Politics is now based on itself, namely, the individuals, which establish political rule – as *volonté générale,* as an object of representation, precisely: as public opinion. This is where the emphatic, value-laden understanding of public opinion has its origin. For Luhmann, it eventually takes on the paradoxical function of a “politics without politics” (Keith Michael Baker) and gains importance mainly for political calculations, especially before and after an election.

5. New transformations

Most observers agree that we are currently moving toward “the next society” (Drucker, 2002; Baecker, 2007). The caterpillar has not yet turned into a butterfly, nor the rabbit into a duck. The water has not started to boil, society is still a functionally differentiated one. But the anomalies are piling up. No longer just modern, but not yet something else, we are living in a ‘post-modern’ twilight zone. In the expectation that the current shift will fundamentally affect all structures and all semantic constructions of our reality, the question is what impact this shift might have on the public [16].

Even if there is no agreement on this, there is at least agreement with regard to the creator of the public as a sphere. One of the few constants in this maelstrom of social transformation is Jürgen Habermas himself. Theories come and go, and spheres and publics shift, “but Habermas, it seems, remains continually relevant” (Whaley, 2012, p. 55). This is especially true for his conception of the bourgeois public sphere, which “retains substantial importance as a foil against which to distinguish new and emerging publics” (Matthias C. Kettemann in his contribution to this issue). His concept is the ‘basic blueprint’ [17] by which the other concepts of the public must be judged, even if they reject it; *Structural Transformations* provides the vocabulary and syntax of the theory of the public (Kuhn’s definition of a textbook, 2012, p. 136, and Habermas is well aware of its textbook status, see 2018, p. 11). The majority of social theorists have addressed this classical theorization of the public, and even the critique (Fraser, 1990) and the critique of the critique (Ugarteche, 2007) has “not abandoned it,” to once again quote Fraser. And while research has multiplied the concept, diversified it down to the micro-dimensions of partial and special publics (Jäger, 1997; Bosse, 2008, 2012; Goldenbaum, 2004; Füssel and Mulsow, 2015), expanded it through models of multiple publics (Fraser, 1992; Benhabib, 1992; Cohen and Arato, 1992), tried to go beyond it by investigating the validity and reach of his concept outside of political theory by exploring various other social phenomena to which the concept of sphere might be applied (Emden/Midgley, 2012), and even downgraded it to the status of a regulative idea that empirically can only be taken into account as a concept of appeal at best (Maresch, 1996;

Fohrmann and Orzessek, 2002) – the notion of an egalitarian critical instance remained untouched. "Given powerful globalizing processes underway, the topic of how to conceptualize the modern public sphere is becoming increasingly urgent," states Pauline Johnson (2001, p. 215). Luckily, there is a concept at hand: "amidst the array of alternatives, the efforts of Jürgen Habermas to attempt to balance out the two main conceptual requirements of this idea, a universalistic construction of the principle of shared interests and a sensitivity to the fact of modern pluralism, might seem a particularly promising option" [18]. It is precisely in epochs of revolutionary crisis, Blumenberg knew, that people fearfully conjure up the ghosts of the past to serve them (1996, p. 103) – and in this case the phantom of the public sphere concept, although what seems to matter here is – to borrow a phrase of Blumenberg's – not so much the actual content of this concept but the decree of its promulgation.

The term 'globalization,' along with 'digitization,' represents the main attempt to grasp what is going on and find access to the world that is emerging before our eyes. Let us briefly turn to the implications of the two with regard to the public.

Habermas himself is particularly worried about digitization (Czingon *et al.*, 2020, p. 8). There is no doubt that a rapidly growing percentage of communication takes place online today, with platforms that are formally private communication spaces having gained systemic importance for public discourse. "Online communication spaces as communicative settings, in which discourse is relevant for democratic decision-making, but in which relationships are also created and cultivated – the private is political! – have enriched and partly replaced public spaces," says Kettemann. "This is a challenge for those states that still have the primary responsibility to protect human rights and fundamental freedoms, both online and offline. New forms of mechanized power have emerged. Private actors have also gained power" (Heidingsfelder, 2020b). As mentioned above, Habermas has given a new relevance to the 'reader' ('user') over the course of these changes that he was not willing to give her at first – a relevance, though, that he makes dependent on her function as integrative factor. As for what a functional equivalent for the communication structure of "large-scale political public spheres" could look like in what he calls the 'digital world,' he is unable to answer – proving to be refreshingly honest (cf. Czingon *et al.*, 2020, p. 27). However, his question, of course, is not so much *if* a public sphere that does justice to the claim to inclusion he demands and lives up to the promise of fulfilling a political function can be maintained in the virtual world of the decentralized network, but rather *how* it might be maintained. For him, the central idea was that the attention of the population – a population that is conceived of as 'large' – is directed to relatively few politically relevant issues, and that a general interest is awakened and kept awake, which was precisely what the 'vertical' mass media did. The new, 'horizontal' media, as he calls them, threaten this old infrastructure of the public sphere. As we have seen, he had already pointed out the erosion in connection with the privatization of the media and warned of the decline of the daily newspapers decades ago. Habermas's question is now: How is publicity still possible today when the new infrastructure is formed by what he calls a "fragmented, centrifugal web-public sphere"? How could this new public sphere counter the immunization of the drifting apart communication islands and further guarantee that the citizens can be educated about their own political interests?

Countering may not the best strategy here, however. To paraphrase Detlef Horster's (1998) fictional Luhmann: "(O)ne may be burdening today's problem-solving capacities with the ideals of the past." What Habermas understands as immunization and what is negotiated in the media of the old public sphere under the terms of echo chambers and filter bubbles can also be observed differently and understood as an opportunity. What is the potential of these islands, which Habermas brands as 'narcissistic'? Do these bubbles in fact endanger the inclusive public sphere he has in mind (the imagined community of active citizens)? Is it perhaps only the

'Habermasian public sphere' – an idealization of a public that never existed in the first place – that is endangered here? What does it mean when competing public opinions that are representative of "the population as a whole" (Habermas) can no longer be formed? How immune are these bubbles? Is it true that citizens can no longer be informed about their own political interests – or is what ends here just this insinuation?

The main question that arises for social theory is, of course, what sense it makes to transfer public ideals taken from 18th-century premises to the Internet. Looking at communications mediated there, Kettemann makes two distinct arguments in his contribution to this issue: First of all, distinguishing between private and public spheres online has become increasingly difficult (especially as public law is applied in a growing number of jurisdictions in private spaces to safeguard public values *vis-à-vis* private platforms). While in the transition phase from the stratified order to the functionally differentiated one the public was formed by privates, and the privates were thought of as citizens who can distinguish between private and public, it now seems that the border between the two is becoming increasingly blurred. Private and public spaces can still be distinguished, but moments of the private (or more precisely, what is to be observed as private) are now presented in a decidedly public way, creating an intermediate realm of public privacy. Piazzi and Seydel (2010) have successfully accounted for this new phenomenon by referring to the – unjustifiably disreputable and maligned – tradition of gossip. First of all, to set the record straight about the mass media's preferred mode of reporting on online communication (they label the aggressive descriptions of the Internet #AIBS, Acquired Internet Bashing Syndrome, p. 50 f.); second, to point out that the idea of privacy persists, despite the openness of the net. Their conclusion: The sense of distinction between private and public has hardly changed. However, public today is no longer something that necessarily concerns everyone, because "what is openly accessible on the net does not have to be intended for all" (2010, p. 80, transl. M.H.). For them, the internet is not so much about making intimate things (chamber pots) public, but rather making public things (cylinders) intimate [19].

Kettemann suggests to consider the normative order of the Internet itself as a suitable lens through which the complex relationship of private and public norms and their impact on communication in general and today's and tomorrow's publics can be understood. His thesis is that the normative order of the Internet – i.e. its inherent laws – produces a learning normativity which also manifests itself on the level of legal normativity (Kettemann, 2020). The validity of these rules is continuously tested by principles inherent to this 'Internet order,' such as internal coherence, consonance with other regime norms, and consistency with the objectives of the order. However, such a normativity – one that learns from the environment – can no longer be represented through traditional subject conceptions. It is rather the other way around: We should consider rethinking our theories of normativity and give them a new foundation by taking a closer look at how the Internet managed to come up with this order in the first place. Up to this point, I agree with Kettemann. I am skeptical, however, when it comes to his suggestion that self-organization (and be it the Internet's) should, in turn, be traced back to a primordial cause, thus depriving it of its most remarkable property: its ability to organize itself without a cause, a reason, a télos. And although his a priori is no longer to be found in the *linguistic* tension between facticity and validity, he nevertheless attempts to locate a correspondence between decision and principle, a redemptive, conclusive formula or general law. It is therefore not surprising that he returns to Kant (1951). By referring to the latter's idea of self-organization as the principle of life, Ketteman even goes a step behind Habermas, who does not presuppose the conceptual system of language to be "transcendentally" or otherwise metaphysically presupposed, as some of his critics wrongly assume, but instead understands the terms and rules as culturally stored results of earlier communication processes.

To abbreviate Kant's 'treatise on self-organization' quite considerably: according to him, we simply cannot understand a causal relation in which a whole acts upon the properties of its parts, as is the case with an organism – or 'an Internet,' for that matter. We cannot comprehend it, cannot think about, or even "get to know" it as such. We can only think such a strange causality, Kant contends, if the whole is an idea – e.g. as when a craftsman has an idea of the object to be made. We are thus forced to look at the organism *as if* it had a conception of the whole. He resists the temptation to make this peculiarity binding on nature; it has to do with us. The punch line is, that in the Kantian critique of teleology, the actual final cause or *causa finalis* plays more or less no role at all (McLaughlin, 1989, p. 162) [20]. Apart from the fact that self-organization research has made considerable progress since Kant and we have in fact learned to think "such a strange causality," his argument cannot provide Kettemann with any support to impute a fundamental normativity ('legal intention') to the depths of the Internet's self-organizing 'mind.' De-randomizing evolution and assuming original normative predispositions – "the order that is supposed to be" – only directs our attention back to those who assume them, and in this respect, Kant does indeed maintain the last word here [21]. In the case of Kettemann, the observer is the legal system, i.e. himself as one of its representatives that presupposes the existence of a valid a priori that is distinguished from factual existence (and he is well aware of it, telling me in a private conversation, which I publish here with his consent: "That is where the legal in me vibrates"). For the legal system, this presupposition is a matter of ordering facts according to norms and deciding whether behavior corresponds to the norm or violates it. "Therefore the legal system seeks the foundation for its own method of observing the world in the distinction between norms and facts" (Luhmann, 2008, p. 20). For sociology, norms are also facts – extremely remarkable ones – and only these can be observed. In contrast to an a priori, which is why we have no jurisdiction to rule on it.

Richard Rorty (2010) once accused Habermas of cultivating an utopia of undistorted communication, which had little to do with democratic practice, and asked him to act more pragmatically. Even if we assume status-free actors that carry out rational conversations in public, it is more than unlikely that the lonely voter in the voting booth will dutifully orient herself to these discussions and then – in a rational form and oriented toward the general interest (this is how Habermas envisages it, 2018, p. 313) – correspondingly make her cross. Well aware of the fact that voters do not meet the high demands made on them – and they are enormously high: "interest in public affairs; possession of information and knowledge; of stable political principles or moral; ability of accurate observation; engagement in communication and discussion; rational behavior; consideration of community interests" (a list Habermas borrows from Berelson, p. 313 f.) – Habermas blames the sphere's fall, i.e. transformation for this "deviation" (p. 314). Luhmann follows Rorty's suggestion and aims to cultivate a more pragmatic view. First of all, he draws attention to the fact that while it is true that we expect rationality from members of an organization or from professional groups, we do not expect it from people in their private lives (Luhmann, 2012, p. 111). And so far, voting is still a private matter, even if there are proposals to meet the legitimate public interest in a citizen's vote, as "voter anonymity overstretches the relevant aspects of the moral right to privacy" (Sturgis, 2005). The idea here is to realize a more engaged and better-educated citizenry, i.e. make sure the voter lives up to the ideal by holding her accountable. A legitimate concern, but one that puts enormous pressure on her – for instance by "her kind of people," more on this later – and perhaps that is precisely the idea. In other words, a radical voting decision, an act of rebellion, would result in sanctions. This would mean that an essential aspect of the secret ballot would be lost: the considerable emotional relief function for the individual. A single vote has no decisive influence on the outcome of the election but is all the more important for the individual [22]. Second, we should not assume too much "cognitive consistency" with regard to individual voting decisions; not only arbitrariness and coincidences and momentary impressions but simply the necessity of having to decide where to put the cross-play a role (Luhmann, 2002, p. 283). Until recently, however, no one knew how to rationally manipulate human irrationality [23]. The "weapons of math destruction," as O'Neil (2017) calls the applications driving the data economy, allow for exactly that. Because of their ability of managing 'big data,' it now seems possible to harness irrationality into desired results. Digitization should therefore be understood not so much as the ability of technology to process and/or store large amounts of data, but rather to link these data – not least data that were not collected for this purpose at all (cf. Nassehi, 2016, p. 57).

Referring to Habermas's "normative (but contested) ideal," Tufekci (2014) investigates what can indeed finally be called a 'social technology.' It is digitization that has brought about the ability to observe, surveil and collect online interactions in large datasets, and thus gave rise to an enhanced, network-based social 'engineering of the public.' Companies such as *Cambridge Analytica* have proven to be very effective in building "models to exploit what we knew about [the millions of people, M.H.] and target their inner demons" (Cadwalladr and Graham-Harrison, 2018). In the context of irrationality, the reference to 'demons' makes perfect sense, especially if one thinks of the original Greek meaning, "the spirit of the departed." It was precisely into this (social) hereafter that society had tried to banish irrationality in the course of the Enlightenment. The new "computational politics" has succeeded in turning political communication into an increasingly personalized, private transaction, and by doing that, has fundamentally reshaped the public sphere – first and foremost, says Tufecki, by making it less and less public: "While Facebook may feel like a modern town square" (O'Neil, 2017, p. 180), a Facebook ad aimed at a particular voter is only seen by her. As the new approaches can now be used to both profile and interact individually with voters, a public sphere is no longer needed.

One of the multiple intertwined dynamics of computational politics that Tufecki has identified shatters the hopes of the late Habermas that organizations – i.e. individuals in organizations – might intervene. On the contrary; although it is true that *Facebook* apologized publicly for secretly conducting a social experiment on their users, and announced a new set of research guidelines afterward, it was not because the private individual and company's Chief Technology Officer, Mike Schroepfer, saw himself as a mediator in Habermas's sense (Habermas, 2018, p. 357). He simply had no other choice; Kettemann's normative order of the Internet came to life, the 'lab rats' were not amused [24]. *Facebook* meekly defended their experiment, but immediately relented, expressed remorse, asked for forgiveness and assured to refrain from such ventures in the future. (Which again shows us that there is largely an undiscussed-consensual pre-understanding with regard to norms. Advocating the legality of experiments on users without their consent was not really an option.)

The second process metaphor addresses the fact of world society. 'Globalization' means that all social borders are interlinked, that society no longer separates any outside and isolates any inside. The coronavirus has made us acutely aware of the implications of this networked globality (Heidingsfelder and Lehmann, 2020, p. 9). Because this new global environment is inclusive, digitization is not just taking place in Kuala Lumpur, Beijing or Frankfurt, but worldwide, which, in turn, makes both processes mutually reinforce each other.

Already in the 90s, discussions on the public sphere had begun to intersect with those on globalization. Back then, the growing cross-border flows of communication were still dominated by the mass media and by the nation state, two of the key elements in Habermas's historical analysis. During the pandemic, nation states have reclaimed some of this relevance, but that does not change the fact that they are not the defining framework any longer. The new global sphere is defined by a multitude of interacting cultural and social publics, spheres that blend the local with the global, operating across national contexts. For the followers of the "sphere doctrine" (that public opinion should be normatively legitimate and politically efficacious), this juncture is all about recovering the critical potential of the public sphere theory (Ugarteche, 2007). The concept that Ingrid Volkmer (2003, 2014, see also the interview in this issue) has introduced to the academic discourse, no longer looks in the rear-view mirror, but pays tribute to this transformation instead by replacing the concept of the one public (macro) sphere with that of the microspheres, emphasizing the multi-level character of the new media landscape. For her, it is the way that individuals and organizations communicate across diverse platforms that define the global communication of today. What happens to the legitimizing role of the public that Habermas had in mind when these publics are disembedded from the nation state and dispersed across many discursive sites? If there is not *one* public sphere any longer, then it no longer makes sense to think about subaltern counter-publics that are opposed to the unanimity of the one public with dominant opinion leaders; we can retire the concept. Irrespective of the question of its facticity, it has enabled a large number of scientific, especially political-scientific connections and approaches (see again Michael Hofmann on the US-American reception in this issue) and thus contributed to the reproduction of that sphere to whose environment the editors and authors of this issue belong. This is no small merit. In Kuhn's sense, the sphere of science has long accepted the assertion of the public sphere as valid; but in the end, a theory is not a matter of asserting a correct description of reality anyway, but only of how that reality appears from the perspective of this theory. From the perspective of Habermas's theory of communicative action, it appears to be deficient and in need of improvement.

Luhmann agrees with Habermas that the conditions are lamentable (1992, p. 707). However, while his theory "does not limit the awareness of negative aspects of modern life" (Luhmann, 1984, p. 62), his answer to the current challenges is not the promise of a better future, but a plea for better science, i.e. a theoretical revision of science to overcome its ontological fixation. In the final section of *Die Wissenschaft der Gesellschaft* (Science of Society), he cites Thomas Kuhn, contradicting his central idea that every new paradigm can only formulate its claim to superiority by its own means (1992, p. 703). The constructivism of modern epistemology is not, says Luhmann, only founded in itself; functional differentiation and constructivism are related. Scientific knowledge has to stand its ground, and it can only do that by distinguishing between reference problems and truth problems – here truth and untruth, the code of science; there the distinction between self-reference and external reference. 'Real' is what is practiced as distinction and made visible by it. This applies not only to the distinction between true and untrue but also to the distinction between private and public. Only to the old thinking, Luhmann writes, does the relativism associated with it appear suspicious (p. 709). At the same time, he stresses "the continuity of Plato, Descartes, Locke, Hume, Kant" (p. 708), within which an increasingly radical distancing becomes visible. But not naively only as an exclusiveness of ever better recognition. Yes, a certain continuous refinement can be observed. However, without the discontinuities and abrupt upheavals taking place on the level of society – i.e. without the restructuring of the social order – the development of science, including its own upheavals, cannot be understood. Here he allows himself, in the form of a reference to Günther's text (1979), another implicit dig at Habermas: with regard to the execution of this new scientific program, his theoretical experiments with the spherical ideal of the public and hopes for progress appear inadequate; even more so, they lack structural richness and were carried out in an aversion to the supporting structures of modern society [25]. Of course, Luhmann did not fail to also put his own proposal into perspective. The question is how science will react to the new enduring discontinuity in which we currently find ourselves – and what kind of theory the next society will initiate. The first contours are already visible; the paradigm of the network seems to confirm Luhmann's assumption of a relationship between paradigm shifts and social shifts in an almost trivial way.

6. Truth after all

We have conceived this special issue as a network of observations that includes analyses of Habermas's original concept, the history of its reception, as well as alternative attempts, not least in view of the massive structural shift we are currently witnessing. The final view is provided by the natural sciences and their understanding of the actual spheres surrounding our earth, i.e. those 'celestial shells' from which the humanities have borrowed the metaphor, and whose current shifts represent the greatest threat to human life on earth, nuclear weapons excluded. Instead of making brief presentations of the individual contributions here – they can easily speak for themselves – I have decided to provide an introduction to the Habermasian concept and its implications, and only referred to them where the argument required it. I would like to use this paragraph for a thought experiment whose "validity" is as of yet unknown, even to me, before concluding with a conceptualisation of the public sphere that I believe has been unjustly neglected in favour of the one presented by Habermas. It bridges back to the beginning of this introduction, which brought together Kuhn's theory of scientific revolutions with Habermas' public sphere transformation theory, and asks a question that has occupied us time and time again in the editorial process, and which – like the legendary 'elephant in the room' – perpetually hovered over the examination of the proposals, discussions with the contributors and the peer reviewers, and also the decisions of which submissions to include in this issue: Can science be considered the realization of the *sacris sphaera promissionis* Habermas had in mind?

But before I turn to this experiment, I would like to examine two other possibilities of determination. The first, which I will only touch on briefly here, would follow Dirk Baecker's (2008) suggestion of understanding the public as a "switch" (White, 1995), as that empty space in which the change between the places (spheres, contexts) takes place – here, at first, nothing else takes place than precisely this switch, which, however, fulfils an important function, namely, to guarantee the fragmentation of the social. It is interesting to note in this context that recent protests in the USA have focused on roads, which generally guarantee rapid, vehicle-assisted passage through public space to get from one sphere to another, and this is exactly what the protest prevented and ensured that people were stuck in this in-between space (as we know, some brutally resisted this demand to give the "switch space" its right). This conception allows for establishing a less emphatic but more sociological, operational or procedural notion of the public sphere.

The second possibility offers a more abstract determination. It understands the public as a medium (Luhmann, 2012, p. 113 ff. and 2010, 433 ff.; Fuchs, 2004; see also Christian Morgner's contribution to this issue). I understand a medium as the loose coupling of homogeneous elements that can be strictly coupled by way of an external force. In the case of the public, these elements are opinions. This relational potential would be the 'substance' (and it would live up to the already mentioned original concept, as an immaterial, invariant and invisible being that is reproduced in all opinion forms in which it becomes visible, see also Heidingsfelder, 2012, p. 83ff.). The medium would 'thirst' for opinions, as it were, for the continued renewal of this potential. It does not beforehand decide what opinion may be or may not be of common interest, and it also does not prefer 'better' (rational) opinions over others. The opinions that prevail work well enough. However, neither the element nor the coupling has bad intentions – or good ones, for that matter. The element wants to be coupled, be it to 'Black Lives Matter' protests or to 'rigged election' claims; the coupling wants to be decoupled – for example, the protest finally dissolves and the rigged election claims fall away – only to be strictly coupled again at some point. It would be the medium of the public itself that demands it; not necessarily couplings of left- or right-wing radicalism, but of opinion more generally. Such a medium would do justice to the main feature of the public: that it is open. Since all opinions can be inscribed – there is no explicit admission, no censorship – it is inclusive. It would also take up and structurally transform a central idea of Habermas's public sphere concept: the idea of consensus. Consensus would be the function of public opinion – the only thing this "court" (Habermas) can rule on – but it appears as agreement on certain issues, i.e. as thematic consensus, for instance, that black lives matter, or that all lives matter, or that the US election was rigged. The interest would no longer be in the empirical state of certain or all individuals involved or in an operation currently taking place (e.g. a rational or fair debate), but only in the "state of consciousness of the environment of the social system" (Luhmann, 1992, p. 55), which functions as a medium for forms to be decided through communication. Only in this respect can public opinion make decisions: by highlighting certain issues, by thematic pre-selection and, if these issues prevail, by repetition to the point of institutionalisation. The constant testing of agreement that the concept of consensus envisages is no longer necessary, because it is not a matter of a jointly developed consensus that has to be decided in a rationally or 'fair' way, but one that has, as it were, always already been decided upon. Personality structures play a role, no doubt, and also the maintenance and 'defense' of these structures (for instance, by rejecting news that could threaten them as 'fake'). However, if one wants to continue a public debate, it can only be done if there is an agreement on the choice and variation of a certain issue.

In this way, public opinion reduces complexity – namely, the complexity of all possible subjects – and this is also the problem it solves. In purely theoretical terms, anything can be institutionalized as an issue – like any social expectation. In the case of the public sphere, Habermas's attempts were successful with respect to science. However, this institutionalization of the public sphere as an anti-institution, understood as a critical authority, is also the reason that the function of public opinion could not be seen. If we replace the anticipation of claims with the anticipation of issues, we can even save the temporal idea of Habermas's design. A certain proximity to another Habermas concept – that of the lifeworld (cf. Luhmann, 1992, p. 56) – cannot be denied. Consensus on acceptable issues must – at least in a rudimentary form – always already be presupposed, as it can never, of course, be created 'discursively' in the situation in which one begins to speak, just as little as social norms or values. I have mentioned the limitation of this determination above: publicity as a medium of opinion can actually only be meaningfully thought of as the system-internal environment of political organizations and interactions, not as general public.

Habermas restricts this mobilization of issues, i.e. 'agenda setting' to what he calls the "media public sphere" ("Medienöffentlichkeit"), which I spoke of in section IV. He expects the mass media gatekeepers to pre-select certain issues for the public, even more than that, to "control the information flows and communication circuits" (Czingon *et al.*, 2020, p. 15) by bringing forth certain issues (of mutual interest) and holding back others (not of mutual interest). This political mass communication is supposed to contribute to the democratic formation of public opinion, and thus to the legitimization of power. Because of this, he does not mind "robust manifestations" or "wild forms of conflict" here because the citizens are supposed to make their own decisions more or less rationally in the light of such competing views. The so-called social media have changed the situation fundamentally; fewer gatekeepers (mostly in the form of algorithms) and more agenda setters not only allow for hyper-robust manifestations but also for the election of 'wild presidents' that bring forth issues of personal interest.

A riskier option is to conceptualize science as the public sphere. It does not arise solely from the coincidental (i.e. fateful) fact that Kuhn and Habermas published their transformation studies at the same time, which came to my attention in a twist of fate (i.e. by chance). Such a conceptualization would be already advantageous because this area can easily be described as "its own sphere of differentiated autonomy" (Luhmann, 2002, p. 280). Only that we have a precise word (namely a concept) for such a sphere: system. As no system can cross its own borders and operate outward into its environment – even if it is capable of identifying other systems on its outside – we can consider a system public the moment it reflects its inner-societal system boundaries. The public, from this perspective, appears as a generalized "other side" of all social systems that each have their own distinct environments, or in the words of Maren Lehmann, as communication across borders (Baecker, 1996; see also Luhmann, 2002, p. 285 and Lehmann in this issue's interview). "This would mean that the public now and today appears in the guise of questions about the nature of spheres, about the difference between spheres, and about the possibilities of access to these spheres." (Baecker, 2008, p. 582, transl. M.H.) When science reflects that it is being observed from the outside, without it being clear how and by whom, it understands itself as observable in the medium of the public. What Habermas called a sphere thus appears as a system form of society. As there is no one system that does not observe and communicate across its borders, there is actually no system that is not public. So, what right does science have to claim a special role here? We find this system form everywhere in society; it applies to functional systems and organizations as well as to families and interaction systems.

One argument in favor of such a consideration is the quality that Habermas postulates as a prerequisite for any public debate: rationality. For Simmel, "intellectuality" is "a principle of reconciliation" (1989, p. 598), despite its occasional sharpness. Certainly, in his view, there is something cruel about the purely rational treatment of people and things [26]. However, in science, this rational treatment is not out for cruelty. In Simmel's words, it is not a "positive impulse," it is a side effect of its aim for 'objectivity.' We can call the form of communication, which is native to the scientific system, 'convivial.' I do not carelessly refer to the term here. Neither did Friedrich Schlegel, who identified this 'conviviality' as an essential feature of the works of German naturalist and ethnologist ('exact scientist') Georg Forster (Schlegel, 1980, p. 101). With regard to the concept of the lecture, Friedrich Schleiermacher, too, speaks of a 'form of conviviality' that has the character of a duel (Lehmann, 2020) [27]. For Habermas, the central intuition of his thinking was that there is a language-immanent télos that prescribes us normatively to seek agreement. This intuition, he says, stems from the realm of interaction with others. It stands to reason that the scientist Habermas has experienced this horizon of friendly coexistence in his immediate environment, academia. Habermas's theory – just like that of the former administrative official Luhmann – would be based on milieu knowledge. The friendliness that is processed in science, to paraphrase him, is one that does not exclude conflict but provides certain means through which conflict can be overcome (Habermas, 1981, p. 152). It is rationality that functions – and this is how Habermas probably imagined it – as a peacemaker here: "As soon as the dispute has moved from the opposition of feelings or of wills or of unprovable axioms which can only be recognized by feelings into theoretical discussion, it must be possible to settle it in principle" (Simmel, 1989, p. 598, transl. M.H.). At the moment, for example, the research community agrees on climate change – it is a fact, it is man-made, more CO_2 leads to more warming, which leads to sea levels rising etc. Researchers are careful not to be confused by individual details from the studies – some of which contradict each other – only the environment (politicians!) tries to conclude that there might still be doubts about these big questions. The same is true for the field of the so-called humanities: they all share – again, despite all disputes in detail – the same assumptions about human agency and the course of historical processes. Doubt is not an expression of distrust, a negative, destructive attitude, but rather a productive one that helps to solve a puzzle (Kuhn, 2012, p. 204) – two men (or women or nonbinary persons) who share this value "may nevertheless differ in the judgments they draw from the use. But, the behavior of a community which makes it preeminent will be very different from that of one which does not" (p. 204). In this sense, the island of rationality called science can do justice to the sphere that Habermas had in mind, and might fulfill the promise of a 'utopia of friendly coexistence.' This would not be without irony, since scientists, of all people, were initially considered unsuited for the sociable interaction, especially for those at court; they lacked, Luhmann quotes Jaqcues de Callière's remarks on "des gens de qualité et des gentilhommes particuliers" from 1658, the necessary attention and sensitivity for sociability (1992, p. 242). This was, Luhmann speculates, only advantageous for science's development into an independent functional system; the researchers did not have to struggle with questions of status but could focus on solving their puzzles instead. Fortunately, science has been able to preserve this achievement to this day – the orientation towards other roles and the compulsion to take them into account take a back seat: "A critical, conflict-rich discussion within science can therefore dispense with inhibitions, as would be unavoidable if there were too farreaching repercussions on other life situations. This is a condition of free scientific discussion." (Luhmann, 1992, p. 243, translated by M.H.) The very attempt to anticipate certain political consequences of the considerations I have made here would compromise my research. No scientist can afford this "suffocation effect" (Luhmann).

Clearly, we are not talking about Popper's 'ideal community' here, but of a real one. Popper himself is aware that science is not living up to his ideal: "Since scientists got subsidies for their work, science is not exactly what it should be. This is unavoidable. There is a certain corruption, unfortunately." (Horgan, 2018) A misuse of power, i.e. their truth mandate, that has to do with certain vanities, the desire to be noticed and recognized: "there is a certain wish that the media should bring them before the public" (Horgan, 2018). Luhmann talks of "(t)he glitterings of success, of being mentioned, of gaining reputation" (1984, p. 68, transl. M.H.) – a seduction to which many sociologists have succumbed by supporting fashionable semantic predispositions. David Hume (1985, p. 35) had even wanted to entrust the evaluation of his most important work to this very public: "The approbation of the public I consider as the greatest reward of my labor; but am determined to regard its judgment, whatever it be, as my best instruction." One would rather advise the explorer of human nature against this today, not only because the public's nature does not allow for an unanimous judgment, as we have seen, but also because such a judgment – if it were possible – would not be based on the rationality that is required here, i.e. the one that does not distinguish between I like/I do not like. However, in contrast with public debates, the validity of scientific knowledge is methodologically assured; it does not depend on taste, instinct or free-floating opinion. Here, every expression of opinion "indicates a willingness to explain, to defend, even to argue" (Luhmann, 1992, p. 242, transl. M. H.) [28]. Although it should be clear that no one likes to be proven wrong, the increased willingness to engage in conflict reduces personal sensitivity. A scientist should nevertheless avoid mistakes as far as possible because truth is based to a large extent on credit and trust. In the scientific variant: evidence of error can result in the elimination of credibility for further statements (Luhmann, 1992, p. 242). Whoever is wrong was either not careful enough or is cheating; the COVID-19 scandal research, which led to retractions from *The Lancet* and *The New England Journal of Medicine* (*NEJM*), is the latest example. While science is making great efforts to considerably mitigate the harmful – honorific, degrading – consequences of such conflicts and to seal them off against other interaction contexts, this cannot stop them completely. After all, a scientific error does not lead to a 'loss of face.' The 'Audit Society,' whose emergence Michael Power (1997) has observed – identifying this instrument of regulation as yet another aspect of globalization – owes a great deal to this scientific practice of evaluation, a professional 'checking upon each other,' especially as this check is an important part of rationality – i.e. of what it means to be a "rational individual" (Douglas, 1992, p. 132).

In the public arena, lies can trump truth, but not here. Fake or misleading articles are not 70% more likely to be published – or reprinted – than truthful ones (as Vosoughi *et al.*, 2018 claim about *Twitter* retweets) in science. False news may indeed spread farther, faster, deeper and more broadly than the truth on the Internet, but in science, it is the other way around. Of course, the fact that we do have a monopoly on truth determination does not mean that all spheres are oriented toward it [29]. However, at present, only science seems to be realizing central moments of a conception with which most of the texts in this volume deal in one form or another: as a sphere in which rational debates are possible, in the course of which the actors involved come to a common agreement. While we cannot presuppose a common rationality for the public, we can for science; while we cannot expect results from the public, we can from science. Despite the latest trends in politics, the consensus value of science is still high, higher than in all other areas of society.

To reiterate, all this happens with recourse to (methodologically sound) rationality. Values, norms, prejudices, interests must remain outside. This is the first condition of accession. As Thomas Sprat put it with regard to the Royal Society: "They (the scientists, M.H.) have escaped the prejudices that use to arise from Authority, from unequality of persons, from insinuations, from friendships" (Sprat, 1966, p. 92). Scientific rationality therefore also disciplines one's own thinking. Research itself, so to speak, weakens external influences that naturally exist; it weakens hatred and weakens self-righteousness. Then it can happen that a "self-righteous, conservative-hating, religion-hating, secular liberal" (Jonathan Haidt about Jonathan Haidt) discovers through his research that the conservatives are not actually crazy: "These ideas make sense. They see things I didn't see" (Tippett, 2017).

This editorial is not the place to address the historical conditions that led to the crisis of rationality; but it is sufficient to see that demanding reason in social interactions today seems to many citizens an unreasonable, even arrogant demand. It has not gone unnoticed that such demands serve to mark the non-negotiability of a position (Luhmann, 2012, p. 111). As such, rationality is not so much a condition of membership, but rather a criterion of exclusion; it appears as ideology – particularly the ideology of the upper class that can afford it, and in this sense: as a discourse *not* free of domination. To say it with another Frankfurt School member: "The one who helps because he knows better turns into the one who humiliates the other through bossy privilege." (Adorno, 2001, p. 109, transl. M.H.). Many people would rather join a virtual facsimile of a coffeehouse wherein irrationality is permissible, and where their fors and againsts can be confirmed by a bounded collective. We seem to be witnessing a kind of counter-reaction – an understandable defiance – that is not only related to a low level of education, as the well-educated people would have it, but also to existential fears and needs. As Maren Lehmann explains in this issue: "Excluded are people who cannot decide to be sober and exercise a tactful self-control – and these are not drunks or exalted people, but people in fear and existential distress or in a panic-like state of insecurity. For all these people there is no public whatsoever; for all these people the borders are existentially closed."

For Habermas, the political public was always only one link, which mediates between the institutionalized discourses and negotiations in state arenas on the one hand, and the episodic and informal everyday conversations of potential voters on the other. However: "Without the impetus of an opinion-forming press that provides reliable information and careful comments, the public can no longer summon up this energy. When it comes to gas, electricity or water, the state has a duty to ensure the energy supply to the population. Should it not be equally obliged to do so when it comes to that other type of 'energy,' without the influx of which disturbances occur that damage the democratic state itself? It is not a 'systemic fault' if the state tries to protect the public good of the quality press in individual cases. It is just a pragmatic question of how it can best achieve this" (Habermas, 2011, transl. M.H.). The fact that many of the liberal media houses (mocked as 'lamestream,' or chastised as a rainbow coalition of corporate shills) have processed this filter function all too rigorously, and even arrogantly, is certainly not enough to make them 'enemies of the people.' It does, however, explain the rage and hatred spewing forth from those whom politicians like Trump provided a forum outside of the "paternalistic" channels – speaking for a different sort of subaltern (Spivak, 1985) and standing with those who have failed to represent themselves, for whom the borders of the public were closed. Indeed, it seems increasingly plausible that many of Trump's followers have followed him fanatically precisely because he has never allowed himself to be intimidated by reason, i.e. the 'better argument' of his opponents.

For Habermas, "a guy like Trump" was able to win and maintain majorities because of the broken media infrastructure that is unable to follow-up on its task of informing the public adequately: It "has disintegrated to such an extent that the information flows necessary for a democratic election are disrupted" (Czingon *et al.*, 2020, p. 15, transl. M.H.). From a systems-theoretical perspective, however, the latest developments demonstrate once more that modern society can no longer be fixed upon uniform principles of reason – not the social media structure has desintegrated, social rationality has. It has become a utopia in the literal sense: "There is no longer a location for it in society." (Luhmann, 1997, p. 185f., transl. M.H.) Since it has no leading system or centre at its disposal, it cannot establish a unified rationality pretension for itself. Anyone who tries merely adds another perspective to the diversity of observer perspectives, while also provoking those disposed to the latency presumption – i.e. the idea that something else might be hiding behind the supposedly rational factual speech, for example, believing that George Soros, the Clintons or other Un-Americans are behind mass media reporting and the Google algorithms; or journalists, judges, scientists with a false consciousness, which is false because it willfully embodies the ideology of the ruling class/establishment/deep state/China. Those who no longer believe in reason, Luhmann knew, at least still believe in latency (1984, p. 457) [30].

What the moment requires for science seems to be a theory of 'communicative irrationality' that no longer relies on the search for consensus as a premise, but is instead dedicated to that which, as its outside, has promoted the formation of an unemotional, rational logic of decision-making and conflict resolution in the first place (Luhmann, 1984, p. 276). While it was the negation of irrationality that created the precondition for the institutionalization of rationality in a process that is often described as 'civilization,' our self-narrations of the so-called enlightenment – of the attempt to shape society through reason – distract from the fact that we have never really left the counter-concept behind (Heidingsfelder, 2020a, 329ff.). It was – as its other side – necessarily always carried along. The fact that it is precisely science – for understandable (namely, historical) reasons – that has ascribed such a heroic significance to rationality should not lead us to assume that this attribution was right with regard to the public sphere (or to democratic rule, for that matter). To draw on a social psychological explanation for a moment, the attempt to radically exclude irrationality, to repress it, or with Foucault, to lock it up – with Parsons, "blocking channels of communication," because the "most important feature of imprisonment is preventing the prisoner from communicating with others" (Parsons, 1963, p. 47) – had, in Freud's terms, constituted an initial division of society, with rationality acting as its super-ego which exerted an almost unbearable pressure on us. The "original repression" of irrationality was doomed to fail; its driving energy was 'displaced' (examples: asylums, art, sometimes both: 'savant art'), acting as a complex attracting moment. We are currently witnessing the return of what has been repressed in such a way. For quite some time, feelings and passion have played an increasing role in science, too – apart from some disciplines in its outer districts ("studies"), where the different forms of moral 'righteousness' described by Haidt (2017) have been gaining ground, one can also observe an increasingly institutionalized form of censorship in the name of identity politics and political correctness in its organizations – the schools and universities.

This crisis of rationality need not worry us with regard to our experiment. The rationality that is processed in the "objective sphere" (and Simmel indeed talks of a sphere here, 1989, p. 598) of science – as well as in all other areas of society – is no longer the absolute rule of reason, but *system rationality*. Any access to social reality is tied to the multiplicity of different communication systems operating in the mode of their own rationality. We can understand it with Simmel as a principle of indifference, a determination which an area produces within its own territory. He names the system of economy, wherein the "purely monetary interested person [. . .] makes use of the mere consistency and pure objectivity of his procedure," without any ill will, which is why he "is not at all inclined to understand when he is accused of cruelty and brutality" (p. 599) [31]. In other words, rationality is not imported from somewhere else; it is a product of the system [32]. The 'USP' or outstanding feature which clearly sets the scientific rationality offer apart from the competitors can be considered with Kuhn as the concept of 'solving the puzzle.' All science uses this schema, even if it is to argue about what is considered truth, and even if scientific programs filter out certain questions (puzzles) at their borders that do not qualify as 'automatically relevant' (Heidingsfelder *et al.*, 2021).

To claim rationality today, then, would mean making clear how science relates to its environment, as a responsibility to consider its own orientation to certain distinctions. It can serve as a cautious, timid hint that science operates differently than politics or economics or the public (sphere). It would require thinking about science as if it were from the outside, as Maren Lehmann pointed out in this issue: in the mode of criticism or protest. By doing that, we could strive to overcome our *déformation scientifique*, the strange or unusual habit to always distinguish between true and false. Whether this leads to an orientation toward publicly defensible (generalizable) points of view is an open question (Luhmann, 2000, p. 104). The interfaces of the systems remain spaces of conflict in which the respective functions try to influence the others without being able to control them – and these conflicts cannot be solved centrally and collectively, in the form of consensus. However, the idea of the public sphere presented here envisages no longer exaggerating one's own claims, but to reflect – together with the other subsystems, and all interactions and organizations – science's internal social environment. In other words, science cannot fulfill this role on its own – but it can set a good example here, as it already assumes the universality of boundary drawing: "Reason that refuses to acknowledge this is not far from totalitarian [. . .] logic," notes Luhmann (implicitly calling Habermas a 'terrorist,' 2012, p. 111). This respect toward different relevance schemes – the insight that what one wants from the other can only be achieved if one respects the relevance schemes of the other – is also the precondition of interdisciplinarity [33]. If those involved become more aware of the excessive demands of each system, new routines could emerge to add to the old ones (schools and universities under state supervision, to name just one).

You will have noticed at this point that I have let myself get carried away to some extent by the utopian content of Habermas's conception of the public. To set the record straight: I do for instance not see how politics, i.e. political politics should be able to reflect on its own rationality, because genuine political action is solely concerned with maximizing votes; certainly, with the help of propagating certain factual goals, but in the end, these are only a means to an end (not the other way around, as politicians would have voters believe). Neither the political public could cope with such a disillusionment, nor could the politicians continue to hold their beautiful speeches. It is precisely here that we find the functionally equivalent strategy, the alternative to orienting oneself toward publicly justifiable or defensible points of view: secrecy (as was typical for the secret societies studied by Koselleck) and hypocrisy (which according to Luhmann is of systemic importance for politics). And it is this strategy against which the emphatic concept of the public sphere defended by Habermas is directed, “as a means for establishing reason” (Luhmann, 2000, p. 106).

In contrast to the concept of the public sphere, the advice science offers to society is non-binding (Luhmann, 1992, p. 705); it cannot put the state in touch with the will of the people in the sense of a representation, nor can any of the other systems. This function of representation was part of the stratified society; Habermas’s innovation is that he no longer imposes it on the old upper class, but on the new one, made up of reasonable citizens. However, as a sphere, science is indeed distinct from the state, i.e. politics – as a site for the production and circulation of discourses that can in principle be critical of it – and that, I am hijacking Fraser’s public sphere definition here:

> [. . .] is also distinct from the official economy; it is not an arena of market relations but rather one of the discursive relations, a theater for debating and deliberating rather than for buying and selling (Fraser, 1990, p. 57).

The economy cannot intervene in the operations of the system; that is operationally impossible. This does not mean, of course, that this internal recursive networking of self-generated elements is not dependent on its environment; the autonomy of the scientific sphere in no way excludes causal connections. Every researcher is caught between puzzle-solving and the institutional and financial conditions that make it possible. I have not examined it specifically, but it is possible that it was Habermas who initiated this recognition of interdependence in Luhmann’s work with his critique of systems theory, for example in the last part of *The Philosophical Discourse of Modernity* (1985, p. 426ff) [34]. Here, he accuses Luhmann of separating the individual and society (p. 442), which is exactly right. But the accused is able to ‘reassemble’ again by means of the “additional hypothesis” (Habermas) of structural coupling, even if, as Habermas points out with regard to the concept of interpenetration, it is designed as the interweaving of *external* relations (p. 442). Habermas characterizes the consistency of this theory-design with regard to the question of the public sphere as follows: “the construct of a public sphere that could fulfill this function (to enable society to refer to itself normatively and to process perceptions of crisis in ‘higher-level communication processes’, M.H.) no longer has a place as soon as communicative action and intersubjectively shared living environments slip between system types that, like the psychological and social systems, form environments for each other and only maintain external relationships with each other.” (1985, p. 436, transl. M.H.) As we have seen, the publicity we have in mind would indeed ‘slip’ between systems – but externality is not the problem here. The burden of enabling society to refer to itself normatively is.

However, two main characteristics that Habermas had envisaged for the public are missing: the political function and general accessibility. Let us first look at the political function. In modern society, only one system decides about the consideration and rejection of claims or demands, namely, politics. Truth can speak to power and inform politicians that we need to “regulate our emissions and control our environment [. . .] before one or more of the many potential triggers starts a positive feedback and takes the system beyond our control” (Robin Robertson in this issue), but as it is politics that deals with the consideration and rejection of such a demand, the 'border communication' that science is capable of would be a political problem. Only politics can mobilize "the performance of binding obligations, with the conditional implication of the imposition of negative sanctions [. . .] in case of noncompliance" (Parsons, 1963, p. 45). Politicians can respond to such proposals of science in two ways (Luhmann, 2010, p. 346):

(1) They can deny environmentalists and mask advocates the power of reason by challenging science's monopoly on truth consensus. This is only possible for those who can refute the scientific evidence [35]. Anyone who rejects them without scientific justification "leaves the community of reasonable people and thus loses the right to influence collectively binding decisions" (p. 346). It is this exclusion that Trump had to cope with, justifying his destructive environmental policies by reference to economic rationality (too expensive) and political rationality (election promises), while Macron and Merkel took advantage of science's privileged social position in society (Heidingsfelder, 2020a, p. 277 f).

(2) Scientific knowledge is transferred and made usable in political practice. For that, scientists and practitioners must work together; only then can knowledge become power. Here, too, the only way to translate scientific knowledge into political decisions is to 'jump.'

The second objection to conceiving science as the public sphere concerns the lack of accessibility. Habermas had imagined this sphere as an inclusive place to which all citizens, "even women" (Luhmann), have access. Its basis is general accessibility: "the civil public stands and falls with the principle of general access" (2018, p. 156, transl. M.H.). Science cannot offer that, although it is – in principle – inclusive, as knowledge in science no longer correlates with stratification. Professorships are not inherited (Luhmann's question was: What are the names of Galileo's or Newton's children?). Included is, as Luhmann inimitably puts it, "Who can communicate, what can be communicated here [. . .]" (1992, p. 346, transl. M.H.). Authority and reception are regulated within the system, but unlike access to a coffee house, *Facebook* or *Parler*, inclusion does not happen easily. The conditions are high. The model of inclusion is that of collegial equality – a scientific community of 'peers' (which, not coincidentally, means both persons of equal standing and noblemen). Amateurs hardly stand a chance. Science would thus not live up to the ideal type, but be closer to the *de facto* historical public sphere from which Habermas extracted it. "The members of the scientific community," Kuhn even claims, "provide the only audience and the only judges of that community's work" (2012, p. 208). I would not agree. Active participation makes higher demands than passive participation, but the beauty of this sphere is that everybody is allowed to participate – for instance via publications or in pursuing a doctorate (which comes close to a license for participation).

In Michael Crichton's early novel *Sphere*, one of the protagonists named Johnson enters the presence of the sphere, then the sphere itself, where he finds a large sea of translucent "foam," and has a conversation in his thoughts with some sort of entity that speaks in cryptic riddles, who eventually tells Johnson that the greatest power humans possess is the ability to imagine things. Habermas' concept of the public sphere appears as such an imagination – and from today's perspective, "as a melancholy warning, so to speak because the forms of criticism and protest practiced today are often so narrow-minded, idiosyncratic, communication-averse that I think practically every day about how attractive and at the same time unlikely his concept of the public sphere probably is" (Maren Lehmann in this issue). Transferred to the virtual world, the algorithms would have to ensure precisely this crosspressuring in order to take the step from "math destruction" to 'math construction' – namely, the construction of cities instead of small towns. One could paraphrase physicist Walther Nernst, who in 1910, after visiting

Einstein, said about the quantum hypothesis: If it is false, well, then it will remain for all times "a beautiful memory." The beginning of his remark could be used as well: Habermas's sphere thesis is probably one of the most remarkable theses on the public ever devised (Einstein, 1993, p. xxiii).

The reality of the public has little that is dreamlike about it. As Dirk Baecker (2008, p. 567) notes, the public today is no longer a "space of encounter" as it was in Athenian Greece or when the carefree winds of literary debate swept across the plains of Fin de siècle Bohemia (to borrow an expression by Haruki Murakami) – at most one of encounter with advertising billboards, a space which we pass through to reach the workplace, to fulfil our consumer desires and then hurry back to the four walls of our home. It is not a space where important discussions take place that decide on the common welfare of society – and whether such decisions were ever made here is at least questionable. It is also not a blank space in which certain entries (inscriptions) are first made. It is a space where "a society already takes place that is permeated by political calculations, economic interests, aesthetic sensitivities and moral demands, not to mention religious considerations and scientific doubt, and dictates to him what she has to expect from whom and under what circumstances. All that which, according to the Enlightenment version of the public, should be the subject of the conversation and then even the decision of the citizens, is already there and structures in advance how the conversation takes place, who leads it and who is excluded from it" (Baecker, 2008, p. 567, transl. M.H.). Shopping malls have long since replaced the public space in the cities, and here it is all about buying decisions (even if they are deferred or only imagined: window shopping). Yet society does not seem to want to part with this claim to the public sphere that Habermas has translated so convincingly into his theory. Even when this claim is repeatedly undermined and turned into its opposite – presumably: precisely because of its counterfactuality.

Anthropologist Michael Tomasello has harnessed Habermas's basic idea for his *Natural History of Human Thought* (2009), fortifying the old boundary between the crown of creation and the rest. The fundamental distinguishing feature between animals and humans? The capacity for collaborative behavior. This is, says Tomasello, unique to the human species. In other words, even before we begin to speak, the Habermasian télos is already at work. Not only is it built into linguistic communication, human communication in general springs from the source of a "shared intentionality." The tradition that had described 'man' (in contrast to the animal) with the help of distinctions such as reason, intellect, will, imagination, feeling, sensuality, is being renewed by a strange revitalization that now defines the difference in terms of cooperation – and: the fun of cooperation! Not surprisingly, Habermas (2009) was pleased with this evolutionary-biological 'lowering' of his main thesis. He notes with delight, "At this threshold, the self-centered intentionality of the individual specimen expands into the extended mind of participants in common practices." What is constituted on this other side is a world in which the participants "can agree on something." As Tomasello (2009, p. 225) says at the end of his book, "Something like the hypothesis of shared intentionality simply has to be true."

While a number smaller than 0 must be negative, and one can also find that what is true cannot be true after all (which was Max Planck's feeling with regard to the constant that was named after him), what must not be, can still be. The list is long, from rape to war to 'dead zones' to the climate catastrophe. As for Tomasello's study, it has recently been supplemented by yet another – if I may say so – 'monkey treatise' (Stocker *et al.*, 2020), which not only refutes his assumption of 'joyless ape cooperation,' but also specifies his claims on the expansion of self-centered intentionality. First, macaques (long-tailed ones) seem to enjoy cooperation with each other (they are clearly more relaxed, i.e. the act of cooperating leads to a subsequent decrease in cortisol levels) and second: they only enjoy it when cooperating with closely bonded individuals (their kind of people, if you like). Social proximity, which had little significance for Tomasello, is the decisive factor here [36]. This insight takes the magic out of Tomasello's beautiful Habermas adaptation. Whoever is interested in extrapolating this consideration to our species: Humans like to cooperate, sometimes even against others (for example in the form of armed conflict) – but not with anyone.

Compared to the other candidates, and in the current circumstances, science is the best of all possible spheres, and definitely a much better one than the bourgeois original. I can be thus accused of – in Blumenberg's words – an "optimistic statics of unsurpassability" (1996, p. 64, transl. M.H.), which is pessimistic with regard to society's ability of effecting a better sphere (and also with regard to bringing about a better society by means of this sphere). To justify this historical reference, one could perhaps say: Theodicy is replaced by sociodicy; in the sense that conflict and disagreement are not considered evil, but a necessary part of society that ensures the "achievement of the optimal overall purpose," which is the reproduction of communication. In the words of Niklas Luhmann: "Providing the possibility of negation, of refusal, of rejection is part of its function" (1984, p. 62).

7. My kind of sphere

In the concluding part of this introduction, I would like to revisit a theory of the public which has never received the same attention as Habermas's attempt. It was made available to the public in 1963, one year after the publication of *Structural Transformations* and, in my view, still holds some important insights for us today, particularly in relation to our present situation. Its leading question was why or under what conditions certain opinions are held or changed, i.e. in how far they can be influenced. The author, Talcott Parsons, defines influence as follows: "a way of having an effect on the attitudes and opinions of others through intentional (though not necessarily rational) action – the effect may or may not be to change the opinion or to prevent a possible change" (p. 38). Note the insertion: not necessarily rational! But what symbolizes scientific influence, for instance in the case of the pandemic? Virologists, epidemiologists and statisticians were successful in bringing about a decision on politics' part to act in a certain way because it was felt to be a "good thing" to prevent the health system from collapsing by minimizing infection risks. One of the most obvious 'intrinsic persuaders' is, according to Parsons, 'facts' (1963, p. 48); those to whom such facts are presented can then "draw their own conclusions." Unfortunately, disputing the facticity of facts often seems like a successful strategy these days. Scientists, of all people, have been blamed for the phenomenon of fake news because they had taken a closer look at the status of what 'is,' i.e. what makes a fact a fact. Indeed, facts are always being produced (*facere* initially means, "to make"). However, "The question was never to get away from facts but closer to them, not fighting empiricism but, on the contrary, renewing empiricism". (Latour, 2004, p. 231). Science still has the monopoly on fact-finding, even though it may problematize this very process, as facts are in fact not "found." What cannot be so easily denied as fact is above all the reality of what is spoken, written, printed, broadcast or made (available) online – this binding effect of what is published (made public) can hardly be denied, even if the question of meaning may be exclusively a matter for the individual; one can still agree or disagree with a certain conspiracy theory, a Biden statement or a song, but only afterwards – post-factually, so to speak (cf. Luhmann, 1992, 55).

The problem is that, according to Parsons, "the critical common factor is a mechanism of persuasion that is generally *beyond appeal to particular facts*, particular intentions, particular obligations and commitments, particular normative rules" (Parsons, 1963, p. 58, italics by me M.H.). We have already mentioned that factor above: trust. The intrinsic source of persuasion that inspires trust brings us closer to the problems that are currently keeping the USA in particular on edge. For of course we trust above all those to which we stand in a "mutual relation of fundamental diffuse solidarity" (p. 49) – when we belong together in a collectivity on such a basis that the other could not have an interest in trying to deceive us (p. 49). This common belongingness in a Gemeinschaft type of solidarity is the primary basis of mutual influence, and – under digital conditions – the biggest problem democracies face these days.

Precisely these "limits of community" (Plessner, 2018) have already occupied us in connection with the bourgeois public sphere. For Parsons, such a community can only be the security base (p. 49). If only close community associates trust each other, then a "ramified influence system" could hardly work; it would be 'stultified.' This is exactly what we can for instance observe with regard to the phenomenon of echo chambers, which Habermas addresses as "narcissistic discourses circling within themselves" (Czingon *et al.*, 2020, 28). No one meets in the marketplace anymore to argue about the right opinion (cf. Baecker, 2008: 614). There are still competitions – but they are no longer fought out with the help of arguments. The emotionally personal group identity determines the debate. The processes that come into play here can therefore no longer be grasped with sociological instruments alone (Heidingsfelder, 2020, p. 262).

At this point Parsons speaks of a sphere: "the very fundamental freedom of association [...] may be said to be the normative principle in this sphere" (p. 49), the sphere of community. Contrary to the Habermasian ideal – but in line with the historical facts – this sphere lacks universal accessibility. Concerning the nature of these normative references, Parsons determines the corresponding conception "the normative justification of generalized statements about information or intention – and *not*," he emphasizes via italics, "their empirical validation" (p. 50). Normative justification – which Habermas also puts forward for the sphere as a necessary political influence factor for democracies – is not empirical validation. A climate researcher who warns of the consequences of climate change, even calling it a climate catastrophe, is under pressure to justify her statement because the measures she recommends may have a very considerable impact on the profit margins of companies or, in democracies, on the election chances of politicians. She succeeds in her justification when she makes them correspond to norms that are regarded as binding on both. It is thus not so much a verification of the item 'climate catastrophe' that allows Robertson and Volkmer to express themselves in this way. It is the function of justification. It provides them with "the right to state them without having to verify them" (Parsons, 1963, p. 59). Parsons refers to the level of norms rather than that of legitimation, which pertains to the level of values. There is, for instance, their reputation: the higher the reputation for competence, for reliability, the more 'weight' their statements have. They, just like those of the virologists, are "believed to be responsibly made" (p. 50). The same is true for those of Habermas (especially his US audience holds him dear it seems, see again Hofmann in this issue). And those of Donald Trump? It also applies to him: his supporters grant him the right to make such statements, to express himself irresponsibly as far as the environment is concerned, but responsibly with regard to their needs, without having to verify them. His argument is *America*. He is highly reliable in this respect. His reputation as an 'Americanist' (so to speak) and nationalist stands against the medical reputation of a virologist like Dr Fauci. His refusal to listen to the scientists was his right as a politician, and he was well aware of it. And what right does Trump have to be taken seriously? In the eyes of his followers, every right. Unlike America, facts do not come first here – and this is true for all of us. In other words, the strengths of one's argument is not more important than one's social belonging – one of the backbones of Habermas's public sphere theory. However, because the norm says that the argument, that reason and rationality should be more important, many people – not least scientists – are not willing to give in to this reality. It is here where Luhmann's definition of norms as counter-factual expectations proves to be fruitful. Luckily, there is an alternative to the normative reaction: the cognitive one. Instead of insisting on the norm (“It just has to be true!”), we can learn (Luhmann, 2008, p. 20).

For Parsons, the ‘associational base of influence’ is primarily particularistic, in contrast to the normative reference, which is primarily universalistic (p. 50). As mentioned above, Aristotle’s question (1989, 75B) was whether the gap between particulars and universals can be jumped. His answer: Not just like that. That was as true back then as it is now. As an American, a politician is allowed to talk about the nation’s domestic politics. However, if socialists (Democrats) are not Americans, they lose that right. Biden has much more trouble establishing a pan-American ‘We’ than Trump a particularistic one. “A leader, I suggest, must try to establish a basis on which he is trusted by a ‘constituency,’ [. . .] so that when he ‘takes a position,’ he can count on a following ‘going along with him’ on it [. . .]” (Parsons, 1963, p. 53). Here we find the effectiveness of populism, which reverses the relationship. The populist ‘goes along with them’: that is the position for which he takes responsibility, and only if he does that can he count on a following ‘going along with him’ on whatever they want him to go along with. His base constitutes a ‘We’ in the sense that they have opinions and attitudes in common by virtue of which they ‘stand together’ – against the un-Americans, against the enemies of the American people.

The relevance of Parsons’s considerations is evident not least in his reference to voting behavior. “The broad presumption seems to be that a person will tend to vote with others whom he defines as ‘my kind of people’ and that it is the ‘cross-pressured’ groups which are most likely to break away from this tendency – cross-pressuring being itself a tendency a consequence of the increasing role pluralism of a complex society” (p. 51). The inner demon turns out to be an outer one. The assumption could then be that some of the ‘Trump voters’ are not exposed to cross-pressuring in the same way as the urban elites: “The modern – probably only the modern – city is a prerequisite for publicity in a practical sense because the big city is the social form that considers borders to be bridgeable. So, publicity probably did and probably does exist for educated, economically confident urbanites – and among them, in its academic form, for university students – and for them it still exists. The public sphere of rural-small-town life, as far as I can see, is always privatistic, always particularistic” (Maren Lehmann in this issue). Transferred to the virtual world, the algorithms would have to ensure precisely this cross-pressuring in order to take the step from “math destruction” to ‘math construction’ – namely, the construction of cities instead of small towns.

Despite all the headwinds, science is still considered a trustworthy source with regard to the reliability of the information it provides: its factuality (p. 48). However, there is one important caveat: only as far as reasonable people are concerned. A reasonable person trusts virologists as to the best protective measures against a virus infection, even though she is not in a position to verify the information independently. When it comes to the community of the unreasonable, science does not stand a chance. As we have recently seen, politics has partly succeeded in disputing science’s symbol of intersubjectively compelling consensus. Many people indulge in a scientific aversion that even rejects the findings of epidemiologists and climate scientists in favor of the values, norms and prejudices of ‘their kind of people.’ Some no longer even believe in the truth of scientific results. Therefore, it is high time for sociology to put irrationality alongside Habermas’s theory of communicative rationality instead of continuing to leave its exploration to Facebook *et al.* – and to make the results public. In case you are interested, you know where to find them: right here.

Markus Heidingsfelder, for the editors, April 2021 [37].

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Notes

1. *Panta rhei*, everything is in a flux, Heraclitus (1986, p. 39) informed his contemporaries, so it must have been news for them. Although we know better today and this no longer surprises (= informs) us, it is all too easy to lose sight of it. Valéry (1956) reminded our species at the beginning of the 20th century that 'later civilizations' are no exception from that rule, and Diamond (2005) did it again at the beginning of this one, suggesting that societies have a choice (between failure and success). While this may or may not be true, it is certain that the only thing that saves these structures of relative durability from ruin (or collapse) is their constant renewal in the present.

2. Again with Heraclitus: Different water, same river (1986, p. 9). Which is why Luhmann – my guess is: ironically – claimed that conservatives like him have the chance of a higher culture of reflection *vis-à-vis* the self-proclaimed progressives (2013, p. 303). It cannot be completely denied that he may have been talking about his liberal, i.e. progressive opponent Jürgen Habermas here.

3. *Les mots et les choses* (The Order of Things) by Foucault (1966) can be considered a continuation of Kuhn's study. Concerned with "the suddenness and thoroughness with which certain sciences were sometimes reorganized" at the threshhold of the nineteenth century, "and the fact that at the same time similar changes occurred in apparently very different disciplines" (p. xii), Foucault set out to examine these changes "more closely, without being reduced, in the name of continuity, in either abruptness or scope" (xii). What the self-declared archaeologist of knowledge excavated were different shapes and speeds of change within this fundamental re-arrangement of knowledge – different paces, different levels, different laws – "a combination of corresponding transformations" (p. xiii), of ruptures within the rupture (in the history of knowledge), tracing a general shift which created a new collective perception of factual and normative contexts of meaning: our modern view of things. It is of course not disputed that there are fundamental differences between the two approaches we cannot possibly examine here (but see for instance Weinert 1982, Gupta 1982; Simons 2017). It is nevertheless quite surprising, as Weinert notices, that the convergence between them has gone completely unnoticed, even more so as they they both perform what they write about, breaking with "with the conception of knowledge as one of continuous growth" (1982, p. 336).

4. As we shall see in a moment, he is responding to a similar study on the bourgeois elite of the 17th and 18th century here which also involved an analysis of classical philosophical texts – by Hobbes, Locke and Rousseau – but came to a very different conclusion.

5. Portraying himself, as Maren Lehmann notes in the interview, as a "young hotspur" – a rebel with a cause, so to say.

6. The tension between norms and facts is, in a sense, the central aspect of his discourse-theoretical conception. While this will be discussed in greater detail in the prologue to the interview with Volkmer and Lehmann in this issue, what I would like to point out here is simply that for Habermas, "claims of validity" – which refer to an ideal that can only ever be met in approximations through the continuation of communication – are raised in *every* process of communication. We are thus left looking at yet another 'floating gap' (Jan Vansina). Only that this time it floats between the past of tribal-historical preconditions of agreement and its current realisation, which will never be able to catch up with this past. In contrast, Luhmann's model of communication also presupposes that communication has always already begun, but it does not owe this start to a primarily normative basis. This 'normativization' of communication (more precisely: language) itself is perhaps the most interesting aspect of Habermas's construction.

7. It should go without saying that I cannot go into the differences of the disciplinary approaches – conceptual history here, discourse ethics there – in the context of this introduction. Like Koselleck and Habermas, I am abstracting and thus subtracting such details in favor of an ideal type of scientific conflict. Just like Habermas, it seems, did in his review, who was presumably under some pressure to justify his upcoming alternative account of events: he not only regrets his prejudiced, mutilated reading of Luhmann's theory in hindsight (see the prologue to the interview with Volkmer and Lehmann in this issue) but obviously also having reduced Koselleck to a mere mouthpiece of Carl Schmitt. He at least decided to delete the corresponding last passage in later

reprients of his review; “to reduce the polemical acerbity,” speculates Olsen (2012) “or because he had begun to have a different opinion of Koselleck‘s writing.”

8. An almost Daoist insight. Some of Lao Tzu’s statements do indeed read as if he addressed them to his future student Habermas: “I let go of all desire for the common good, and the good becomes common as grass” and: “Try to make people moral, and you lay the groundwork for vice” (Lao Tzu, 2020).

9. One can get the idea that Habermas is renewing the mediæval political concept of the king’s two bodies here, with the public sphere taking the place of theology, and the *character angelus* (divine character) no longer being the royal power, but that power which the new angels (citizens) grant their government via ‘divine reason’. As strange as this may sound at first: on closer examination, it is indeed this model that Habermas bases his early reflections on, as the goal of political action is the ‘communitas perfecta,’ i.e. to change society as a whole. And although the late Habermas admits that one can learn from systems-theoretical arguments that the steering capacities of politics are not sufficient for complex societies, he only applies them to authoritarian political communities (Czingon et al., 2020, p. 19). In other words, he is not prepared to take this thought to its logical conclusion and face the ‘limits of steering’ that have to do with the fact that the systems of society are steering themselves (Luhmann, 1997).

10. Pierre Bourdieu (1994) will establish the metaphor in sociology and distinguish fields of consumption from fields of production, but also allow for sub-fields (such as literature and art), situating the field of cultural production within the field of power and even speak of the ‘intellectual field of France’ (1993, p. 8).

11. Although nothing that behaves in this way can rightly claim the name ‘nature’ – a word that comes from the Latin *nasci*, meaning ‘to arise, to be born.’ For Plato, eternity – as a mode that is free from all alteration – is the true form of being, the nature of nature. It appears as the opposite of Heraclitus’s *Panta rhei*: Nothing is in a flux. And nothing is being born. It has been and it will always be, that’s the: idea. In this sense, Habermas is not talking about the factual ‘substance’ of the public; what cannot be corrupted is his idea of it.

12. Carmi (2020) has recently offered a detailed theoretical intervention that reconsiders the category of deviation with regard to media, showing the politics behind the production of such categories. Broadening the frame of reference beyond questions of ‘power’ (in the Foucaultian sense) could be promising. What role do for instance money, beauty, truth, even love play in relation to the establishment of media standards and specifically the reproduction of deviant media?

13. Without understanding the word in a pejorative way, the bourgeois public sphere could also be conceptualized as a parasite in the sense of Serres (1987), settling at the border between two forms of society. From this perspective, it appears as an exploiter of possibilities that appear at this point of rupture.

14. He is referring here to Plessner’s definition of the public sphere here as the “sphere of validity of (the) tact,” which Plessner based on the difference between person and role: while diplomatic relations exist between role bearers, those between “natural persons are based on tact” (Plessner, 2018, p. 101 ff., see also Habermas, p. 97, transl. M.H.).

15. As Benedict Anderson (1983) will later show in detail, it is not least this shared experience made possible by the mass media on which the fiction of the nation state rests – as an “imagined community” whose imagination depends on these very media.

16. ! Some observers call this development differently, i.e. this claim about a new form of society is disputed: They argue that the impression of entering a completely new type of society is false – because the consciousness of the scientists making this claim is. “If there is just more information then it is hard to understand why anyone should suggest that we have before us something radically new” (Webster, 2002, p. 259). Webster’s suspicion is that the approaches stressing discontinuity would have ideological character, in the sense of ideology as always being the

ideology of others. For these critics, contemporary society is first of all still a capitalist one oriented toward accumulating economic, political and "cultural capital" (Bourdieu). They acknowledge that network society or information society theories stress some important new qualities of society (notably globalization and digitization), but charge that they fail to show that these are attributes of overall capitalist structures. In this way, Webster for instance distinguishes between different epochs of capitalism: laissez-faire capitalism of the 19th century, corporate capitalism in the 20th century, and informational capitalism for the 21st century. It seems more plausible to apply Schultz' fourth type and assume that reality, i.e. society is in fact changing, but the conceptual world of Marxist philosophy of history is not.

17. This is the somewhat unfortunate translation of §4, entitled "Der Grundriß" – literally: the ground plan – in the English version of his book (1993, p. 27). Interestingly, Luhmann used the same architectural metaphor as the subtitle for *Social Systems*, "Grundriß einer allgemeinen Theorie" – presumably not so much a Habermas, but a deliberate Hegel reference, who had also presented his encyclopaedia of the philosophical sciences "im Grundrisse," i.e. in outline –, but John Bednarz Jr. and Dirk Baecker simply dispensed with it in their English translation.

18. The most recent criticism came from the side of philosophy (Gabriel, 2020). Habermas, it says, ties the accessibility of the public sphere to a historically contingent dimension, which is wrong because the public sphere should not be seen as a by-product of modern socio-economic processes. This attempt to essentialize the public by binding it to 'man' – one can hear Foucault turning in its grave, a concept that he hoped would vanish from the face of the earth or at least: washed from its beaches – is sabotaging itself. Not 'man' has written this critique, but a rather young German professor from a town called Bonn, who represents the by-product of socio-economic and other social, i.e. contingent processes that led him to believe such a public profiling at the expense of *the* recognised German sociologist and philosopher and his most famous concept would earn him the applause of the media. The idea that 'man,' the human subject, is a stable object for human or 'man's, as it were, self-understanding is itself a historical product, as Foucault has shown: 'Man' is an invention, a mere "effect of a change in the fundamental arrangements of knowledge" (1966, p. 387). All statements have a historical component, and may it be one that pleas for a kind of eternal public sphere outside of history, rejecting any historical determination. Anyone who does not link the abstract or conceptual perspective of the public sphere with a historical one – which is what both Habermas and Luhmann do – is at best naïve; she is neither able to grasp the specifics of modern society, because she lacks any point of comparison, nor those of the different forms of publicity. Gabriel's book – as a patchwork of philosophy of language, critique of science, epistemology, hermeneutics, anthropology, ontology – successfully demonstrates its own historical contingency: unfortunately possible, but not at all necessary.

19. This development contributes significantly to what Hans-Georg Moeller sketches as profilicity in this issue; however, he does not see profilicity as a product of digitization. Instead, he derives profilicity from Luhmann's concept of second-order observation as something that has always existed, but has become enormously widespread and deepened in modernity. To exaggerate his thesis: profilicity does not flourish because of the new media, but the new media flourish because of profilicity; it is one reason why digitization has been so phenomenally successful.

20. This does not mean, of course, that Kant (*2*020) was averse to the idea of teleology. In his general history of humanity he on the one hand acknowledges the disorderly, self-organizing chaos of human history, but on the other hand subordinates a goal to it, believing – he says it explicitly: hoping – that it submits to a plan of nature, that the seeming chaos will probe to be a 'steady development of the original predispositions' ("stetig fortgehende Entwickelung der ursprünglichen Anlagen").

21. However, six years earlier he sounded more confident and hopeful about the unravelling of such strange causalities. Even if human beings proceed without a plan of their own, he speculates in his *Idea for a General History of Mankind with a Cosmopolitan Intention* (2020), perhaps a plan can still be distilled from it. After all, any departure from the teleological doctrine would not leave behind a lawful nature, but only a "purposelessly playing" one, and the (comforting) guide of reason would be replaced by a "disconsolate approximate." His answer: "Man wants concord; but

nature knows better what is good for her species: it wants discord." (Kant, 2020, transl. M.H.) Kettemann would thus have encountered in Kant's teleology the opposite of what he hoped to find there: a society-immanent télos that prescribes us to seek conflict.

22. The difference to the recent past is that today, especially in the USA, the dissatisfied voters are no longer willing to return to their diffuse trust in the system afterwards (Lange, 2003, p. 131). For a large part of the political public, to relate to politics only by means of this one 'valve function' does not seem enough. Populism gives in to this need for direct contact of the public with politics, instead of preventing it, for instance in the form of rallies or a 'contract with the the voter.' It thus deprives politics of its important buffer function: the absorption of individual interests. If this absorption no longer succeeds, the legitimacy of the *generally* binding decisions is called into question. The decision-makers of the Biden administration would only bind the Biden voters. In this sense, the questioning of the legitimacy of the 2020 US election is a logical consequence of the populist idea and no Trump idiosyncrasy.

23. Although propaganda and the mass media have been accused of manipulation, brainwashing audiences, etc., this thesis could never be empirically proven – but it has proven to be a grateful topic for Hollywood, with which the same masses could be thrilled. Even if we assume that this mass manipulation was a reality, it would no longer work today. It could be more fruitful considering the manipulative aspects of the public sphere theory by Habermas instead. Based on the distinction manipulation/criticism, and written with the intention of manipulating public opinion, it, in turn, accommodates hopes of manipulation on the side of criticism. For, according to Luhmann, critical reason wants to assert itself in public opinion against other interests (Luhmann, 2002, p. 288).

24. Nobody will deny that we are dealing with a lab, and a huge one at that: "No researcher had ever worked in a human laboratory of this scale." (O'Neil, 2017, p. 180). Facebook's excuse why they did this experiment on their users is hypocrisy in the best political sense: it was all about welfare, i.e. their users' well-being. "In 2011, there were studies suggesting that when people saw positive posts from friends on Facebook, it made them feel bad. We thought it was important to look into this, to see if this assertion was valid and to see if there was anything we should change about *Facebook*" (Schroepfer, 2014).

25. Günther (1979) had certified Habermas a "poverty of systematic problem perspectives," and also accused him of a kind of class perspective on science: Whoever assumes scientific rank as Habermas does, and distinguishes between the historical-hermeneutic science here, and the analytical or experiential science there, is a religious believer. What is wrong with assuming, he asks, that they could complement each other? (p. 164) According to Günther, Habermas is diligent, but belongs to a tradition irrevocably abandoned to decay, "which only lives where it can work with outdated ways of thinking," wallowing in a "vague, mystical depth" (p. 170). I would not deny Günther's writings themselves a certain mystical quality, but I agree with him that we should focus on surfaces (phenomena) instead.

26. Horkheimer (2013) saw this cruelty at work in the Nazi regime, observing an "eclipse of reason" in modern society, distinguishing true reason from its corrupted version, instrumental reason, the label that Habermas tried so hard to attach to Luhmann's theory by calling it a "social technology" (Habermas and Luhmann, 1971). It is a track that Koselleck also pursues in *Critique and Crisis*, where he focuses not only on how concepts of rationality are instrumentalized but also on the other Kantian concepts so important to Habermas: morality and equality.

27. A duel that in this case does not take place between equals, but between professors and students, which – according to Stichweh (2010, p. 10) – has today gained even more sharpness due to the end of the university as a 'communitas': Here the teacher who wants to win over students for the fascination of reflection and research; there the student who demands a certain service in order to increase her human capital.

28. Luhmann rightly points out that the reality is often different, that not everyone who criticizes academic texts has their own truth proposal on offer. Here is one example from one of the many 'duels' that took

place during the production of this issue of *Kybernetes* fulfilling that requirement: "The paper presents its take on Luhmann appropriately, yet it misses the important point that Kant's or Habermas's 'general public' is systemic as well, its system reference not being one of the functional subsystems of society but the system of society itself. The paper mentions society but does not accord it any systemic value. I doubt, moreover, that the issues at hand for second-order observations of economy and polity are, respectively, profits/losses and winning/losing power. Instead, the competition among their publics regards, respectively, prices/qualities/images and issues/themes/problems."

29. When one of the most prominent German representatives of virology (Christian Drosten) faced an attack by a powerful national newspaper, scientists stood together and focused on the evidence: "In my opinion, the new version of the study (by Christian Drosten, M.H.) convincingly incorporates the comments that were made on the statistical analysis of the first version," assessed Christoph Rothe, statistician from the University of Mannheim at the request of the German Press Agency after a first review of the revised results. Rothe was one of the researchers who had criticised the statistical methods in the original analysis. The statistician Dominik Liebl from the University of Bonn also considered the statistical part of the revised study to be significantly improved. According to Liebl, the methodological part of this analysis was not perfect; and the basic message of the first version of the preprint remains, it is essentially the same in the new version. However, he adds, the authors have further improved their preprint with the help of criticism from the scientific community. "So the team of science works and this is perhaps the only good news in a story that should not have been one" (RND, 2020, transl. M.H.). Business as usual. It was precisely this 'ordinariness' – the peer review process – that the German newspaper had scandalized, misjudging the function of conflict in science.

30. The hypocrisy of journalists that there is no hypocrisy has made it easy for the opponents of mass media – a hypocrisy that is reflected in the form of professional ethics, "which allows journalists to understand their efforts as a service to the public and [...] as a reason for neutrality of interests" (Luhmann, 2000, p. 106). Of course, it is good that the media try to litigate forms of self-control in this way. It can therefore do no harm to imagine that they are independent of the wishes of their audience, that making media is about providing the citizens of the state with relevant information, that they can therefore fulfil the role Habermas has in mind for them, that they are independent, whatever interest groups there may be. In fact, they have not much of a choice here, because when they reflect on the representation of publicity, they reflect on their own function – secrecy and hypocrisy are therefore not available here, or only in the form mentioned above. They should not be surprised, however, that this hypocrisy becomes the subject of discussion in the same public sphere.

31. When Trump bought and sold alliances, he acted – from a businessman's point of view – highly rationally. But not from the perspective of politics that processes a different form of rationality (Heidingsfelder, 2020a, p. 125 ff.). Up to this day, Luhmann notes, business benefits from this in legitimizing its self-description on the basis of assumptions about the rationality of its decision-making practices (2012, p. 110 f.). In the words of the late Habermas, who has integrated some systems-theoretical insights into his thinking: "This deafness to the social, natural and cultural environments is precisely the basis of its political blackmail potential" (Czingon/Diefenbach/Kempf, 2020, p. 21, transl. M.H.).

32. For the comprehensive social system of world society, especially for its organizations and professions, rationality weighs most heavily. Although society cannot provide its subsystems, through norms, rules, directives, "the epithet of rational "(Luhmann): if we wish to understand how the context is reproduced for other system rationalities, we need to look at the comprehensive social system of world society – and its forms of respecifying overly general criteria, organizations and professions – first (Luhmann, 2012, p. 110f.).

33. As Aristotle(1989, 75B) emphasized, with recourse to the metaphor of the sphere: evidence within a scientific system (sphere) cannot without further ado be transferred to other systems (spheres). His exceptions: geometrical demonstrations apply to mechanical or optical demonstrations, and arithmetical to harmonical). But that is not even necessary. We can do what distinguishes us modern people as

modern (and what sometimes causes us such trouble). With Kierkegaard (2005) and Van Halen: We might as well jump. The last contribution of this issue by Robin Robertson stands for such a 'jump' from one sphere – the so-called humanities – to another, the natural sciences. If the earth continues to warm up, her message to the social theorists can be translated, there will soon be no more society that can be theorized about. We must therefore set other priorities and turn our attention away from imaginary spheres to the real ones composing Earth's environment: atmosphere (gasses surrounding Earth), biosphere (living portion of Earth), cryosphere (frozen portion of Earth), hydrosphere (water on and in Earth) and lithosphere (solid portion of Earth that is not frozen water) – spheres that are currently shifting due to climate change, with the shifts particularly impacting the biosphere, cryosphere and human society. Volkmer and Sharif (2018) have responded to this call. They describe the shift in their book *Risk Journalism between Transnational Politics and Climate Change* – and "call for urgent policy approaches to minimize further implications on a global scale."

34. However, the fact that Luhmann did indeed deal with Habermas's critique here and there is vouched for, and can be demonstrated, for example, with regard to a merely phenomenological determination of the category of meaning, which Habermas had rejected as unsatisfactorily, at least measured against the claims of systems theory. Luhmann: "The objection has occupied me ever since" (1992, p. 110, transl. M.H.).

35. Larry Kudlow demonstrates how it is done: "I'm not denying any climate change issues, George. The issue here though is magnitudes and timing" (Heidingsfelder, 2020a, p. 275).

36. The Macaque researchers attribute this to the anxiolytic effect of oxytocin, which probably is upregulated during cooperative interactions with closely bonded individuals. Psychological research on whether this 'moral molecule' may change political preferences and make people care about a political candidate from another party showed an interesting result: "We found that Democrats on oxytocin had significantly warmer feelings toward all Republican Democrats than did Democrats who received a placebo … For Republicans, nothing" (Zak, 2012). Zak's peers have since helped him overcome his narrow-minded vision of oxytocin as a 'hug hormone' in favor of a more complex description (see for instance Quintana *et al.*, 2019).

37. Special thanks the Emerald team: Sallie Gregson, Suraj Singh, Aaditya Cenveo, to Dirk Baecker and Jesper Tække for helpful suggestions, and last but not least Elexis Ellis for her editing.

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