

“MEDIALITY”.

SOME FUNDAMENTAL QUESTIONS ON THE THEORY AND HISTORY OF MEDIA¹

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The article looks at basic questions concerning mediality, which it defines as a common attribute of techno-anthropological means of representation and communication, as developed and developing through mutual interaction, such as to give rise to a particular environment in which certain forms (of sense) can be distinguished. Among the basic questions of mediality and media are thus also those of whether and to what extent media conceptualize their own history and development. The study presents – primarily from the perspective of the theory and history of literature and art – a critical overview of media theory, starting with the ideas of Friedrich Kittler. It compares these with certain aspects of Marshall McLuhan’s thought, pointing out a conflict between the concept of an escalating development of media towards a closed cybernetic loop, and the concept of media as an evolutionary extension of human senses. The rhetorical and stylistic aspects of Kittler’s perspective are interpreted through Bürger’s (and Benjamin’s) thesis of the melancholic dimension of modernism. The basic principles of Niklas Luhmann’s theory of systems are analysed as a stimulus for thinking about mediality, together with his concept of a system of art as a functionally differentiated social system, historically established with the dawning of the modern age. We also pay attention to the intermedial research carried out by Lars Elleström and his description of a system of modalities, which sets up a new frame for approaching media. Elleström’s model enables us to reflect on media from many varied perspectives (such as mass media studies, new media, film media, film science, art history and theory, literary criticism, etc.), yet does not cover sources of media dynamics; these may relate to a certain gap or difference that enters the

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relationship between consciousness and communication, technology and the body, technology and the senses, and seems to set in motion the development of these constantly changing techno-anthropological tools.

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Mediality can be understood as a general attribute of the processes of mediation (of meaning, information, data and perceptions) as manifested on the basis of the common characteristics of media in the broad sense: the historically ever-present techno-anthropological means of representation and communication developed and developing through mutual interaction; in other words the creation, preservation, transmission and manipulation of data, which at the same time give rise to the environment itself within which certain forms (of sense) can be distinguished.

If we agree on this seemingly superfluous definition outlined above – the means (“media”) which create the environment (“the medium”) – we begin to see questions and areas that the theory of mediality, rather than just that of “media”, relates to. To what extent do media create and recursively transform what we call history? To what extent do media grasp and record their own history and development? How much does the visibility of the content and form that the medium mediates depend on making the medium itself invisible? What makes up the materiality of the medium: its material boundary, where the medium encounters the senses; the long-term sociocultural practice and institutions that concentrate and regulate the rise of media creations; the physical-chemical processes that take place beyond the senses of perceptible form; the technological apparatus of the medium – the algorithms and protocols that make up its functioning; the epistemic conditions that form the continuity of the medium, and its development? Are there any common characteristics of media *in abstracto*, and if so what are they? Is it even possible (or necessary) to establish a definition of all media? Are there repeating patterns and a historical dynamic of differentiation of old and new media?

Any theory of mediality that is based on the definition of media as predetermined by their present state and by their socio-technological development will always be a step behind. The influential seminal and controversial works of

Marshall McLuhan and Friedrich Kittler proceed, rather, in the opposite way: they look for the principles of the functioning and development of these special, environment-creating means, while at the same time they want a reflection of the media that is always a mediated reflection – a work independent from the traditional disciplines with which they work, and from the thematic areas with which the fields of philosophy, aesthetics, literary criticism, historiography, anthropology, psychology, biology or the positivistic history of technology are concerned. That said, it is not unimportant that the professional background of both these thinkers was in literary criticism and philosophy. Marshall McLuhan (1911–1980), a Canadian, studied English at the University of Manitoba and subsequently at the University of Cambridge, where his teachers were I. A. Richards, F. R. Leavis and E. M. W. Tillyard.² In his doctoral thesis, completed in 1942 (but only published in 2006) he focused on the work of the English Renaissance dramatist, pamphleteer and satirist Thomas Nashe, and in particular on the polemic of the period concerning the tension between rhetoric on the one hand and grammar and dialectic on the other, and on the reduction of the disciplines of the *trivium* in line with the teachings of the French humanist Peter Ramus. The transformation of the university curriculum, according to McLuhan, resulted in a revolution in European thinking in examining the identity of rhetoric (McLuhan's student, Walter J. Ong, considered Ramus' reformation of the *trivium* in a similar way, albeit directly connected to the role of print technology) and in the relationship between words (*verba*) and things (*res*). This was a revolution which fundamentally distanced Renaissance thinking from modernity, and whose media consequences (the impossibility, and at the same time the urgent necessity of interpreting the tension and special relationship between words and things for the modern age as a relationship between the media and the message) McLuhan realised only later.³ Friedrich Kittler (1943–2011) graduated in German studies, Romance philology and Philosophy in Freiburg, and his early work, influenced mostly by the works of Lacan and Foucault, was dedicated to canonical authors such as G. E. Lessing, F. Schiller and J. W. Goethe.⁴ This philological and post-structural genealogy left its mark on

2 MARSHALL MCLUHAN, *Člověk, média a elektronická kultura* [*Man, Media and the Electronic Culture*, Eng. edition: *Essential McLuhan*], Brno 2000, p. 5.

3 JOHN GUILLORY, *Marshall McLuhan, Rhetoric, and the Prehistory of Media Studies*, *Affirmations: of the Modern* 3/2015, <www.affirmations.arts.unsw.edu.au/index.php?journal=aom&page=article&op=view&path%5B%5D=81&path%5B%5D=85>, accessed June 22, 2016.

4 FRIEDRICH KITTLER, *Gramophone, Film, Typewriter*, Stanford 1999, p. XXI; FRIEDRICH KITTLER, *Optical Media: Berlin Lectures 1999*, Cambridge 2010, p. 1.

Kittler's thinking with special dynamism, signifying a sharply negative reaction towards the residual nature of the technologically blind intellectual tradition of the human sciences (*Geisteswissenschaften*). Despite the fundamental differences between these two scholars in the basis and peripeteia of their ideas, they agree with each other at those times when from the perspective of the problematics of media their goal is to bridge, or alternatively to rework various differences in the origins of the natural, information and socio-humanistic sciences.

Let us look, for example, at Kittler's famous sentence from his work *Draculas Vermächtnis. Technische Schriften*: "Nur was schaltbar ist, ist überhaupt" – "Only what is switchable, is at all".⁵ Kittler certainly has in mind here the necessity of transforming traditional ontological questions through knowledge of the technological processes taking place behind the media. However, we should also notice that this is about existence in the sense of the possibility of something being switched on, that only a thing that "has a switch" exists. And this in turn implies a state of being switched on and a state of being switched off. But what does the moment of "switching" imply? Whatever there is, i.e. whatever is perceptible, thinkable, recordable and/or repeatable, appears as such against the background of everything that has *no* determined value, address or parameter: pure chance, chaos, formless nothing, the absolute absence of data, noise. According to Kittler, the technical media – in various ways, through their limits and the mutual differences in what they can record – let us know about that which we can never know, for which Kittler borrows Lacan's concept of the *real*. Reality, if we are to know about it, needs to be "switched on", and whatever is real plays out on the level of mathematical and technological protocols and algorithms. For Kittler, then, human senses are definitely not media; rather, they are linked to the technicity of media as their feedback. One of the key methodological sources of this approach is Claude Shannon's "Mathematical Theory of Communication" (1948). Noise figures here as something that cannot be avoided in technical transmission, but that can, with the help of algorithmic operations, be incorporated into the capacity of the channel and so be quantified. It is precisely the possibility of quantifying noise, which is nothing but the *real*⁶, that gives media and technology the

5 FRIEDRICH KITTLER, *Draculas Vermächtnis. Technische Schriften*, Leipzig 1993, p. 182.

6 This equation is controversial; it would be more accurate to consider noise as a "symptom of the real".

advantage over the human subject with all its processes of consciousness, cognition and sense categories. From this point, Kittler's theory sets off in a radical direction. It is no longer based on the concepts of sense, meaning, representation, mimesis etc., but rather on the concepts of signal and noise, and analyses of the very different technical reality of the creation of data and their "recording" within various media. In this way Kittler can write an archaeology of "discourse networks" (*Aufschreibesysteme*, or, literally, "systems of writing down") and follow the breaks in the evolution of methods of generating data and data flows, which is a process that paradoxically drives itself forward, within which the individual stages link to each other causally, and which cannot be reversed.

One such break is that historical moment at the end of the nineteenth century when new analogue technical media first appeared that enabled data to be recorded and/or replayed (i.e. more than just information) in real time: the phonograph, the gramophone and film. In other words, according to Kittler there was a collapse of the monopoly of writing and its system, which is exclusively symbolic.⁷ "Writing, however, stored writing", writes Kittler, "no more and no less".⁸ In a chirographic and typographic civilisation, everything that had to exist must have passed through a limited system of graphemes, "through the bottleneck of the signifier":⁹ the endlessly varied reality of the senses was subjected to a graphic-syntactic segmentation so that within it – within the technology that enables the re-evocation of the data flow – "words quivered with sensuality and memory".¹⁰ At the moment the phonograph appeared, the symbolic system of writing collided with the capability of this harmless-looking invention to record and replay the physical effects of the real: acoustic frequency curves on the phonograph cylinder, which, however, is also a method of recording. This difference can again be described with the help of the distinction between noise and information: it is now possible to record sounds which do not fall into a recognisable symbolic system (such as an unknown language or the sounds of some exotic music that cannot be captured by traditional methods of notation); it is possible to replay the voices of the dead; the direction of the data flow can now be reversed, and in so doing the *effect* of pure noise that cannot be detected by simple senses is made present. According to Kittler, this manipulation of the

7 F. KITTLER, *Gramophone*.

8 F. KITTLER, *Gramophone*, p. 7.

9 F. KITTLER, *Gramophone*, p. 4.

10 F. KITTLER, *Gramophone*, p. 10.

time line has a greater significance than the earlier discovery of photography,¹¹ in which the effect of the real is also imprinted in the chemical layer on the silver substrate. And for this reason, film – a sequence of images, through whose mechanical acceleration the optical illusion of movement arises – is of comparable significance: for the first time, it is possible to see the *imaginary* of the movement of the human or animal body. In the spirit of Kittler's observations it is also possible to say that psychoanalysis could only have arisen after the invention of film and the phonograph. In a similar way, the "oral history" and "primary orality" by Walter J. Ong¹² are revealed "only after the end of the writing monopoly, as the technological shadows of the apparatuses that document them [on magnetophone tapes]".¹³

As Kittler points out: "It is no coincidence that Lacan recorded infants' jubilant reactions to their mirror images in the form of documentary footage. Finally, of the real nothing more can be brought to light than what Lacan presupposed – that is, nothing. It forms the waste or residue that neither the mirror of the imaginary nor the grid of the symbolic can catch: the physiological accidents and stochastic disorder of bodies. (...) Film was the first to store those mobile doubles that humans, unlike other primates, were able to (mis)perceive as their own body. Thus, the imaginary has the status of cinema. And only the phonograph can record all the noise produced by the larynx prior to any semiotic order and linguistic meaning. (...) Freud's patients no longer have to desire what philosophers consider good. Rather, they are free to babble. Thus, the real – especially in the talking cure known as psychoanalysis – has the status of phonography."¹⁴

It can be said, then, that the real is not accessible to human senses, however it does show through media as that thing which cannot be made symbolically present. For Kittler, the history of media has its beginning and its end. It begins with symbolic segmentation, with the spatialization of the flow of speech via the medium of writing, and it ends at the point when it is possible to convert analogue data to digital (plus and minus binary values, with no interspace

11 See especially WALTER BENJAMIN, *Malé dějiny fotografie [Brief History of Photography]*, in: *Co je to fotografie?*, (ed.) Karel Císař, Prague 2004, pp. 9–19; WALTER BENJAMIN, *Umělecké dílo ve věku své technické reprodukovatelnosti [The Work of Art in the Age of its Technical Reproducibility]*, in: *Výbor z díla I. Literárněvědné studie*, (ed.) Martin Ritter, Prague 2009, pp. 299–326.

12 WALTER J. ONG, *Technologizace slova: mluvená a psaná řeč [Orality and Literacy: The Technologizing of the Word]*, Prague 2006.

13 F. KITTLER, *Gramophone*, p. 7.

14 F. KITTLER, *Gramophone*, pp. 15–16.

between them) and back into digital hypermedia, the first stage of which is the Turing machine. These invisible processes of breaking down data into an endless sequence of two values and their reassembly, which takes place at a speed beyond human perception and experience of time, do not, according to Kittler, just define our situation, but also merge with history: “If the film called history rewinds itself, it turns into an endless loop”.¹⁵ The subject of this Kittleresque history, then, is no longer humankind, but rather the media technologies themselves, whose evolution is escalating in nature. For Kittler, media invent themselves; thus, the last people who “wrote” the development of digital technology were the engineers who, at the beginning of the 1970s, unfolded several dozen square metres of blueprint paper in the Intel laboratories in order to construct the hardware architecture of the first integrated microprocessor. All other microprocessors were subsequently designed using microprocessors.¹⁶

Sybille Krämer has pointed out the penetrating, but also problematic implications of Kittler’s theory,¹⁷ of which at least two (of the latter) are worthy of attention here. First of all, with the digitalisation of data the truly significant processes by which, with the help of cultural technologies, reality is formed, play out beyond the reach of human senses. Thus Kittler claimed that the phase of phenomenological thinking and aesthetic experience was overtaken by history; this means the end of phenomenology and also the end of art based on *aesthesis*. What has remained is a by-product of the existence of bits and optic cables: the digital environment, interface, entertainment. In the introduction to his book *Optical Media* Kittler remarks that his “insane and probably impossible task”¹⁸ is to do for media what Hegel did for aesthetics: describe a system that is not just of art, but rather of art and media at the same time – under the conditions, however, in which this system progressed towards its end, just as the recording monopoly of the book did in Hegel’s time, which (as Kittler asserts) came to its end with the first public presentation of photography. Secondly, Kittler’s vision presupposes a new kind of *operative ontology*, whose being consists in the logic of technological processes that relate only to formal computational systems. Digitalisation is, therefore, a modern form of a universal language.¹⁹

15 F. KITTLER, *Gramophone*, p. 4.

16 FRIEDRICH KITTLER, *Literature, Media, Information Systems: Essays*, London 1997, pp. 147–148.

17 SYBILLE KRÄMER, *The Cultural Techniques of Time Axis Manipulation: On Friedrich Kittler’s Conception of Media*, *Theory, Culture and Society* 23/2006, pp. 93–109.

18 F. KITTLER, *Optical Media*, p. 26.

19 S. KRÄMER, *The Cultural Techniques*, p. 108.

We may add one hopefully important observation to this: Kittler's theory itself intentionally chooses the "archaic" media form of writing (and of the lecture, cf. Kittler's commentary in his book *Optical Media: Berlin Lectures 1999*). By its very nature, however, it can only describe the conditions of the end of meaning, not its own meaning. Kittler's prophetic style, the nature of which we shall assume has been sufficiently delineated in the extracts above, thus appears as an intentional medial choice related to the history of writing and literature – and can even be interpreted as that aspect of modernism for which Peter Bürger (*Theorie der Avantgarde*, 1974) advocated, after Walter Benjamin, the term 'melancholic'. Kittler's literary-critical contribution²⁰ leads to establishing such coordinates where it seems impossible to interpret literary texts in any other way than as symptoms of media-technological development, i.e. through extracts and random passages about numbers and symbols. Kittler does not just abandon the traditional aesthetic forms (form, genre, theme) and semantic categories of meaning, but also any attempt at the reconstruction of "authors" and (their) "works". We could, however, also see this differently: this aspect of Kittler's *écriture*, from a certain perspective, falls into a poetological key – one that is melancholic, finding fertile soil in allegorical figures ("the film called History" etc.) and fragments.

As far as Kittler's methodological reflections are concerned, it is worth mentioning what he has absorbed, and how he has deviated from the work of Michel Foucault. Kittler accepts Foucault's defining theoretical steps, through which historiography is transformed into the reconstruction of discontinuous strata that form, in different epochs, the different conditions of enunciation, and subjects them to specific criticism. Approaches and concepts such as the archaeology of knowledge, episteme and discourse analysis are, in his opinion, created (from the point of view of Foucault's own time) by an anachronistic projection of an alphabetical universe in which the concept of media does not yet exist. This is why, according to Kittler, Foucault's analyses reach no further than the mid-nineteenth century; this is why Kittler entitled his habilitation thesis "Discourse networks" (*Aufschreibesysteme*)²¹ and examined in it the sharply differing key dates of 1800 and 1900 (Kittler 1985); and this is why he is writing an "archaeology of the present". "Even writing itself, before it ends up in libraries,

20 NIELS WERBER, *The Disappearance of Literature: Friedrich Kittler's Path to Media Theory*, Thesis Eleven 1/2011, pp. 47–52.

21 This is also why the established English translation "discourse networks" seems only a rough approximation of the original "systems of inscription" or "of writing down"; Kittler wants to move beyond Foucault's "discourse".

is a communication medium, the technology of which the archaeologist simply forgot. It is for this reason that all his analyses end immediately before that point in time at which other media penetrated the library's stacks. Discourse analysis cannot be applied to sound archives or towers of film rolls".²²

Despite a certain continuity with Marshall McLuhan's work, Kittler's thinking differs from that of the founder of media studies in fundamental ways. McLuhan's view is foundational for the subject in the sense that he does not consider media to be just the sum of all existing media. One of his well-known theses states that media are the extensions of man, of the human body – prosthetic augmentations of the sense organs. This extension of the senses becomes the dynamic of techno-anthropological development, whereby technology on the one hand, and the human body on the other join together and separate as the objects of co-evolution, while at the same time they remain independent entities.²³ Technical media broaden the human sensory universe, wherein human organs both "extend" and "amputate" to the same degree (e.g. contact lenses correct the dysfunctional eye, but at the same time fix the specific visual defect). McLuhan's definition of media is necessarily broad and along with television and printing it also contains the bicycle, money or the light bulb. From Kittler's point of view, McLuhan penetratingly observed that the content of one form of media is always another form of media²⁴: the content of printing is the written word, the content of the telegraph is printing, and so on (cf. J. D. Bolter & R. A. Grusin's concept of remediation; see also W. J. T. Mitchell: "all media are mixed media, combining different codes, discursive conventions, channels, sensory and cognitive modes").²⁵

- 22 F. KITTLER, *Gramophone*, p. 5. Kittler's theory then opens critical perspectives on the approach of *the new historicism*, which took inspiration from Michal Foucault. Which archival works, data storage protocols, media, archival and material technologies enable and motivate the selection and (typically for the new historicism) juxtaposition of literary and non-literary texts? With the help of which cultural technologies will we build historical awareness? And how does the technology of "memory" appear in the historical text? Is it not, in the final analysis, a great weakness of the new historicism that it did not recognise that the codex, the manuscript, the book or the text are among the many types of recording media by means of which an observable and reflectible reality is constructed? That the written text remained its model for the historical record, that methodologically (not materially) it remained mono-medial?
- 23 On McLuhan's central position between Kittler's technological anti-humanism and physical-material post-humanism, as represented by e.g. N. Katherine Hayles, see *Critical Terms for Media Studies*, (eds.) W. J. T. MITCHELL, MARK B. N. HANSEN, Chicago 2010, pp. XII–XIII.
- 24 MARSHALL MCLUHAN, *Jak rozumět médiím [Understanding Media]*, Prague 2011.
- 25 W. J. T. MITCHELL, *Picture Theory: Essays on Verbal and Visual Representation*, Chicago 1994, p. 95.

It is possible to observe this right up to today's hypermedia, which, according to Kittler, make the concept of media (in the great arch of 'History') superfluous. Nevertheless, Kittler's condemnation of McLuhan's understanding of media is telling: "Only McLuhan, who was originally a literary critic, understood more about perception than electronics, and therefore he attempted to think about technology in terms of bodies instead of the other way around".²⁶

Thinking about media has proliferated and become more differentiated since the time of Marshall McLuhan, for whom media are the extensions of man, and of Friedrich Kittler, who arrives at his penetrating insights on the basis of the premise that the guiding principle of history is not man, but rather media technology. During this process, the idea of mediality has become especially important within the broad field of German *Medienwissenschaft*²⁷ that emerged from Kittler's early *Medienanalyse* and broadened out into the investigation of cultural techniques (*Kulturtechniken*) up to the contemporary philosophy of media or media anthropology; cf. also some approaches within the context of new media and intermediality. It is not just the investigation of mediality as the general condition of thought, cultures and the phenomenality of the world that appears especially challenging from the perspective of philosophy and aesthetic thinking, but also the search for connecting links and for meaningful differentiation among the most varied types of media, from art forms through to mass communication and digital media.

Access to the first of the thematic groups just mentioned is enabled from the depths of the traditions of predominantly continental philosophy by, for example, a concept such as Derrida's thinking on archi-écriture (archi-writing), which lies beyond (or previous to) the semiotic dualities of image and word (J. Derrida; M. Petříček); or by the negative theory of media, for which the mediality of media itself resists shaping and immediate observation, which is to say that this phenomenon remains linked with negativity, with the trace, with the moment of outage (D. Mersch; J. Vojvodík). One original theory, which ap-

26 F. KITTLER, *Optical Media*, p. 29.

27 Cf. BERNHARD SIEGERT, *Cultural Techniques: Or the End of the Intellectual Postwar Era in German Media Theory*, *Theory, Culture and Society* 6/2013, pp. 48–65; *Medienwissenschaft. Východiska a aktuální pozice německé filozofie a teorie médií* [*Medienwissenschaft. Foundations and Current Positions of German Philosophy and Theory of Media*], (eds.) KATEŘINA KRTOLOVÁ, KATEŘINA SVATOŇOVA, Prague 2016.

proaches mediality from well outside the established lines of philosophical and sociological thought, is systems theory. Its basic principles of examining societies and their communications media and forms were first proposed by Niklas Luhmann. Luhmann's idea is that of a conceptually comprehensive project that works with the impulses of non-Aristotelian (operational) logic (G. Spencer-Brown), cybernetics (H. von Foerster) or the theory of organisms (H. R. Maturana, F. J. Varela). It is, however, also capable of linking them with the history of philosophy and theories of society in such a way that in so doing their classic themes (matter and substance, consciousness and communication, etc.) are subjected to a significant reassessment. Luhmann's theory is developed at the levels of a general theory of systems, a theory of the social system and a theory of the individual systems of modern society (law, economics, art, religion, science, education, politics, personal relations). In his description of these various fields he combines a triple perspective: firstly, communication (the autopoiesis of society within a network and with the help of a network of communications); secondly, systemic (autopoiesis of a system with the aid of self-observation and distinguishing between the system and the environment); and thirdly, evolutionary (development of autopoietic systems with the aid of internal differentiation and variation, selection and stabilisation of elements and structures).²⁸

For Luhmann, the fundamental starting point is the differentiation of the system toward its environment: the system is not identity, but difference. He conceives of biological, social and mental systems as autopoietic, operationally closed, recursively self-creating networks of elements (the concept of autopoiesis is created by diverging from the Aristotelian tradition and the dichotomy of poiesis and praxis). Nothing may enter such a system that is outside this network of self-reactions – no external element. A system can only react to its environment by means of its own elements (its own “programme” for creating them), i.e. with the aid of the system/ environment difference. Social systems, i.e. societies, and mental systems, i.e. consciousness, share a universal medium (here, for the first time, we see the relevance of the concept of media), which is meaning (*Sinn*). At the same time, however, they are consistently separated in the way

28 NIKLAS LUHMANN, *Essays on Self-Reference*, New York 1990; NIKLAS LUHMANN, *Die Kunst der Gessellschaft*, Frankfurt am Main 1995; NIKLAS LUHMANN, *Die Gessellschaft der Gessellschaft*, Frankfurt am Main 1997; NIKLAS LUHMANN, *Art as a Social System*, Stanford 2000; NIKLAS LUHMANN, *Láska jako vášeň; Paradigm lost* [*Love as Passion; Paradigm Lost*], Prague 2002; NIKLAS LUHMANN, *Sociální systémy. Nárys obecné teorie* [*Social Systems. An Outline of a General Theory*], Brno 2006; NIKLAS LUHMANN, *Theory of Society*, vol. 1, Stanford 2012; NIKLAS LUHMANN, *Introduction to Systems Theory*, Cambridge 2013.

indicated above, i.e. they function towards themselves only as a *component of their environment*: it is for this reason that a social system can only communicate by communication (message), not by consciousness. The same is true in reverse: only through consciousness, not communication, can a mental system think. The system/ environment difference is written into these systems in the same way as the relationship between the past and the future, through which, according to Edmund Husserl, a consciousness of temporal continuity is formed (by the mutual relationship of protension and retention shaping a continuous movement of the horizon of meaning).

The basis for the organisation of social systems is, therefore, communication – a communication event having arisen within the structure of all possible (contingent) communication events (the concept of contingency is that of something that is neither impossible nor necessary). For consciousness, this principle is the thought that is always already a continuity of the past and the anticipated (*cf.* the connection above with Husserl's phenomenology, whose analysis of the shaping of meaning by consciousness Luhmann considers to be the first appearance of the autopoiesis of consciousness in the history of European thought).²⁹ The living motivation not just of evolution, but of the very existence of systems, is the attempt to prevent its immediate interruption when face to face with that limitless randomness which represents everything else: the system drastically reduces the complexity of the environment to the pure continuity of its own elements, and this is constantly being created using observation of the environment and observation of oneself as the observer (second-order observation). This reduction is enabled by operations carried out exclusively with the help of their own binary code: for example, the distinction between communication/non-communication. If the complexity of the environment increases, the increasing noise of the environment is reduced by the self-organisation and internal differentiation of the system: thus, in historical eras we arrive at the founding of those functionally different subsystems of modern societies which were referred to above and to which the system of art also belongs.

The concept of media here does not refer to the material bearer of meaning or to the means of communication, albeit that for these cases Luhmann uses the roughly analogous concept of “dissemination media” (*Verbreitungsmedien*). The “medium” functions as the flip side of the coin, the clear contrast to “form”, as a medium in which forms are discernible. So, for example, the indistinguishable and endless variations of tone and sound on the one hand, and the phoneme – an

29 Cf. N. LUHMANN, *Die Kunst der Gesellschaft*, p. 22.

invariant bundle of distinctive characteristics – are related to each other: this is the relationship between medium and form. However, a level higher, and entirely in the spirit of Saussure’s concept of language, the situation changes: now the phoneme becomes part of a chain which creates form, i.e. a morpheme, against the background of the medium of a linguistically amorphous sequence of phonemes and in contrast to the limited number of formable morpheme chains. It is possible, as is well-known, to continue on in this fashion (F. de Saussure, N. S. Trubetsky). Medium/form is a distinction that changes according to the level and the area of activity we observe. From the system theory perspective, it is important that language (and communication media) are not systems in the sense given above. However, from the point of view of both meaning-oriented (*Sinn-orientierte*) systems – consciousness and societies (communications) – language appears as a fundamental communications medium – a medium not of their mutual interconnection and adaptation, but rather of a structural pairing, a mutual observing by means of their own distinctions, and an observing of the way these distinctions are continually created. This conception of language is not common, but it does have precedents in the history of thought (*cf.* Wittgenstein’s concept of private language).³⁰

On the level of complex modern societies, we then arrive at Luhmann’s concept of symbolically generalised media. With the rise of the second degree of dissemination media, which is (after the rise of writing) printing, the reach of communications crosses a critical line for civilisation. There has to be a manifold increase of the set of criteria for accepting communication as communication, through which the functionally differentiated subsystems of the social system concurrently arise. Only in this way is it possible to introduce feedback guaranteeing the self-regulation of communications, i.e. to decide on the difference between communications and non-communications, and on which types of communication (difference) “make a difference”, i.e. carry information and have to be understood. (“Information is a difference that changes the state of a system, thus generating another difference”).³¹ Symbolically generalised media are the results of such process of differentiation of the social system and, at the same time, they are the media of evolution of individual specialised subsystems: science (whose symbolically generalised substrate is ‘the truth’), economics (‘money’) or art. For example, according to Luhmann a significant increase in the complexity of the

30 DAVID WELLBERY, *Systems*, in: *Critical Terms for Media Studies*, (eds.) W. J. T. Mitchell, Mark B. N. Hansen, Chicago 2010, pp. 297–309.

31 N. LUHMANN, *Theory of Society*, vol. 1, p. 113.

system of art and its establishment in the form of a special social subsystem took place at the beginning of the new age. Art gradually “became aesthetic” (this process was already underway in mediaeval painting): it relaxed its ties to the already differentiated centres of religion and politics and became independent from the expression of political, religious or moral interests. The functional conception of the work of art changed (the model work (*cf.* the rhetorical concept of *copia*) – the individualised work – the singular work) and with this the demands on it increased: the work now must ensure both discontinuity from previous works, and continuity within the system as a whole. During the eighteenth century, this differentiation process (including the differentiation of the relationship between professionals and the public: the artist becomes a “genius”, the expert becomes an expert on styles, etc.) became irreversible.³² The style that, in Luhmann’s account, is conceived of as purely functional is then nothing more than a method of reaching a union of differentiation between form and context (rather than content): the genetic material that guarantees the continuation of art and the breaking away of every work of art from what precedes it. This can also be expressed as “an artwork distinguishes itself by virtue of the *low probability of its emergence*”.³³

It is evident that Luhmann’s conception offers a new perspective on the history of “functionally differentiated societal systems” in the perspective of their distinct evolutionary phases – and the processes of their autonomous establishment in particular are seen as if through a focused lens. Compare this with the work of the representatives of *systemtheoretische Literaturwissenschaft*, as developed by, among others, G. Plumpe, N. Werber, S. J. Schmidt or Ch. Reinfandt. The individual literary text (the communication) can be grasped here as a difference generating a difference. The literary canon appears as a partial, temporarily stabilised structure of selections, a programme determining valid literary-communicative acts, a constantly activating communication selection grid (of subjects: literary works, and of approaches: interpretations), which *more frequently* (“naturally”) controls communications than itself becomes the subject of communication, and thus of questioning (deviation) and reselection. The system theory of literature is, however, clearly less suitable for understanding e.g. the author’s poetics – it puts

32 Cf. GERHARD PLUMPE, *Epochen moderner Literatur: Ein systemtheoretischer Entwurf*, Opladen 1995; CHRISTOPH REINFANDT, *Der Sinn der fiktionalen Wirklichkeiten: Ein systemtheoretischer Entwurf zur Ausdifferenzierung des englischen Romans vom 18. Jahrhundert bis zur Gegenwart*, Heidelberg 1997.

33 N. LUHMANN, *Art as a Social System*, p. 154.

connections of this kind in the position of anachronisms. (Cf. however Schmidt's project of Media and Cultural Studies, *Medienkulturwissenschaft*, which attempts to cross systems theory with aspects of the theory of action.³⁴)

An approach to the other problem mentioned above – the differentiation of various (artistic, technical, mass, electronic and digital) media and their relationships – is given in Lars Elleström's work.³⁵ Elleström starts with intermedial questions and sketches out a synchronous taxonomy of relationships valid for all manifestations and kinds of mediality. At the same time, he does not proceed "from above", from the singular, already historically established media, but rather he breaks down (the totality of) media into their individual characteristics and aspects, i.e. their sub-planes (he uses the word "modality"), which offer themselves up for logical comparison (at the same time leaving the philosophical-theoretical roots of his distinctions more closely unexplored – more on this below). He sets the typical questions such as "the image and the word", "visual and verbal media", "film and literature", "multimediality", "adaptation", "what is a medium" etc. temporarily aside and instead works from the so-called modalities, with whose help he then moves on to determine three broadly conceived types of media: basic, qualified, technical (see below). At the same time, the materiality of media, both latent and realised, made manifest, is not parenthesized.

To begin with, Elleström distinguishes four mutually closely linked, but theoretically definable modalities of media: material, sensorial, spatiotemporal and semiotic. Each of these consists of multiple possible modes. The material modality is the name given to the latent physical and corporeal interface, which is grasped by man through his senses (e.g. in the case of a motion picture the flat surface of the screen and the sound waves; the material modality of the printed literary text is a two-dimensional surface). The sensorial modality indicates a perceptual offering of media, to which physical receptors (exteroceptors, interoceptors, proprioceptors) and senses (sight, hearing, touch, smell, taste) turn in order to generate sense-data and sensations. The spatiotemporal modality, according to

34 For instance, SIEGFRIED J. SCHMIDT, *Přesahování literatury: Od literární vědy k mediální kulturní vědě* [Literature Borders. From Literary Science to Media Cultural Science], Prague 2008.

35 LARS ELLESTRÖM, *Modalities of Media: A Model for Understanding Intermedial Relations*, in: *Media Borders, Multimodality and Intermediality*, (ed.) Lars Elleström, New York 2010, pp. 11–48.

Elleström, is a structuring of these sensations and sense-data into a form, *Gestalt*, which (*a priori*, according to Kant) provides conceptions and experience of space and time. In the framework of this modality Elleström makes a distinction between the modes of perceptual, virtual and materially manifested time and space.³⁶ A semiotic modality means, following Ch. S. Pierce, the creation of meaning in the spatio-temporally conceived medium by three different modes of thinking and the interpretation of the sign: on the basis of convention (the creation of symbolic signs), resemblance (iconic signs) and contiguity (indexical signs). From this analysis it follows that the illusion of spatiality generated by film arises in the spatiotemporal modality; the sequential character of the written/printed literary text emerges in the semiotic modality (and not, for example, if the text is represented on the surface of the screen in a documentary film) in which its (most frequent) symbolic mode applies; or, one of the typographical differences between animated and feature film can be described within the framework of the semiotic modality as the difference between the iconic character of the animated image and the indexical character, which the recording technology of the camera impresses on the image of feature film.

All four modalities are, according to Elleström, essential elements of media and determine the specific character of each individual type of media. A further step, perhaps not yet adequately worked out, is to distinguish those media types for which the description of the given modality is adequate, and those which cannot be used up by them because they are, in addition, *qualified*. In the semiotic and, perhaps more generally Aristotelian tradition, Elleström also – and this may seem a duplication of the originally defined material modality – comes up with a definition of technical media as practically unparenthesizeable concretizations of abstract types: 1) (abstract) basic media: these can be determined only through the help of the modal configurations; 2) (abstract) qualified media: if these are to be understood (as media), they are strongly qualified through their developmental cultural tradition (see below); 3) (concrete) technical media: only these give a real and physically stable form to basic and qualified media, and are not just the tools of production. For this reason, paper, oil on canvas or the computer are, for Elleström, technical media, but the pen, the hard disk or the typewriter are not (technical media are really the means for the realisation of the latent material modality of certain media). Examples of basic media (through various combinations of modes of the given four modalities) are, then, such recognisable types as ‘auditory text’, ‘tactile text’, ‘still image’, ‘moving

36 *Image and Code*, (ed.) WENDY STEINER, Ann Arbor 1982.

image', 'iconic body performance', 'organised non-verbal sound', etc. However, at the moment when they unavoidably enter the definition of certain media through their sociohistorical development and the aesthetic-communicational convention of the determined and predetermined aspect, Elleström speaks of qualified media: qualified contextually by the specific historical, cultural and societal conditions (media are not timeless) and operationally, i.e. by specific representational and communicational codes. All artistic media are thus clearly (and long-term) qualified media. The process of qualification can also be observed in the example of film history, which did not become "qualified" on the day when it was presented for the first time as a cinematograph – something on the level of a technological curiosity rather than media in the developed sense of the word.

The implication and benefit of Elleström's systematic proposal for the field of *interart poetics*, of intermediality and comparative analysis and the interpretation of media are significant, as they clearly define the modalities ("levels") on which it is possible to compare media. This enables a description of the effects of transformation, remediation, representation and adaptation, which arise inside the given media (between its modalities), and between the various types of media, with the help of a model that makes the identification of 'acceptable' and 'unacceptable' linkages possible. However, instead of these implications, in the context of the previously introduced perspectives I will focus here on the weaknesses that lie behind the strengths of Elleström's theoretical analysis. Both Kittler and Luhmann, mentioned earlier, constructed their ideas at a purposeful distance to the existing map of disciplines, in anticipation or prefiguration of ending and rewriting it. Elleström's model enables movement across the borders of the various media and disciplines, while enriching work in established fields such as film studies, literary criticism, the history of art etc., but it does not cast doubt on them, and is not intended to do so. Its multi-level proposal is open, extensible and adaptable, but it is also clearly static, not because it does not contain that prophetic and entirely anti-sacral motif of the beginning and end of the history of media, which we find in Kittler's work, nor that radical recoding of the paradigm of investigating society and the individual that Luhmann proposes, but in the sense that it does not explain the omnipresence (and evasiveness) of mediality, or the motive for the genesis of media, i.e. what it is that propels the accelerating and escalating (according to Kittler or McLuhan) development, evolution, or devolution of media, including artistic media.

One can also say that although it is possible to take into consideration and include in Elleström's synchronic and static model (albeit not explain) the change

and development of media forms (diachrony), the model does not clarify its relationship to the philosophical traditions which it inherits. Elleström belongs to hermeneutic thinking (in the broad sense of interest in the interpretation of the sense of media “content”, not just the transmission of information and data); his argumentation, however, variously draws on phenomenological, semiotic, cognitive-scientific and generally technical knowledge, without noting the methodological tension following from their establishment. Elleström’s understanding of the human body as one of the “technical media” through which a theatrical presentation takes place acts, however, from the perspective of phenomenological perception or idea of “alterity”, simplistically.³⁷ The distinction between the material modality and technical media in the ideas of content and form then seem to draw us to the idea that the question of material realisation seems to be just a matter of *techné*: “the material modality of sculpture consists of (an idea of) extended, generally solid materiality that can be realized by technical media such as bronze, stone or plaster”.³⁸ The static distinction of content and form as a level (“of modalities”), however, seems to lead to a blurring of the fact that this “technical realisation” has already been given in advance, i.e. by a semiotic convention tied to the state of certain art, its qualified dimension: that the use of the material is an aesthetic choice that also transforms *additional* “levels” of the work/medium. Against this, Luhmann’s idea, which moves many traditional areas of discipline such as aesthetics, literary criticism or comparative art theory outside the field of view, understands the distinction between media and its form as its own medium (“evolution”) of art. Suddenly the development and “self-organisation” of artistic forms within the framework of a system of art appears from a genetically more appropriate view, which also explains that moment of its “qualification” and autonomous establishment. At the same time, Elleström’s scrutiny of the difference between e.g. the television and computer screen (a two-dimensional surface, sound reproduction, moving and still image) is – again from Kittler’s point of view – a misunderstanding of “what is”. Even if Kittler’s technological radicalism excludes extensive groups of questions and themes, and primarily in essence any meaningful experience with media and artistic forms, his cultural-critical insight throws a light on similar “neutral” analyses of intermedial relations, within which they appear as “correct”,

37 Cf. MIROSLAV PETŘÍČEK, *Hranice a limity textu [The Boundaries and Limits of the Text]*, *Česká literatura* 52/2004, no. 4, pp. 528–539, and there especially the references to Edmund Husserl’s *Cartesian Meditations* (1931) and the work of Maurice Merleau-Ponty.

38 L. ELLESTRÖM, *Modalities of Media*, p. 30.

but sterile for the most part. A possible way forward is a deeper exploration of the philosophical, socio-critical and art historical contexts and stages in which it arose and changed the *concept* of media from roughly the early modern age,³⁹ and a *correlation* of this genesis and change with the development of various and individual media forms, which were, are or remain the instrument and medium of this conceptualisation. Another area could be the investigation of which media modalities dominated in various historical periods,⁴⁰ the determination of the mutual relationships, hierarchies and processes through which media transform from “basic” to become “qualified”, and to carry this investigation in synthesis forward to the contemporary situation.

Translated by James Partridge

39 JOHN GUILLORY, *Genesis of the Media Concept*, *Critical Inquiry* 36/2010, no. 2, pp. 321–362.

40 Cf. F. KITTLER, *Optical Media*.