

**Eötvös Loránd University
Faculty of Arts**

**THESES OF THE
DOCTORAL DISSERTATION**

**The Reality of the Media: The Mediums of Reality
(The Mediatization of Sense-Making and the Construction of Reality)**

by
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1. The Subject and the Objectives of the Thesis

In my Thesis I would like to present the discourse of contemporary German system theory and a possible application of it in the field of Media Theory. The application has been developed by myself, and my Thesis describes how it can function as a basis of a complex (media) theoretical framework.

Theoretical construction and reconstruction have been placed in a specific circular relation: my work defines itself as constructive reconstruction and also reconstructive construction. This can be read as a principle which characterizes the circular (cybernetical) way of thinking. This way of thinking can be taken as the most important basis or starting point of my thesis; a short summary of this follows.

Heinz von Foerster based a complex epistemology on the basis of classical cybernetics.¹ Foerster tried to develop a point of view that replaces the linear and rigid structure of the object-subject (observer-observed) distinction. According to Foerster, the observer is really constructed by the observed and vice versa: ‘observation’ is nothing else but the circular relation between them. Observation as a relation defines the observer and the observed, so the observer refers not only to the observed, but also to himself by the act of observation. This crucial self-reference of the observer can be taken as another main point of the circular way of thinking or – as Foerster named it – the “cybernetics of cybernetics”. Humberto Maturana’s famous definition sums this all up: “everything said is said by an observer”.² So the relation of observer and observed (subject and object) is defined more as co-ordination than subordination.

Foerster sees the main differences not between subject and object (observer and observed), but between the *orders* of observation. His favorite illustration for this is the case of the blind spot. Using Foerster’s termini, the first order of observation (our eye’s direct observation) is unable to get a coherent and complete image about the world out there. What we can see is something we learnt to see: the image we “see” is a result of computing processes. Actually it is our brain that “sees”: it observes the observation of the eyes transmitted to the visual cortex. The blind spot can be seen only by the conscious observation of the observation of our brain. This is self-reference (one of Foerster’s key terms): when we are looking for the blind spot, we are actually observing our own observation; we are

¹ Heinz von Foerster: *Understanding Understanding: Essays on Cybernetics and Cognition*. Springer, New York, 2003

² Humberto Maturana: Everything is said by an observer. In: *Gaia, a Way of Knowing*, edited by W. Thompson, Lindisfarne Press, Great Barrington, MA, 1987 pp. 65-82.

observing ourselves as we are observing. In Foerster's blind spot experiment, we glimpse our own blindness. A paradoxical situation arises: we can see that we cannot see, so we see (that we cannot see). With the help of the introduction of a new (second) order of observation, the observation of the first order of observation will be possible. The second order of observation in that case is self-observation: we can observe *how* the first order of our observation works.

Cybernetics, says Foerster (or rather, "the first order of cybernetics", as he named the traditional form of the cybernetics), uses feedback only on the level of the elements (objects) of the observed system. In spite of that Foerster's "second order of cybernetics" is circular in so far as the cybernetician takes himself as part of the observed system.

The description of reality depends more on the describing system (subject) than on the "reality out there" (object). Foerster's "undifferentiated encoding principle" says that we only have data of the quantitative kind. Our neuronal system "knows" only the place and intensity of any stimulus. All qualities of any impression are made by the observing system itself: that is the basis of the famous idea of "operational closure" developed by Humberto Maturana.

Niklas Luhmann's oeuvre can be interpreted as a combination of the second order of cybernetics and the theory of autopoietic systems, applied in the field of social sciences³. Concepts like the distinction between 'closed' and 'open' systems and the self-regulation of these systems were key problems of general system theory from the 1950's on. Closed systems do not take any material (possible element of the system) from their environment in their functioning. The elements of open systems are, on the other hand, in the condition of permanent streaming: they can transgress the borders of the system. They are tending towards a more complex and differentiated state. Open systems are not only characterized by the production of entropy (like closed systems), but also by the transmission of entropy. The relation between system and environment is a specific problem of the theory of open systems.

One of the most important questions of cybernetics was about how the states of systems can be stabilized under fluently changing environmental conditions. The feedback models (developed for answering that question) seemed universal for classical cybernetics; that is why cybernetics could be considered to be able to describe technical, social and psychic systems.

After this brief summary of cybernetics and system theory the main questions of the Luhmannian way of system theory and cybernetics can be asked: 1. How can we define a

³ See: Niklas Luhmann: Social Systems. Translated by John Bednarz, Jr. – Dirk Baecker. Stanford University Press, Stanford, California, 1995.

system? 2. How is the distinction between the system and its environment produced and reproduced? 3. What is the exact operation that produces the distinction, and how is it able to decide (inside the system) what belongs to the system?

According to Luhmann, these problems had been considered in two different ways in the former system theory: some arguments took systems as substantial, some others as analytical categories. Luhmann rejects both, because both of them constitute observing positions outside the systems, so they consider system theory itself an observer outside the world it observes. They say – according to Luhmann’s argumentation – that system theory as scientific position of observation is not a part of the “world” it observes. Based on Foerster’s theories of observation (summarized above) Luhmann can easily reject this position. His (and Foerster’s) starting point is the negation of objective observation. The observer must enter into the observation. The distinction between observer and observed is made by the observer’s act of observing himself as he observes. Observed (self)observation produces the observed (the result and matter of observation).

In connection with this, Luhmann claims we can see that systems cannot be defined by their borders because the borders are constantly changing, and there is no (objective) position of observation. His answer (and innovation) is the dynamic concept of the system. He says: “The system is nothing else actually but the difference of the system and the environment.”⁴ A differentiated system is not equal with the sum and connections of its elements, but it is built by system/environment-*differences* – even as the differences between observer and observed construct the process of observation and the process of observation makes the difference between observer and observed in Foerster’s theory.

The *medium* (in this case: tool, territory and matter) is the sense. In that medium operate the systems of communication and the systems of consciousness: both are characterized by specific ways of operation, and neither can be derived from the other. The basic operation in the case of the system of consciousness is *thinking*; in the case of the system of communication (the social system, says Luhmann) is *communication*. They can appear for each other only as environment (it is not possible to derive communication from consciousness). We have to understand the forms of sense appearing in communication systems (the structures of sociality or “social reality”) in a “sui generis” way. This is indeed one of the most important objectives of my Thesis: to understand and describe the processes

⁴ Niklas Luhmann, *Einführung in die Systemtheorie*. Carl-Auer Verlag, Heidelberg, 2004. p.66.

of the social construction of reality on the basis of the Luhmannian termini ‘communication’, ‘sense’, ‘medium’, and ‘form’.

Analyses that shift in the direction of Media Theory are highly reasonable, because mass media is maybe the most important social institution of the construction of reality. My Thesis gives a brief summary of a media theory based on theoretical implications presented above.

2. The Structure of the Thesis

My paper is divided into three major chapters articulated by three key authors. The subject of the first chapter is Heinz von Foerster and his “second order of cybernetics”: a kind of epistemology characterized by circularity, recursivity, self-reference and the “second order of observation” (see above). “Its basic idea is turning the principle of cybernetics into philosophy...”⁵

The role of this chapter is to define an epistemological basis for the entire paper and also to introduce some key terms like the ‘second order of observation’, ‘circular causality’, ‘reality’, ‘operational closure’, ‘autopoiesis’. The emphasis on the Foersterian roots offers a new view to Luhmannian system theory, a new approach which is different from the ways of the usual sociological contextualizations. Here, the constructivistic, recursive and dynamic character of Luhmann’s theory will be in the focus. One of the main characteristics of the Foersterian-Luhmannian theory is the nature of terminology. The theory builds itself according to the main principles of self-reference and autopoiesis. The descriptions of the theory are used during the building of theory, so terms are developed according to their own theoretical models. Theories concern themselves as observations from a particular point of view, and terms are to be created in a recursive way within these observations. As Luhmann says:

„In contrast to the usual theoretical representations, which at best take some few concepts from the literature, define them in critical discussion with existing meanings, and then work with them in the context of these concepts’ traditions, in the following we will try to increase the number of the concepts that are used and to determine them in reference to one another. This applies to concepts like: meaning, time, event, element, relation, complexity, contingency, action, communication, system, environment, world, experience, structure, process, self-reference, closure, self-organization, autopoiesis, individuality, observation, self-observation, description, selfdescription, unity, reflection, difference, information, interpretation, interaction, society,

⁵Bernhard Pörksen: Ethik der Erkenntnistheorie. (Bernhard Pörksen über Heinz von Foersters Wissen und Gewissen). In: *Schlüsselwerke des Konstruktivismus*. Edited by Bernhard Pörksen. VS Verlag für Sozialwissenschaften, Wiesbaden 2011. pp. 319-341.

contradiction, and conflict. One may readily observe that conventional theoretical designations like action theory and structuralism disappear in this collection. We will retain "systems theory" as our trademark because in the domain of general systems theory one finds the most important groundwork for the type of theory we strive for here. We do not use these concepts without reference (and often, with contrasting reference) to an already-existing body of theoretical knowledge. But the concepts should also, insofar as possible, hone one another. Every conceptual determination ought to be read as a constraint on the possibility of further conceptual determinations. Thus the entire theory is interpreted as a self-limiting context."⁶

The first chapter also contains an excursus. This is a "case study" about a specific narrative discourse which existed only for a short while in the daily papers of Vienna and Budapest at the end of the 19th century and was called "wochenplauderei" (weekly chats). These wochenplauderei-texts can show nice examples for recursivity and self-reflection because their narrative-poetic structure is about the continuous self-creation and self-presentation of the author by fictive chatting with the reader. Their author (the feuilletonist) appears in the texts as eyewitness, *observer* of particular events and it is exactly the documented observation which creates his (narrative) character.

The second chapter is about the system theory of Niklas Luhmann. In the first part main terms like 'form', 'medium', 'system', 'sense', 'communication' and 'culture' were interpreted and put into a new context which my discussion defined for them. Here I intend to show the Luhmannian view of *social reality* and its construction processes.

The second part deals with the Luhmannian interpretation of the mass media. Its function and diverse realities produced by it have been presented, and also a *semantics of objectivity* ('semantics' in this case is a specific Luhmannian term defined in the paper) which leads us to a specific concept of *media* (through terms like 'self-description', 'transparency', 'authenticity'; all defined in the paper).

The ideology of the transparency of the media (the semantics of objectivity) loses its edge by media convergence and new structures and techniques (digital, social media). These are new forms of shaping, transmitting and archiving of meanings (or sense). Frank Hartmann summarizes this in his book *Medienphilosophie* (published in 2000, the book has become a determining one in the German discourse of media theory):

"Eine Selbstwahrnehmung unter Bedingungen medialer Existenz bedeutet, sich auch mit der neuen Dimension technisch generierter Realitäten auseinanderzusetzen. Dabei geht es nicht um die Phantasien einer Virtual Reality, ... sondern darum, daß Interaktionen unter Bedingungen der neuen Medienwirklichkeit zunehmend künstlich werden ... es wäre wohl besser, wenn wir angesichts dieser telematischen Präsenz von anderen also von einer zunehmend *realen Virtualität* sprechen würden.[...]

⁶ Niklas Luhmann: *Social Systems*. Translated by John Bednarz, Jr. – Dirk Baecker. Stanford University Press, Stanford, California, 1995. pp. XLIX-L.

Der gegenwärtige Medial Turn auf Ebene der Theoriebildung weist in die Richtung einer Analyse der Kultur der *realen Virtualität*. Für die Informationsgesellschaft zeichnet sich die elektronische Konvergenz aller Kommunikationsformen ab, womit eine immersive Medienwirklichkeit erzeugt wird, in der Erscheinungen nicht länger die Reflexion von Erfahrungen auf symbolischer Ebene sind, sondern selbst zu Erfahrungen werden.”⁷

The change of the relation between reality / media-reality and the global change in the structures of communication show a sort of ‘turn’: mediatization and mediality became keywords for scientific research and also for the everyday experience.

The third main chapter of the paper discusses this turn. The terminology built before here comes into contact with theoretical issues developed by Vilém Flusser (a key person of contemporary German media theory).

The first part of the chapter gives an overview of the Flusserian universe of ‘technical images’ (the specific Flusserian term is also the title of his important and magnificent book). The second part of the chapter transgresses from the semantics of objectivity by trying to describe the Language of the New Media (the term comes from the title of Lev Manovich’s famous book). The language of the new media is the framework and the tool of the new form of culture in and by which it describes (and understands) itself. This language has been presented in the paper according to Manovich’s considerations, but still on the theoretical base built and presented in the former chapters.

After an excursus about self-referentiality, in the final chapter the paper presents the ontological and epistemological aspects of a new concept of *media* which has been summarized in Stefan Weber’s non-dualistic model.

3. Results

1. This paper is the first systematic summary of Heinz von Foerster’s work in Hungarian.
2. The paper marks progress in forming theoretical relations between Foerster and Luhmann. The way of systematic co-interpretation of the both these theories presented in this paper is unique and new (to the best of my knowledge).

⁷ Frank Hartmann: *Medienphilosophie*. WUV, Wien, 2000. pp.17-18

3. The train of thought from the general Luhmannian term ‘medium’ to the more specific ‘mass media’ (so the explication of the Luhmannian system theory *as* media theory) can be read in the Hungarian language for the first time in this paper.

4. An important result of the paper is the new interpretation of the program-fields of mass media and the new aspect in the definition of the media-contents (from commercials to the news) which diverges from the classical Luhmannian way (although the key terms remained the same). To the best of my knowledge these are new in the literature.

5. The reception of a specific German discourse in the field of media studies (keywords: *Medienwissenschaft, Publizistik, Journalistik*) in an excursus dedicated specially for that subject.

6. Maybe the most important results of the paper is the brand new terminology based on the synthesis of the key authors Heinz von Foerster, Niklas Luhmann and Vilém Flusser, and the construction of a new concept of the media.

Publications connected to the subject of the Thesis

Papers:

A médiaterről. [On the Media space] In: Ármeán Ottília – Gagy József: Új média és kommunikatív magatartás. Kolozsvár, Scientia, 2011. 35-44.

Megfigyelni a megfigyelést: Heinz von Foerster ismeretelméletének alapvonalairól. [Observing the Observation:]On the Epistemology of Heinz von Foerster] In: Jancsák Csaba – Nagy Gábor Dániel – Szűcs Norbert: Céhem Vándorkönyvei. Tanulmányok a 60 éves Pászka Imre tiszteletére. Szeged, Belvedere Meridionale, 2009. 139-149.

Utószó (Karácsony Andrással közösen) [Afterword (in common with Karácsony András)] Niklas Luhmann: Szociális rendszerek című könyvéhez. Gondolat – Akti, Budapest, 2009.

Konstruktivista rendszerfelfogás és formafogalom Niklas Luhmann kommunikációelméletében. [Constructivistic Approach of the System and the Concept of Form in Niklas Luhmanns Communication Theory] In: Ivaskó Livia (szerk.): Érthető kommunikáció. Szegedi Tudományegyetem Médiatudományi Tanszék, Szeged, 2005. 115-120.

Második rendbéli bevezetés (Niklas Luhmann Bevezetés a rendszerelméletbe című könyvéhez) [Introduction Second Order (to Niklas Luhmanns Book 'Introduction to System Theory)] In: *Educatio* 2004. 2. szám, 319-324

Niklas Luhmann elmélete és a német médiatudomány, avagy adalékok a publicisztikatudomány és a zsurnalizmus fogalmaihoz. [Niklas Luhmanns Theory and the Media Studies in Germany (On the Notions 'Publizistikwissenschaft' and 'Journalismus')] In: Ivaskó Livia: *A kommunikáció útjai*. Gondolat - MTA-ELTE Kommunikációelméleti Kutatócsoport, Budapest, 2004. 83-111.

A művészet rendszere Niklas Luhmann szociológiájában. [The System of Art in the Sociology of Niklas Luhmann] In: Bangó Jenő - Karácsony András: *Luhmann-könyv*. Rejtjel, Budapest, 2002. 131-153.

Translation (from German):

Rolf Großmann: Monitor – köztes médium a hang, kép és program közt. [Monitor – a Medium Between Voice, Image and Programm] In: Batta Barnabás: *Médium Hang Esztétika (Zeneiség a mediális technológiák korában.)* Univ Kiadó, Szeged, 2009, 102-117.

Conference Presentations:

Helyi kultúrák újratöltve: a jelentésvektor megfordulása és az önreferencia diadala. [Local Cultures Reloaded: the Turning Back of The Vector of Meaning and the Triumph of Self-Reference] Presented at the conference „A Vágygazdaság forrásvidékei” (SZTE BTK Kommunikáció- és Médiatudományi Tanszék és PTE BTK Kommunikáció- és Médiatudományi Tanszék), Szeged, 16th September 2011

A technikai képek kultúrája: a (digitális) médiatársadalom. [The Culture of Technical Images: the (Digital) Media Society] Presented at the conference 'A digitális korszak kommunikációelmélete (Az új média használata és társadalmi hatásai)' Eger, 4th June 2010

Az új amerikai televíziósorozatok és a kortárs médiakultúra. (Gollowitzet Dianával közösen). [The New American Television Serials and the Contemporary Media Culture. (In Common with Gollowitzer Diana)] Presented at the conference 'A vizualitás antropológiája' (Magyar Kulturális Antropológiai Társaság - Miskolci Egyetem Kulturális és Vizuális Antropológiai Intézete), Miskolc, 20th May 2010

'Communication' and 'Social' According to the Approach of the System Theory. Presented at the conference 'Bridges of Media Education' University of Novi Sad, 2009. 09. 13.

A globális médiakultúráról. [On the Global Media Culture] Presented at the workshop 'Médiakultúra – populáris kultúra' (Szegedi Tudományegyetem - Debreceni Egyetem) Síkfőkút, 14th April 2007

Újságírók, terek, médiumok. (A normatív nyilvánosságfogalom genealógiájáról.) [Journalists, Spaces, Mediums. On the Genealogy of the Normative Concept of the Public Sphere] Presented at the conference 'Reflexió(k) vagy „mélyfúrások”? A kultúrakutatás

változatai a „kulturális fordulat” után’ (PTE BTK Kommunikáció- és Médiatudományi Tanszék – ELTE BTK Művészet- és Médiatudományi Intézet – PTE BTK Kultúratudományi Doktori Program), Pécs, 9th March 2007

Médiaelméletek és médiaontológiák. [Media Theories and Media Ontologies] Presented at the conference ’Elméleteink 2000 körül.’ (SZTE-MTA), Szeged, 9th November 2006