Reinfandt, Christoph. "Systems Theory." In: Martin Middeke, Timo Müller, Christina Wald, Hubert Zapf, eds. *English and American Studies: Theory and Practice*. Stuttgart/Weimar: Metzler 2012: 231-237.

Consciousness and Communication

10 Systems Theory

10.1 Consciousness and Communication

10.2 Medium vs. Form

10.3 Systems Theory and Reading/Analysing Texts

Not very far into William Blake's huge multi-media epic Jerusalem (1804-1820), the mythical but very modern character Los cries out indignantly: "I must Create a System, or be enslaved by another Man's. / I will not Reason & Compare: my business is to Create" (Plate 10). To this day, every attempt at introducing systems-theoretical thinking to the fields of literary and cultural studies faces frequent resistance along similar lines: Why would one resort to another man's-or another discipline's-system, when the very word 'system' itself seems to be alien to the flexibility and personal relevance of many of the aesthetic practices examined in literary and cultural studies? The following observations will try to counter these charges. While a variety of systems-theoretical approaches have found their way into literary studies (cf. Reinfandt, "How German" 276-78), Niklas Luhmann's sociological systems theory of modernity seems to offer the most compelling framework for an inclusive but highly differentiated re-conceptualisation of many of the central concerns of recent literary and cultural theory. Luhmann participates in the late-twentieth-century shift from

the regulative idea(l) of 'identity' to a full acknowledgement of the constitutive function of 'difference' for all notions of truth and knowledge. But he replaces the focus on language and text(uality), which twentieth-century (literary) theory insisted on after the 'linguistic turn' (cf. entries II.1 and II.4), with a very different focus on observation and communication. These key terms provide an alternative to the fixation on matters of representation which characterises the mainstream of (literary) theory. In reconnecting representation to sophisticated notions of practice, process, and mediality, a systems-theoretical approach introduces a culturally and socially embedded as well as strictly historicised understanding of textual and media-based phenomena. While the terminology of systems theory seems to be highly abstract at first glance, it nevertheless opens up new perspectives on text-context relations and texts' social functions. It is thus highly conducive to inquiries under the banner of the 'cultural turn,' as the following sketch of the systems-theoretical potential for work in English and American Studies will demonstrate.

10.1 | Consciousness and Communication

Modern society, according to Niklas Luhmann, consists of communications which, in referring exclusively to themselves and to other communications, create their own dynamics of systemic formation and closure. Thus, modern society at large differentiates itself into autonomous, autopoietic (i.e. self-generating) subsystems ('social systems') catering to different functions, such as economy, law, politics, religion, art, education, science and literature. All these social systems operate according to their own norms and horizons of meaning (Sinn). On the other hand, Luhmann considers human beings as a combination of 'organic systems' and 'psychic systems' and locates them in the environment of social systems and

hence outside society, which is one of the most controversial aspects of his theory. He also claims that social systems and psychic systems operate differently: In contrast to social systems, which consist of an ongoing series of interconnected communications, psychic systems operate on the basis of interconnected thoughts. Meaningful human thoughts, Luhmann argues, cannot readily be transferred into the realm of communication because this transferral imposes the distinction of information and message with their respective dimensions of selectivity. This leads, as will be explained in the section 'Layers of Mediality (1)' below, to a completely different horizon of meaning from the one surrounding the original thought.

For Luhmann, social systems consist of communications, psychic systems of thoughts.

Systems Theory

This is the first theoretical challenge, which, however, provides an interesting explanation for typically modern phenomena like alienation, fragmentation and loss or lack of meaning.

The second theoretical challenge is the following: We have seen that both human consciousness and social communication exist only as a series of events which are, as such, fleeting, evanescent, continually passing out of existence and thus discontinuous. How is it, then, that both persons and

societies generate a fairly stable understanding of their respective existence? How can this fundamental discontinuity be overcome so that the system can construct its continuous identity in self-description and, in parallel, its very own 'view' of the world on the basis of its specific constitutive difference from its environment? Luhmann provides the answer to these challenges with the help of a radical rethinking of the concept of 'medium'.

10.2 | Medium vs. Form

Systems-theoretical terms are never formulated as free-standing notions but rather as observer-dependent distinctions. The term 'observer' does not refer to human action but rather to the systemic operation of drawing a distinction by marking something off from the unmarked space surrounding it. This operation is also constitutive for the systems themselves: every system can only exist—and be adequately theorized—in its specific difference from its environment. For example, the subsystem of (modern) literature 'observes' the world (i.e. constructs its own environment) with a strong emphasis on the subjective experience of psychic systems. The subsystem of (modern) science, on the other hand, tries to relegate subjectivity to the sidelines in order to 'observe' the world (construct its environment) objectively in an attempt to maintain ontological notions of truth under modern conditions. Both literature and science thus provide text-based Observations of Modernity (Luhmann 1998; note that modernity has to be understood as both the subject and the object of observation). Their descriptions (constructions) of the world, however, will only partially overlap, thus contributing to modern culture's overwhelming sense of plurality and fragmentation.

A crucial position in systems theory's repertoire of distinctions (so far, system/environment, operation/observation, consciousness/communication) can be assigned to the distinction of 'medium' and 'form.' Theoretically, Luhmann draws upon the psychologist Fritz Heider, who suggested that media provide loosely coupled elements which can be rigidly coupled in forms. David Wellbery has described this persuasively, with reference to Daniel Defoe's *Robinson Crusoe*, as "the Friday theory

Consider a stretch of sand on an apparently uninhabited island. As such, it is just what it is: sand. However, if I, like Crusoe, happen to encounter a footprint in it, it becomes a medium for bearing form. The grains of sand—'loosely coupled' in the sense of having no fixed arrangement and being susceptible to rearrangement—are brought into a particular array that exhibits the form 'human footprint.' Friday has left his trace and this trace is a datum that is itself distinguished from, but related to other data ('animal spoor', 'wind swirl'). The footprint is a 'rigid coupling' of the loosely coupled elements (the grains of sand) in the sense that not just any indentation of the beach will do. The sand thus becomes a medium when it is imprinted with, receives, or comes to bear the form; and the footprint becomes a form when the loosely coupled elements of the medium are brought into an alignment that makes a difference ('That's Friday's footprint, not the footprint of a turtle!'). (301-2)

Starting from this general distinction of medium/ form, Luhmann develops a multi-layered expansion of the media concept which goes beyond received notions in literary, cultural and media studies because "[f]rom the perspective of systems theory [...] the terms *form* and *medium* are relative; what counts as a medium will depend entirely on the plane of analyses selected" (Wellbery 302). What potential does this concept hold for literary and cultural theory?

10.2.1 | Layers of Mediality (1): Meaning

Most strikingly, Luhmann uses his reconceptualisation of the term 'medium' in order to establish that social systems and psychic systems constitute themselves within the medium of **meaning** (Sinn). The constitutive operations of social and psychic systems, i.e. communications and thoughts respectively, generate a temporal horizon which establishes the system's very own past, present and fu-

Medium as a relative category

of media":

Medium vs. Form

ture. On this basis, meaning(fulness) can be produced and assessed on a strictly functional (and relative) basis: Everything which facilitates the continuation of a system's specific operations is meaningful, but only for that particular system. Thus, many of the more hermetic texts of high modernism do not seem to make any sense at all for 'normal readers' (and sometimes not even for academics), but they make perfect sense within the confines of the system of modern literature at that particular stage of its evolution. The medium of meaning, then, provides a solution to the challenge posed by the fundamental discontinuity of the system's operations. Both psychic and social systems rely on it, albeit in fundamentally different modes: While perception and imagination enable consciousness to transform information into meaningful units of experience, communication remains insurmountably grounded in difference, and this is why the identity of experience is inevitably compromised by its expression. According to Luhmann, communication comprises a three-fold process of selection in which the difference between what is being communicated ('information') and how it is being communicated ('message') has to be successfully processed ('understanding'; again: not alluding to human action) before connectivity (Anschlussfähigkeit) can be reached in the form of either acceptance or rejection (which would, either way, maintain the system's continuing existence as it necessitates another communication). In contrast to traditional sender-receiver models of communication, there is a strong sense of simultaneity in which the message actually creates information and not the other way round, very much like the emergence of form actually brings about the medium-status of the mere sand in the Friday theory of media. On a more general note, these ideas sit comfortably with recent developments in epistemology (constructivism) and narratology, where discourse is assumed to bring a story into existence instead of merely recounting it.

10.2.2 | Layers of Mediality (2): Language

The co-evolution of psychic and social systems has brought forth an additional layer of mediality which allows for a 'structural coupling' between autonomous systems, even if one system's meaning can never be another system's meaning. No information can ever cross from one system into another because all a system gets from its environment (including other systems) is stimuli which will have to be transformed into information according to the system's very own rules - information can only be constructed (and thus generated) internally. This additional layer of mediality is language, which Luhmann, in contrast to assumptions from modern linguistics and (post-)structuralism (cf. entries II.4 and V.2), conceives not as a system but rather as the medium which makes structural coupling between consciousness and communication possible. Thus, language facilitates a history of mutual stimulation between systems, which results in their coordination despite the systems' insurmountable autonomy and closure. (Modern) literature, for example, has long been the privileged arena for playing out the dimension of subjective experience as it unfolded in modern culture. In spite of this affinity, however, it has always processed the stimuli from psychic systems according to its own rules, which has led, with high modernism marking a crucial turning point, to an increasing sense of alienation and overwhelming difficulty on the part of the psychic systems (cf. entries I.2.6 and I.3.4). At the same time, (modern) literature has maintained fruitful relationships with the systems of politics and religion, but these were also punctuated by acts of censorship, restrictive regulations and even death sentences against authors like, most recently, Salman Rushdie, which clearly indicates the limits of mutual understanding.

Language in this sense works on two levels simultaneously: on the one hand, it provides a medium for the symbolic generalization of meaning within the systems (i.e. a semantic detachment of signs from their potential reference at the cost of particularity, see 'Layers of Mediality (4)' below), raising the potential for connectivity to unprecedented heights; on the other hand, it serves as a medium of communication by means of material signs, and it is on this materially graspable and observable level that structural coupling is facilitated even to the point where Romantic poems are written and read by psychic systems as authentic and immediate outpourings of feelings in spite of the fact that the marks on a page are completely disconnected from their author once they are 'out there' and can only be processed and made sense of in the new systemic context (communication/'literature'). The interconnectedness of both levels adds two new qualitative dimensions to the functional understanding of meaning introduced above: First, language holds the potential of negaLanguage mediates between different systems.

Systems Theory

Literature as a medium of subject-formation

tion, thus doubling the potential for meaningful selections at one stroke. Secondly, language provides a semantic dimension which creates a second dimension of differentiation at a distance from reality, potentially reflecting—but also alleviating and thus countering and sometimes even negatingthe effects generated on the operational level of the systems involved. Notions of identity, for example, tend to be, if at all, wrested from difference in such a compensatory fashion. They are, as such, largely a semantic phenomenon, while the operations of systems keep on processing difference in order to maintain their operational identity. Thus, modern literature as a social system has provided many opportunities for the self-fashioning of psychic systems as modern subjects, and the genres of poetry and fiction have provided suitable blueprints for this exercise with their additional shaping of the mediality of language. However, the dynamics of the system have also undermined these very same constructions in the course of the system's evolution: The emphatic speaking subjects of Romantic poetry vanished into the mere voices of modernist poetry which in turn increasingly acknowledged their own textual/written/printed status in a move from modernist universality to postmodernist particularity, returning psychic systems to their own devices, and with increased ontological insecurity at that. Similarly, the realistically grounded and embedded subject positions of realist fiction became increasingly detached from the world with the modernist turn into interiority and experientiality, which again could only be re-connected to the world with a postmodernist acknowledgement of their textual/written/printed status. As opposed to the cognitive orientation of some constructivist approaches, systems-theoretical thinking manages to combine cognitive and social orientations by grounding the mediality of language in the mediality of meaning and acknowledging the importance of both dimensions for the interplay between psychic and social systems.

10.2.3 | Layers of Mediality (3): Writing, Print, Electronic Media

While language facilitates the emergence of face-to-face interaction (oral communication) with heightened semantic potential, social systems in Luhmann's sense would have to rely on additional layers of mediality. Here, writing is of seminal im-

portance because it liberates communication from the limitations of interaction. While the storage and distribution functions of writing introduce the possibility of covering spatial and temporal distances with the concomitant effects of building an archive and facilitating specialization of vocabulary and genre, it is the technologizing of writing in print which brings forth modern culture and society as we know it. Only on the basis of print can various textuality-based historical semantics such as, for example, (modern) love with its grounding in individuality and subjectivity (cf. Luhmann, Love as Passion), form a virtual reality of sorts. This virtual reality of modernity becomes all-permeating with the advent of electronic media and their ultimate convergence into what Luhmann calls, in the title of a monograph, The Reality of the Mass Media, insisting in its notorious opening sentence that "[w]hatever we know about our society, or indeed about the world in which we live, we know through the mass media" (1).

10.2.4 | Layers of Mediality (4): Symbolically Generalized Media of Communication

While the layers of mediality identified so far are all part and parcel of media studies and cultural studies as currently practiced, there is one additional layer which has as yet not been addressed in terms of its mediality. This layer starts from a surprising observation: In spite of the innumerable occasions for communication induced by the contemporary mediascape and by the increasing functional differentiation of modern society into specialized autonomous sub-systems, successful communication in any given system does not become more likely-in fact, paradoxically, it becomes even less likely. So each functionally differentiated social system has to cope with this increasing improbability of successful communication, which is generated by the print-induced severance of production and reception (cf. Luhmann, "Improbability"): every potential reader of a text may at all times opt for reading a different text or even doing something completely different, and the writer has no way of making sure that a particular text is going to be read at all—and even if the text is read, the writer has no way of making sure that it is understood in any particular way, be it according to the writer's intentions or, on the

Medium vs. Form

functional level, according to the specific horizon of meaning of a particular social system. To counter these developments, social systems establish their own functionally determined horizons of meaning by imposing a secondary medium of communication on writing, print, and the electronic media. These secondary 'success media,' as Luhmann calls them in his as yet untranslated magnum opus, Die Gesellschaft der Gesellschaft, make the continuation of systems-specific communication more likely by establishing a distinct symbolically generalized horizon of meaning and a specific binary code for each social system. For example, the medium of money facilitates the ongoing communicative negotiation of +/- ownership in the economic system, publications facilitate the ongoing communicative negotiation of +/- truth in the science system, and works of art and literature facilitate the ongoing communicative negotiation of +/- beauty, interestingness, aptness or whatever symbolic preference value one would like to propose for modern art and literature.

As one can see here, systems theory provides a plausible explanation for the increasing specialization, fragmentation and destabilization of traditional notions of meaning under modern conditions. At the same time, it provides a consistent set of terms for addressing the various layers of meaning which are 'inscribed,' as it were, in any text. Meanwhile, systems-specific communication is always surrounded by an environment of other social systems as well as what Luhmann terms 'general social communication.' General social communication precedes and prepares (but also picks up impulses from) the communication in functionally differentiated subsystems of modern society, which is in turn based on the relationship between psychic and social systems that can be described in terms of 'socialisation' and 'inclusion/exclusion.' The functionality of social systems themselves can be described with regard to the three basic systemic references of function, performance, and reflexivity. The level of function refers to the system's relationship with modern society as a whole, in which the emergence of a specific subsystem is motivated by a specific function no other system caters to. On this level, textual analysis would have to address the dominant systemic reference of a given text, along with the specific discursive rules applicable at a given moment in that system's evolution. In the case of literature, for example, these rules would also have to be differentiated with regard to their applicability to processes of production (by authors who are actively socialised in the literary system) as opposed to processes of reception (by readers who are only passively socialised in the literary system). In the system of science, on the other hand, all readers are, as scientists, also writers, so that the systems-specific communication rests exclusively on active socialisation, which explains why modern scientific communication has evolved into a much more specialized discourse than modern literary communication: Scientists may write for scientists exclusively, while literary authors may never completely forget the common reader, even if modern literature as a social system reached unprecedented levels of specialisation with modernism. The level of performance regulates the system's relationship with other systems in its environment in terms of structural coupling, and the manifold relations among social systems can be balanced against relations between social and psychic systems with their variable modes of inclusion/exclusion. Here, a systems-theory approach to literature would look at the complex interactions of the literary system with the systems of law (e.g. copyright), economy (the literary market), education (schools), science (literary studies), etc. This inbuilt polycontextuality of literature can then serve as a starting point to explain its frequently compensatory but at times also reflexive and expansive performance for individual readers or groups of readers: Literature can confirm its readers' prejudices and preconceptions and thus give them a sense of security, but it can also motivate readers to re-think their assumptions and to learn something new about the phenomena it describes. Finally, the level of reflexivity determines a system's identity by means of self-observation and self-description as well as the specific workings of a system's symbolically generalized medium of communication with its binary code of preference value vs. reflection value. On this level, the transformation from 'text' to 'work' can be described in terms of textual features against the background of the evolution of the modern literary system. The level of reflexivity thus establishes the inner-systemic dimension of the exterior dimensions addressed under the rubrics of function and performance.

The function of literature

The literary system and its relations to other systems

Systems Theory

10.3 | Systems Theory and Reading/Analysing Texts

Luhmann's innovative concepts of meaning and mediality position modern literature in its specific horizon of meaning which combines objective, subjective and reflexive dimensions. Accordingly, every text can be analyzed in terms of its (fictional) referentiality, in terms of its relation to subjective experience, and in terms of its mediality. While the first two dimensions have been traditional concerns of literary studies, it is actually the third dimension which regulates the terms

and conditions of how a text works at a given historical moment. Thus, systems theory provides an integrated framework for analyzing individual texts in terms of their mediality which in turn links the individual text to its particular genre and its specific functionality at a given moment in the evolution of modern literary communication (for a glimpse of the implications for poetry, fiction and drama at a crucial historical turning point, see for example entry I.2.4). Broadly

Focus on Literature as a Social System

The emergence of the novel as the central genre of modern literature provides a suitable example for the emergence of literature as a social system, which had to demarcate its distinctive function as opposed to other emerging social systems, unfold its performative potential for these other social systems as well as for psychic systems, and finally establish its operative identity through continuous self-reference and thus reflexivity. In terms of function, early novels like Daniel Defoe's Robinson Crusoe had to legitimize their new project of presenting fictional but realist narratives about the contemporary world by insisting on its status as a true story that is "told with modesty, with seriousness, and with a religious application" (Preface). One would assume, however, that contemporary audiences were much more interested in the "wonders of this man's life [which] exceed all that [...] is to be found extant," and it is certainly no coincidence that the preface praises these attractions which point forward to a new understanding of literature in terms of imagination and entertainment before it insists on the morally exemplary qualities of the tale. Similarly, it can be safely assumed that audiences' interest in the Harry Potter of the eighteenth century, Samuel Richardson's Pamela with all its spin-offs, was more directed at the interior of young women's bedrooms and minds than the moral point of Virtue Rewarded. In terms of the novels' literary status, however, readers' enthusiasm for spectacle and piquancy brought the dangers of coarseness and genuine popularity, which in turn undermined the new genre's cultural authority. No wonder, then, that Henry Fielding, who truly emancipated modern fiction by establishing the authorial narrator and thus liberated fiction from the constraints of first-person narration, tried to fend off the uneducated by using the uncommon adjective 'eleemosynary' in the very first sentence of Tom Jones after he had legitimized the new genre with recourse to neoclassical poetics as a 'comic epic poem in prose' in the preface to his earlier novel Joseph Andrews (1742).

Whatever the strategies of insisting on novels' status as literature in the emerging new sense, however, the **performative potential** of the new genre remained to a certain extent unchecked by these. To this day, nothing can keep readers of fiction from reading novels for mere entertainment without any regard for literary ambition as manifested in, for example, formal complexity, and nothing can keep readers from identifying with characters or looking for a message or moral which could be applied to their own lives. Accordingly, novels (and modern literature at large) perform all kinds of services for psychic systems and, depending on which registers of meaning are foregrounded in the reading process, establish more or less close performative ties with other social systems. While this can result in exclusively religious, political, economic or whatever readings, the fact that the text at hand provides an **integrative vehicle** for this multiplicity emerges as one of the strong points of modern literature.

As this sketch shows, function and performance are only loosely coupled. The relationship between the two will have to be continuously negotiated and calibrated in the processes of self-observation and self-description characteristic of modern literary communication. **Reflexivity** thus becomes the **hallmark of modern literature**, and a history of modern fiction could be written with a focus on the variety of metaliterary, metanarrative or metafictional strategies displayed in novels since the eighteenth century. Such strategies are one of the decisive markers of 'literary fiction' even today, while some subgenres of the novel, such as the Gothic novel, lost their status as literature on these grounds (cf. entry I.2.4).

Systems Theory and Reading/Analysing Texts

speaking, the evolution of modern literature has been marked by the emergence of subjectivity as the basis of modern culture in a movement from negotiating its relation to the world (reference) through emphatic validations of subjective experience to an increasing acknowledgement of its conditioning through textuality and mediality (cf. Reinfandt, "Reading"), but one of the distinctive features of modern literature is the persistent compensatory co-presence of all three dimensions with varying dominants. Depending on the contexts of their reception, modern literary texts carry the potential for manifold readings. Systems-theoretical approaches in literary and cultural studies provide a dynamic framework for acknowledging the polycontextuality and the historical dynamics shaping the underlying processes of production and reception.

The four-dimensional topography of layers of modern mediality outlined above suggests that Niklas Luhmann's sociological theory of modernity provides a repertoire of distinctions that on the whole allow for a more precise and differentiated analysis than comparable approaches in cultural theory, such as, for example, Stephen Greenblatt's metaphorical notion of 'the circulation of social energy' or Michel Foucault's concept of 'discourse' (cf. entries II.4 and II.5). What is more, the theory is self-reflexive in that it acknowledges its own positioning in the very cultural continuum of modernity that it describes: sociological systems theory is only one more example for the creativity of systems, which forms the basis for everything there is. The dangers of enslavement as envisioned by Blake in the opening quotation of this entry can perhaps best be countered with the help of an approach which charts the multidimensional layers of systemic creativity as well as the dangers of their mutual encroachment upon each other on a sophisticated theoretical footing which acknowledges the systems' fundamental operative closure and autonomy.

Select Bibliography

- **Luhmann, Niklas.** Art as a Social System. Stanford: Stanford University Press, 2000.
- **Luhmann, Niklas.** Die Gesellschaft der Gesellschaft. Frankfurt/M.: Suhrkamp, 1997.
- Luhmann, Niklas. "How Can the Mind Participate in Communication?" Materialities of Communication. Eds. Hans Ulrich Gumbrecht and K. Ludwig Pfeiffer. Stanford: Stanford University Press, 2004. 370–87.
- **Luhmann, Niklas.** "The Improbability of Communication." *Essays on Self-Reference.* New York: Columbia University Press, 1990. 86–98.
- **Luhmann, Niklas.** *Introduction to Systems Theory.* Cambridge: Polity, 2011.
- **Luhmann, Niklas.** Love as Passion: The Codification of Intimacy. Cambridge: Polity, 1986.
- **Luhmann, Niklas.** Observations on Modernity. Stanford: Stanford University Press, 1998.
- Luhmann, Niklas. The Reality of the Mass Media. Stanford: Stanford University Press, 2000.
- **Luhmann, Niklas.** Social Systems. Stanford: Stanford University Press, 1995.
- Luhmann, Niklas. "What is Communication?" Communication Theory 2 (1992): 251–59.

- Moeller, Hans-Georg. Luhmann Explained: From Souls to Systems. Chicago: Open Court, 2006.
- Müller, Harro. "Luhmann's Systems Theory as a Theory of Modernity." Niklas Luhmann. Spec. issue of New German Critique 61 (1994): 39–54.
- Reinfandt, Christoph. "How German Is It? The Place of Systems-Theoretical Approaches in Literary Studies." Systems Theory and Literature. Spec. issue of EJES: European Journal of English Studies 5.3 (2001): 275–88.
- Reinfandt, Christoph. "Reading the Waste Land: Textuality, Mediality, Modernity." Addressing Modernity: Social Systems Theory and U.S. Cultures. Eds. Hannes Bergthaller and Carsten Schinko. Amsterdam/New York: Rodopi, 2011. 63–84.
- Wellbery, David. "System." Critical Terms for Media Studies. Eds. W.J. T. Mitchell and Mark B. N. Hansen. Chicago: University of Chicago Press, 2010. 297–309.
- Werber, Niels, ed. Systemtheoretische Literaturwissenschaft: Begriffe – Methoden – Anwendungen. Berlin: de Gruyter, 2011.

Christoph Reinfandt