# Publication Review

## Recent Books and Articles Related to Constructivist Approaches

> **Upshot** · This section lists publications related to constructivist approaches – constructivism, second-order cybernetics, enaction, non-dualism, biology of cognition, neurophenomenology etc. – that recently have been published elsewhere, and which the reader of the journal might find interesting. The entries are ordered alphabetically and clustered according to their respective primary disciplinary backgrounds or application. The increasingly extending bibliography and the Constructivist E-Print Archive (CEPA) can be consulted at http://cepa.info

## Artificial Intelligence

> Schneider S., Abdel-Fattah A., Angerer B. & Weber F. (2013) Model construction in general intelligence. In: Kühnberger K.-U., Rudolph S. & Wang P. (eds.) Artificial General Intelligence. Proceedings of the Sixth International Conference, AGI-13, Beijing, China, July/August 2013. Springer, Berlin: 109–118.

>> In this conceptual paper we propose a shift of perspective for parts of AI – from search to model construction. We claim that humans construct a model of a problem situation consisting of only a few, hierarchically structured elements. A model allows selective exploration of possible continuations and solutions, and for the flexible instantiation and adaptation of concepts. We underpin our claims with results from two protocol studies on problem-solving imagery and on the inductive learning of an algorithmic structure. We suggest that a fresh look into the small-scale construction processes humans execute would further ideas in categorization, analogy, concept formation, conceptual blending, and related fields of AI. Relevance: In accordance with Ernst von Glasersfeld's postulate that knowledge is actively built up by the cognizing subject, the paper emphasizes the constructive nature of human intelligence. While problem space models in AI also partly reflect this, the metaphorical language of problem space search lends itself to epistemological misinterpretations.
http://www.academia.edu/3543193/Model_Construction_in_General_Intelligence or http://cepa.info/937

## Cognitive Science

> Caruana F. & Borghi A. M. (2013) Embodied cognition, una nuova psicologia [Embodied cognition: A new psychology]. Giornale Italiano di Psicologia 1/2013: 23–48.

>> Embodied Cognition represents the most important news in cognitive psychology in the last twenty years. The basis of its research program is the idea that cognitive processes depend, mirror, and are influenced by bodily control systems. A whole class of novel perspectives entered into the psychologists' agenda only after the emergence and success of EC. In the paper we will deal with some of the main topics debated within EC, from the discussion on the role of representation, to the relationship with enactivism, with functionalism and with the extended mind view. Against an interpretation according to which EC is simply an evolution of the classical cognitivist program, we will focus on the aspects that highlight crucial discontinuities with it, suggesting instead that the EC perspective is indebted to previous theoretical traditions such as American pragmatism, ecological psychology and phenomenology. In the present paper we will discuss some of the most important achievements of EC in different areas of experimental research, from the study of affordances to that of the bodily experience, from the investigation on emotions to that on language. Our aim is to force the Italian public, particularly recalcitrant to EC, to critically reflect on the debts to previous traditions. Relevance: The paper reviews embodied theories with a special focus on enactivist approaches.
http://cepa.info/938

> Petitmengin C. & Lachaux J. P. (2013) Microcognitive sciences: Bridging experiential and neuronal microdynamics. Frontiers in Human Neurosciences 7: 617.

>> Neurophenomenology, as an attempt to combine and mutually enlighten neural and experiential descriptions of cognitive processes, has met practical difficulties which have limited its implementation into actual research projects. The main difficulty seems to be the disparity of the levels of description: while neurophenomenology strongly emphasizes the micro-dynamics of experience, at the level of brief mental events with very specific content, most neural measures have much coarser functional selectivity, because they mix functionally heterogeneous neural processes either in space or in time. We propose a new starting point for this neurophenomenology, based on (a) the recent development of human intra-cerebral EEG (iEEG) research to highlight the neural micro-dynamics of human cognition, with millimetric and millisecond precision and (b) a disciplined access to the experiential micro-dynamics, through specific elicitation techniques. This lays the foundation for a microcognitive science, the practical implementation of neurophenomenology to combine the neural and experiential investigations of human cognition at the subsecond level. This twofold microdynamic approach opens a line of investigation into the very cognitive acts in which the scission between the objective and the subjective worlds originates, and a means to verify and refine the dynamic epistemology of enaction. Relevance: The twofold microdynamic approach that we are advocating in this article not only provides a method-

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ological solution to the problems of correlation between experiential and neuronal, first-person and third-person descriptions of our cognitive processes. It also opens a line of investigation into the very cognitive acts in which the scission between the objective and the subjective worlds originates, and a means to verify and refine the dynamic epistemology of enaction.
http://www.frontiersin.org/Journal/Abstract.aspx?s=537&name=human_neuroscience&ART_DOI=10.3389/fnhum.2013.00617

> **Petitmengin C., Remillieux A., Cahour B. & Carter-Thomas S. (2013) A gap in Nisbett and Wilson's findings? A first-person access to our cognitive processes. Consciousness and Cognition 22(2): 654–669.**

>> The well-known experiments of Nisbett and Wilson lead to the conclusion that we have no introspective access to our decision-making processes. Johansson et al. have recently developed an original protocol consisting of manipulating covertly the relationship between the subjects' intended choice and the outcome they were presented with: in 79.6% of cases, they do not detect the manipulation and provide an explanation of the choice they did not make, confirming the findings of Nisbett and Wilson. We have reproduced this protocol, while introducing for some choices expert guidance to the description of this choice. The subjects who were assisted detected the manipulation in 80% of cases. Our experiment confirms Nisbett and Wilson's findings that we are usually unaware of our decision processes, but goes further by showing that we can access them through specific mental acts. Relevance: This article shows the possibility and reliability of disciplined first-person descriptions.
http://cepa.info/931

> **Villalobos M. (2013) Enactive cognitive science: Revisionism or revolution. Adaptive Behavior 21(3): 159–167.**

>> The enactive approach is usually associated with a revolutionary project that aims to transform in a radical way our understanding of mind and cognition. Bold theoretical moves such as the rejection of cognitive representations or the assumption of a deep continuity between life and

mind, among other enactive ideas, justify this perception. Nonetheless, when we assume a broader historical perspective, including the long cybernetic tradition that preceded the emergence of cognitive sciences, the image of the enactive approach looks different. Put in the context of the paradigmatic shift that took place between first-order and second-order cybernetics, especially in the case of Maturana's autopoietic theory, the enactive paradigm, so I will try to show in this work, appears rather like a conservative or revisionist project. Better said, it appears as a slightly hybrid paradigm, wherein original and progressive elements coexist with revisionist components. The paper aims to offer an alternative interpretation of the enactive approach and contribute to a better understanding of its identity as a research program, and its present and its possible future challenges. Relevance: The paper offers a reconstruction of the historical relationship between autopoietic theory and the enactive approach, and evaluates the internal consistency of the enactive approach.

## Cybernetics

> **Richards L. D. (2010) The anticommunication imperative. Cybernetics and Human Knowing 16(1–2): 11–24.**

>> In the cybernetic tradition of Heinz von Foerster's imperatives, this paper proposes "the anticommunication imperative": If you seek the new, compose asynchronicity. I draw on narratives credited to Herbert Brün, both written and oral, that have inspired this formulation, of which the importance of anticommunication in the role the arts play in society is central. I connect Herbert's idiosyncratic approach to systems and their stages to the idea of anticommunication as essential for the retardation of their decay. I offer the idea of imperatives as one way of thinking about the design of a desirable society, that is, a network of statements that point to what is not currently the case, but which, if they were the case, would be desirable. Relevance: The paper provides, explicitly, a second-order cybernetic perspective on systems and the arts.
http://www.academia.edu/3708626/The_Anticommunication_Imperative

> **Richards L. D. (2013) Difference-making from a cybernetic perspective: The role of listening and its circularities. Cybernetics and Human Knowing 20(1-2): 59–68.**

>> Take as a premise that listening (and its circularities) becomes an essential practice for making a difference in the world and represents a critical concept in the design of a participative-dialogic society. The speaker-respondent circularity turns listening into a conversation. Participants set aside their habitual or socially prescribed ways of interacting and explore other ways to be present. This perspective on listening and difference-making suggests an alternative (not mutually exclusive, yet distinct) approach to the human attribute called consciousness, from one characterized by purposiveness to one focused on presence. I claim that the idea of a participative-dialogic society as desirable is so alien to prevailing ways of thinking about the world and how it must work that it would be dismissed as "anarchist" if openly promoted – that is, it implies an alternative to the reward-oriented hierarchy approach to the design of economic and social systems that dominates societal structures world-wide. By advancing the idea anyway, I expect to make a difference. With anarchic intentions in mind, I propose listening, thinking, and designing kinetically (in contrast to kinematically). Listening (and its circularities) replaces, or at least offers an alternative to, reward-oriented hierarchy as a way of thinking about difference-making in the world. Relevance: The paper provides, explicitly, a second-order cybernetic perspective.
http://www.academia.edu/3708693/Difference-making_from_a_Cybernetic_Perspective_The_Role_of_Listening_and_Its_Circularities

## Economics

> **Massironi C. & Guicciardi M. (2011) Investment decision making from a constructivist perspective. Qualitative Research in Financial Markets 3(3): 158–176.**

>> Purpose: This paper aims to introduce the reader to investigation of some aspects of investment decision making from a con-

structivist perspective. Approach: The constructivist perspective is introduced in its dual nature of epistemology and of modelization. From constructivist epistemology, the paper mentions the corollaries of theoretical pluralism and cognitive pragmatism. From Kruglanski and Ajzen's lay epistemology theory, the paper presents in more detail a constructivist modelization for the study and improvement of formal processes of investment decision making. Findings: Beginning from the proposed framework, the paper indicates the lines for the development of a critical (or reflective) investment decision-making attitude. This is an investment decision making which is able to reflect on its own constructs and cognitive processes in order to develop investment processes with a higher "constructivist awareness" and efficacy. Value: The proposed modelization can contribute to the work of those dedicated to the development of better formal processes of investment. The paper presents three examples of possible applications potentially useful for the improvement of the processes of asset valuation of value investors. Relevance: This paper aims to introduce the reader to investigation of some aspects of investment decision making from a constructivist perspective.

http://cepa.info/921

## Epistemology

> Pattee H. H. (2008) Physical and functional conditions for symbols, codes, and languages. Biosemiotics 1(2): 147–168.

>> All sciences have epistemic assumptions, a language for expressing their theories or models, and symbols that reference observables that can be measured. In most sciences the languages in which their models are expressed are not the focus of their attention, although the choice of language is often crucial for the model. On the contrary, biosemiotics, by definition, cannot escape focusing on the symbol-matter relationship. Symbol systems first controlled material construction at the origin of life. At this molecular level it is only in the context of open-ended evolvability that symbol-matter systems and their functions can be objectively defined. Symbols are energy-degenerate structures not determined by laws that act locally as special boundary conditions or constraints on law-based energy-dependent matter in living systems. While this partial description holds for all symbol systems, cultural languages are much too complex to be adequately described only at the molecular level. Genetic language and cultural languages have common basic requirements, but there are many significant differences in their structures and functions. Relevance: The paper expresses the classical epistemological mind-matter problem at the simplest evolutionary level, which begins with self-replication. At this level I call it the symbol-matter problem, and I discuss the physical and epistemic conditions for symbol systems and languages to arise.
http://www.academia.edu/4775461/Physical_and_functional_conditions_for_symbols_codes_and_languages or http://cepa.info/922

## Linguistics

> Cuffari E. C. (2012) Gestural sense-making: Hand gestures as intersubjective linguistic enactments. Phenomenology and the Cognitive Sciences 11(4): 599–622.

>> The ubiquitous human practice of spontaneously gesturing while speaking demonstrates the embodiment, embeddedness, and sociality of cognition. Spontaneous co-speech gesture confirms embodied aspects of linguistic meaning-making that formalist and linguistic turn-type philosophical approaches fail to appreciate, while also forefronting intersubjectivity as an inherent and normative dimension of communicative action. Co-speech hand

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{ OF RELATED INTEREST **ERNST VON GLASERSFELD ARCHIVE**
On 22 March 2013, the official inauguration of the Ernst von Glasersfeld Archive took place in Innsbruck. The event is documented in a book edited by Theo Hug, Michael Schorner & Josef Mitterer. The archive contains von Glasersfeld's literary estate, personal documents and pictures as well as his self-made office furniture. Manuscripts, photographs, audiotapes and video clips are being digitized and made available for a wide audience, and in particular for future research. Archivist Michael Schorner and the literary executors, Josef Mitterer and Theo Hug, are looking forward to your visits, both online at http://www.evg-archive.net and physical: Herzog-Friedrich-Straße 3, 6020 Innsbruck (Austria). The archive is open on Tuesday and Wednesday, from 13:00 to 17:00.
Hug T., Schorner M. & Mitterer J. (eds.) (2013) Ernst-von-Glasersfeld-Archiv. Eröffnung – Inauguration. Innsbruck University Press, Innsbruck. ISBN 978-3-902936-17-2. 76 pages.

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gestures, as linguistically meaningful speech acts, demonstrate sedimentation and spontaneity (in the sense of Maurice Merleau-Ponty's dialectic of linguistic expression), or features of convention and nonconvention in a Gricean sense. Yet neither pragmatic nor classic phenomenological approaches to communication can accommodate the practice of co-speech hand gesturing without some rehabilitation and reorientation. Pragmatic criteria of intersubjectivity, normativity, and rationality need to confront the nonpropositional and nonverbal meaning-making of embodied encounters. Phenomenological treatments of expression and intersubjectivity must consider the normative nature of high-order social practices like language use. Reciprocally critical exchanges between these traditions and gesture studies yield an improved philosophy that treats language as a multi-modal medium for collaborative meaning achievement. The proper paradigm for these discussions is found in enactive approaches to social cognition. Relevance: The view in this paper is constructivist as it argues for a middle-way understanding of meaning co-construction as neither internal nor external, but rather as multimodal and multi-body enacting.

> **Kravchenko A. (2013)**
Биологическая реальность языка [The biological reality of language]. Вопросы когнитивной лингвистики 1: 55–63.

>> Ignoring the biology of cognition and language characteristic of the orthodox view of language as a symbolic system is fraught with grave methodological danger. This danger can be avoided by taking a biological approach to language as consensual coordinations of consensual coordinations of behavior, with an emphasis on the relational nature of linguistic interactions that sustain the unity of society as a living system. With this in view, a new agenda for language sciences is called for which must depart from the old dualistic view of the relationship between mind and language. Relevance: The biology of cognition is viewed as capable of taking linguistics out of the methodological impasse. http://cepa.info/929

> **Kravchenko A. (2013) What's in a presidential address from the point of view of the biology of cognition?.** Russian Journal of Communication 5(3): 286–288 .

>> It is argued that the difference in the rhetoric used by Russian presidents in their annual addresses and American presidents in their inauguration speeches reflects the difference between the Russian and American societies viewed as living systems in the theoretical framework of the biology of cognition. Relevance: The biology of cognition principles are applied in analyzing rhetoric as a reflection of orientational values in different societies as living systems.

> **Kravchenko A. & Boiko S. (2013) Anglicisms in russian in the context of the orientational function of language.** In: Proceedings of the International Symposium on Language and Communication, 17–19 June 2013, Izmir, Turkey. Izmir University, Izmir: 233–246.

>> The traditional approach to writing in terms of the code model of language leads to functional illiteracy, affecting individual and social cognition as adaptive behavior in a consensual domain of co-ordinated interactions, or languaging. Leaning on the biology of cognition, the paper emphasizes the orientational function of texts in establishing a culture-specific relational domain of linguistic interactions sustaining the unity of a languaging community as a living system distributed across space and time. The exploding use of Anglicisms in modern Russian public texts is indicative of dramatic changes in language and culture that may be described as hybridization. Based on an analysis of a large sample of Russian hybrid public texts, it is suggested that unhindered cross-cultural interaction poses new challenges for cognitive development of language-specific cultures outside the Anglo-American world, making real the danger of losing their cultural identity. Relevance: The biology of cognition principles are applied in analyzing an ongoing large-scale linguistic change caused by a shift in the orientational values of Russian society as a living system.
http://isea.academia.edu/AlexanderKravchenko/ Papers/ or http://cepa.info/927

## Literature Science

> **Clarke B. (2013) Gaming the trace: Systems theory for comparative literature.** The Comparatist 37: 186–199.

>> "Gaming the Trace" builds up the power of narrative structures from a consideration, first, of the trace – the event of minimal inscription – and next, of what is latent in the reception – that is, the construction – of the trace. I coin a word to capture this combination of grammatological event and observing process, semiolepsis, and relate these dynamics to an allegory of narrative reception. Metempsychosis, or the tale of the transmission of the soul from one body to another, comes forward as an allegory of the reception of the trace. From here the essay moves to an interrogation of the movie Avatar's mise en scène of the avatar system – its telling, its design specs, and its phantasmagoric realizations of technological metempsychoses. It turns out that an actual media technology exterior to that frame feeds another digital "transmission of soul" back into the physiological metamorphoses of the storyworld. Relevance: The essay expounds as well as applies a broadly Luhmannian framework of systems differentiations. Its methodology throughout is an application of epistemological constructivism and second-order systems theory.

## Media Science

> **Moody M. & Burleson C. (2013) Using service-based, collaborative teaching in journalism courses.** Teaching Journalism and Mass Communication: A Journal Published by the Small Programs Interest Group 4(1).

>> New media technologies, changing student learning styles and high employer expectations in a tightening job market necessitate innovation and constant adaptation of journalism and public relations teaching materials. Building on a constructivist paradigm, this essay proposes a service-based, collaborative approach to teaching that involves students, peers, employers and faculty. It offers a model, strategies and a case study using this teaching style. Faculty, students and employers benefit from departments that maintain a good relation-

ship with key stakeholders and incorporate convergent media into course assignments. Collaboration and service learning also are essential to keeping up with emerging trends. Relevance: The paper addresses how to implement a constructive approach in service-learning projects.
http://aejmc.us/spig/2013/utilizing-service-based-collaborative-teaching-in-journalism-courses/ or http://cepa.info/936

## Methodology

> **Alhadeff-Jones M. (2013) Complexity, methodology and method: Crafting a critical process of research. Complicity: An International Journal of Complexity and Education 10(1/2): 19–44.**

>> This paper defines a theoretical framework aiming to support the actions and reflections of researchers looking for a "method" in order to critically conceive the complexity of a scientific process of research. First, it starts with a brief overview of the core assumptions framing Morin's "paradigm of complexity" and Le Moigne's "general system theory." Distinguishing "methodology" and "method," the framework is conceived based on three moments, which represent recurring stages of the spiraling development of research. The first moment focuses on the definition of the research process and its sub-systems (author, system of ideas, object of study and method) understood as a complex form of organization finalized in a specific environment. The second moment introduces a matrix aiming to model the research process and nine core methodological issues, according to a programmatic and critical approach. Using the matrix previously modeled, the third moment suggests conceiving of the research process following a strategic mindset that focuses on contingencies, in order to locate, share and communicate the path followed throughout the inquiry. Relevance: This paper provides the readers with a constructivist methodology of research inspired by Morin's paradigm of complexity and Le Moigne's general system theory.
http://ejournals.library.ualberta.ca/index.php/complicity/article/view/20398/15669

## Psychology

> **Chiari G. (2013) Emotion in personal construct theory: A controversial question. Journal of Constructivist Psychology 26: 249–261.**
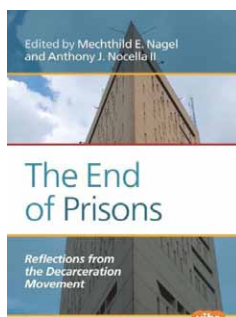
>> George Kelly's personal construct theory (PCT) has been accused of disregarding the role of emotion in human life. This charge originates from a misunderstanding of PCT's basic assumptions. Kelly deals with experiences commonly called "emotional" in terms of dimensions of transition according to a genuinely constructivist epistemology. A review of the literature shows few elaborations of Kelly's original formulation of constructs relating to transitions, and even some contributions critical of Kelly's approach to emotions. This article rebuts the criticisms while making clear the epistemological and theoretical bases of Kelly's treatment of transitional experiences, its peculiarities, and its role in the diagnostic/therapeutic process. Relevance: It deals with the notion of emotion from a genuinely constructivist epistemology such as that envisioned by Kelly's personal construct theory.

> **McGann M., De Jaegher H. & Di Paolo E. (2013) Enaction and psychology. Review of General Psychology 17(2): 203–209.**

>> The enactive approach to cognitive science aims to provide an account of the mind that is both naturalistic and nonreductive. Psychological activity is viewed not as occurring within the individual organism but in the engagement between the motivated autonomous agent and their context (including their social context). The approach has been developing within the fields of philosophy, artificial life, and computational biology for the past two decades and is now growing within the domain of psychology more generally. In this short paper we outline the conceptual framework of the enactive approach. Illustrative research questions and methods for investigation are also broached, including some existing examples from theoretical, behavioral, and computational modeling research. It is suggested that an enactive psychology provides the basis for the conceptual framework of the enactive approach. Relevance: This paper defines a "enactive psychology" to describe the complex of relations between a cognitive agent and their environment.
http://www.academia.edu/4993021/Enaction_and_Psychology

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{ OF RELATED INTEREST **THE END OF PRISONS**

The book *The End of Prisons: Reflections from the Decarceration Movement* edited by Mechthild E. Nagel & Anthony J. Nocella II brings together a collection of social justice scholars and activists who take Foucault's concept of discipline and punishment to explain how prisons are constructed in society from nursing homes to zoos. This book expands the concept of prison to include any institution that dominates, oppresses, and controls. A prison, as defined in this book, is an institution or system that oppresses and does not allow freedom for a particular group. Within this definition, we include the imprisonment of nonhuman animals and plants, which are too often overlooked. Rodopi, Amsterdam, 2013. ISBN 978-9042036567. 248 pages.

## Psychotherapy

> Chiari G. & Nuzzo M. L. (2006)
Exploring the sphere of between:
The adoption of a framework of complementarity and its implications for
a constructivist psychotherapy. Theory
and Psychology 16: 257–275.

>> A psychological understanding of interpersonal processes in terms of complementarity is not new. It is enough to mention Buber (the title of our paper refers to an expression of his), as well as Bateson and his definitions of double description, binocular vision and complementary and symmetric relations. We would like to clarify the nature of complementarity, and to point out the presence of this framework in some philosophical and scientific discourses about the person. Moreover, we think that the adoption of a framework of complementarity becomes a metaphysical necessity within what we have called "hermeneutic constructivism," and that other constructivisms fail to acknowledge it, thereby losing much of their metatheoretical, revolutionary potential. We will document the possibility of adopting a framework of complementarity with respect to different pairs of poles, which specify as many phenomenal domains: (1) the relation between any entity and its environment; (2) the relation between modes of description; (3) the relation between the person and the world; and (4) the relation between people. In the final part of the paper we outline some implications of a consideration of complementarity for the psychotherapy process. Relevance: The framework of complementarity is an essential feature of hermeneutic constructivism.

> Chiari G. & Nuzzo M. L. (2010)
Constructivist psychotherapy: A narrative hermeneutic approach. Routledge,
London.

>> A book that proposes to outline a systematic approach to psychotherapy cannot omit describing the psychological theory such an approach belongs to. George A. Kelly had the same opinion, in that he put an analysis of the differences between the philosophical assumptions of "accumulative fragmentalism" and "constructive alternativism" before the exposition of his theory of personality and his psychotherapeutic

proposal. Choosing the title for the book "Constructivist Psychotherapy: A Narrative Hermeneutic Approach" represents the attempt to mark a significant differentiation from the more orthodox expositions of Kelly's personal construct psychotherapy on which we heavily base our approach, and at the same time to specify as much as possible our metatheoretical and theoretical references. Relevance: The book has an extensive exposition of the different constructivist views on knowledge with their links with genetic epistemology, autopoietic theory, phenomenology, hermeneutics, social constructionism, radical constructivism.

## Sociology

> Becerra G. (2013) A brief introduction
to Niklas Luhmann's "Theory of Autopoietic Social Systems" and "Theory
of Functional Social-Autopoietic Systems". Intersticios. Revista sociológica
de pensamiento crítico 7(2): 21–35.

>> The aim of this paper is to present synthetically the central concepts and fundamental laws of Niklas Luhmann's "Theory of Autopoietic Social Systems" and "Theory of Functional Social-Autopoietic Systems." To do this we outline the conceptualization of notions like time, communications, observations, elements, relationships, complexity, connection, operation, environment, function, code, program, generalized symbolic media and their interrelationships and place within the laws of the theory. The guiding questions of this paper are: What entities do Luhmannian theory tell us about? How do these entities behave within the laws of the theory? And finally, the practical evaluation over the aims and goals of Luhmann's theoretical program:, for which purposes? Relevance: The document presents, in a clear way, the central concepts of Luhmann's theory of autopoiesis and its relevance to the study of social phenomena.
http://www.intersticios.es/article/view/11605

> Halsall F. (2012) Niklas Luhmann and
the body: Irritating social systems. The
New Bioethics 18(1): 4–20.

>> For Niklas Luhmann the body seems to almost disappear in modernity. Modern society, he argues, is a system comprised of a

number of operatively closed and functionally distinct sub-systems such as economics, science, law, the mass media and so on. Each system is autonomous and observes the world in its own terms via its internal communications. Thus, Luhmann's sociology is generally characterized as a post-human one. That is, one in which the basic unit of both social agency and sociological analysis is not the embodied human subject but rather instances of impersonal communication. This article offers a challenge to this by arguing that the body still has a significant function in Luhmann's account of social systems. My claim is that the body has the ability to migrate between different systems and, thus, has a transcendent status in social systems. That is, the body can migrate between social systems and, in Luhmann's terms, irritate them in significant ways. Relevance: It offers an account and critique of the radical constructivism of Luhmann's systems theoretical account of social systems by looking at the place of the body in it.
http://cepa.info/930