CURATING IN THE FIELD OF COMPLEXITY

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Acknowledgments

To the psychic systems with whom I am structurally coupled, and whose perturbations have transferred me the energy needed to avoid equilibrium in the writing process; to generate this piece of communication was by no means an autonomous act: Juste, Sarah, Mother, Ashley, Victoria, and my Curating Contemporary Art 2012-2014 cohorts.

Abstract

According to Paul O'Neill, 'the figuring of authentic culture as emergent and self-organised – rather than commissioned, prescribed or authored from elsewhere – is precisely one of the most important themes within the curatorial discourse of the last two decades.'[1] This paper responds to the challenge of finding a means by which this trope of the 'organic, open ended co-production' or 'dialogical negotiations' that lead to exhibitions may be understood, beyond as a rhetorical hallmark. It does this by reconceiving of the curatorial in terms of the sociological theory of complex systems, rather than reiterating the trope of complexity in curatorial discourse.

In a radically systematic evaluation of the emergent forces that give rise to exhibitions and discourse, it seeks to offer an account of the development and interactions of the curatorial field in a language other than its own, meeting the demand for raising the horizon of the ambition of transdisciplinarity in the field.[2] I argue that by entering more deeply into an application of the methodologies of a holistic, posthumanist mode of analysis, a more qualitative understanding of the mutually affective relations of the field of exhibition making might be derived.

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[1] 'It is still appropriate to note the recurrence of certain themes across the divergent debates and practices of curators in recent decades. One such theme is precisely the trope of emergence and the dialogical negotiation of artworks into public existence through the organic, open-ended co-production and conversation of artists, curators, artist-curators and other players.'
O'Neill, Paul, and Mick Wilson. "Curatorial Discourse and the Contested Trope of Emergence." Ica.co.uk. Institute of Contemporary Arts, 4 Dec. 2008. Web. Dec.-Jan. 2014.

[2] 'There is a certain amount of inter-and transdisciplinarity that has entered the field and operates there, but I am very interested in raising the horizon of its ambition.'
(Bismarck, Rogoff 29).

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1. INTRODUCTION

1. – Zooming in: From Constellation to Complexity

> *'The curatorial is constellational – and the act of exhibition making lies within it. It is a set of interconnected, yet different activities which all influence each other in the making of a project. Every part reflects the whole. The exhibition also reflects the varying relations that constitute it.'*[3]

In *Cultures of the Curatorial*, Beatrice Von Bismarck attempts to map the intricate web of relations evoked by the concept of the constellation, in which every element is not only unique and arbitrary, but interconnected within a dynamic scope of perspectives. (Bismarck 8) She is interested in the qualities of contingency and mutual causality that it evokes in her description of the collaborative processes of curatorial production. In her analysis, its fluctuating nature relates to Bourdieu's 'sociological definition of a field whose rules are constantly defined and redefined by those participating in it' (Bismarck 37) – in which every part is said to reflect the whole, and the whole is said to reflect the relations that it contains.

> *'The curatorial is a "dynamic field where the constellational condition comes into being, constituted by the curating techniques that come together as well as by the participants – the actual people involved who potentially come from different backgrounds, have different agendas and draw on different experiences, knowledges, disciplines [...]' (Bismarck 24)*

However, considering this description, we question whether the dynamic relations of curating may lie more readily in reach than the distant juxtaposition of the 'constellational.' The elements in Bismarck's constellation are not simply objects and ideas in Benjamin's notion of 'dialectics at a

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[3] Bismarck, Beatrice Von. "Curating/Curatorial." Cultures of the Curatorial. New York: Sternberg, 2012. N. pag. Print. 7.

standstill,' [4] but emphatically motivated agents with their own ‘different agendas,’ who actively ‘come together,’ She centres in on the potentiality of both techniques and living figures, in that they 'draw on' but do not necessarily represent their different histories. Her interest lies in the condition of dynamic interaction evoked by the constellation, in which multiple participants interfere in an on-going process of exchange.

Our study therefore challenges the limits of the 'constellational' conjecture of the curatorial, regarding it not from the arbitrary distance of the earthbound viewer, but by zooming into the field of collective interactivity of cultural production. We do so through the transdisciplinary lens of complexity theory – shifting our focus to examine from where the ‘self-actualising process of meaning-formation’ (O’Neill 2008) emerges from the irrevocably intricate dynamics of the process of collaboration, whose living elements are unpredictable, ‘enmeshed in systems of personal and economic relations.’

It is important to note that the idea of emergence, a defining trait of complex systems,[5] is in fact a long-standing trope within curatorial discourse. According to Paul O'Neill, 'this figuring of authentic culture as emergent and self-organised – rather than commissioned, prescribed or authored from elsewhere – is precisely one of the most important themes within the curatorial discourse of the last two decades.’[6] This paper responds to the challenge of finding a means by which this trope of the ‘organic, open ended co-production’ or ‘dialogical negotiations’ that lead to exhibitions may be understood, beyond as a rhetorical hallmark.

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[4] ‘It’s not that what is past casts its light on what is present, or what is present its light on the past; rather, image is that wherein what has been comes together in a flash with the now to form a constellation. In other words, image is dialectics at a standstill.’
Benjamin, Walter, and Rolf Tiedemann. The Arcades Project. Cambridge, MA: Belknap, 1999. Print. 23.

[5] ‘Its importance stems from the belief that emergence is the key ingredient that makes complex systems complex.’
Standish, Russell K. "On Complexity and Emergence." High Performance Computing Support Unit (2008): n. pag. Web. 2 Jan. 2014. <http://arxiv.org/pdf/nlin.AO/0101006.pdf>.

[6] 'It is still appropriate to note the recurrence of certain themes across the divergent debates and practices of curators in recent decades. One such theme is precisely the trope of emergence and the dialogical negotiation of artworks into public existence through the organic, open-ended co-production and conversation of artists, curators, artist-curators and other players.'
O'Neill, Paul, and Mick Wilson. "Curatorial Discourse and the Contested Trope of Emergence." Ica.co.uk. Institute of Contemporary Arts, 4 Dec. 2008. Web. Dec.-Jan. 2014.

1.2 Irreducible, unpredictable, and anti-human: Methodologies of Complexity

Complexity, a mode of inquiry that takes the irreducibility, instability, and immateriality of interaction as a research subject, is defined for many theorists as the 'domain between linearly determined order and indeterminate chaos.' (Byrne 10) 'Its study is governed by the interest between the usual scientific boundaries – between biology and economics, between few and infinitely many agents, between stasis and utter chaos, between control and anarchy. (Miller 32) In complexity theory, the potentiality of the 'in-between' permeates every discipline that studies the entanglement of multiple agents bound in the dynamics of interaction, from the growth of slime to organisations. Complexity theorists 'want to know when and why productive systems emerge and how they can persist.' As a study, it offers multiple entry points into the precarious, emergent condition of the curatorial, which itself lies in a space 'between curated and organised; self curated and self organised,' (Obrist)

As a holistic paradigm, complexity regards every part of the interaction that occurs *between* elements, as well as the transfer of energy and information *between* itself and the environment, as fundamentally irreducible, interactive, and ecologically accountable, contrary to the postmodern impulse of fragmentation.[7] For its more radical proponents, such as Smith, 'no negation is costless or innocent.' [8] It considers that in collaborative processes - even further than

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[7] 'The central analytic tool of post-modern criticism is negation or deconstruction. […] From an eco auto organizational point of view the idea that such negations are always possible in systems environment relations is questionable.'
Smith, John A., and Chris Jenks. Qualitative Complexity: Ecology, Cognitive Processes and the Re-emergence of Structures in Post-humanist Social Theory. London: Routledge, 2006. Print. 7

[8] 'We stress interdependence […] Or: an animal or a phenomenon, like a social fact, is only recognisable on account of its closure or identity vis a vis an environment. That is also the basis of its extinction, as individual or species, at the hands of that environment. That kind of critically balance, potntially fallible interdependence is characteristic in complexity theory.'
(Smith 7).

‘each part reflecting the whole,’ as proposed by Bismarck. ’the whole is greater than the sum of its parts.’[9]

Complexity is also engaged with the growth arising from the uncertainty of change. According to Wallerstein, ‘The science of complexity recognises instability, evolution and fluctuation everywhere, not only in the social arena, but also in the basic processes of the natural arena.’ (201) This continuous change and growth caused by interaction also characterises the fluctuation of the curatorial as a field, which ‘allows for a continuous dynamic reconceptualisation of the relations between all actors.’ (Bismarck 15) Complexity allows for the recognition that the exhibition - a site of negotiation - also emerges within a site of negotiation, in which ‘the activities, positions, and capital [whether] economic, social, cultural, or symbolic, are continuously under debate.’ (Bismarck 30)

Finally, in its most radical form, complexity is also 'a proposal for the beginnings of the altered theoretic strategy’ (Smith 26) of a post-humanist discourse. According to Smith: ‘*what we understand as ‘humanism’ privileges, isolates, makes central and unique human being. [. . .] We do not say humans are not ‘special’ or lack autonomy but that these qualities rest not on the assertion of the will (Nietzsche and his descendants) or on unlimited technological control (Modernism and Marxism) but instead are deeply rooted in the systems of terrestrial ecology.’* (26)

Complexity challenges the curatorial to consider itself beyond a humanist mode of production – questioning where the immaterialisation of knowledge production, and the decentralisation of the field of exhibition making around the ‘central and unique human being’ may lead.

1.3 - The Curatorial as a Complex System: A Structure

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[9] ‘The term emergence is used to describe the appearance of new properties that arise when a system exceeds a certain level of size or complexity, properties that are absent from the constituents of the system. It is a concept often summed up by the phrase that ‘the whole is greater than the sum of its parts,” and it is a key concept in the burgeoning field of complexity science.’
Davies, PC W. "Emergent Biological Principles and the Computational Properties of the Universe." Complexity 10.2 (2004): 11-15. ASU Cosmos. Arizona State University, 2004. Web. 01 Dec. 2013. 2.

This dissertation therefore is involved in the venture of reconceiving of the complexity of the curatorial field through an experimental application of the above theoretical methodologies. In doing so, we seek to offer an account of the development and interactions of the curatorial field in a language other than its own, meeting the demand in the field for raising the horizon of the ambition of transdisciplinarity.[10] We argue that by entering more deeply into its analysis, a more qualitative understanding of the mutually affective relations of the field of exhibition making might be derived.

While it may indeed appear adventurous to draw the interdisciplinary parallel of complexity between the emergence of an exhibition and the emergence of evolutionary biology, of organizational science, or of the movement of a crowd, it is in fact our intention to draw our scope outward from the microcosmic to the macroscopic in so drastic a manner. The motion of stepping backwards allows us to see how the wilderness contained within many smaller pixels, in every field of interaction beyond the curatorial, may in fact betray a surreptitiously incestuous relation. Such a perspective may reveal how the endeavour of gauging the force of evolution is crucial to engage with, rather than dismiss or deconstruct. They not only influence cultural systems, such as that of the field of our inquiry, but are an inseparable part of them.

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[10] ‘There is a certain amount of inter-and transdisciplinarity that has entered the field and operates there, but I am very interested in raising the horizon of its ambition.’
(Bismarck, Rogoff 29).

2. THE CURATORIAL AS A COMPLEX SOCIAL SYSTEM

2.1 - The Curatorial in Society

As the study of complexity is itself characterised by a range of conflicting perspectives and applications across the natural and social sciences (Smith 9) in order to begin a qualitative theoretical analysis we must first position ourselves within the diversity of its approaches, choosing an theoretical analysis that would be best suited to the interests of the field at hand.

The first distinction we make, therefore, locates the curatorial field in the boundaries of sociological complexity, which is concerned with the interaction that takes place within human society rather than in the natural sciences.[11]

If Rebecca Gordon Nesbitt is invested in the idea that 'the art world microcosm becomes more than just a vehicle for passive scrutiny and provides an arena for new ideas and models to be developed which, if successful, might leak through its permeable membrane and into society at large,' (Nesbitt 38) we offer a qualitative analysis of the interaction between the systems of the curatorial and society, one taking place within the other, to understand how they establish such a mutual influence.

Luhmann's extensive research toward a complex theory of the social sciences (*The Society of Society*, 1997) originates in the study of complex natural systems in cognitive biology.[12] For him, all human systems of productive interaction such as the curatorial, take place within the single, self-referential social system of a world society, whose interaction and emergence is

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[11] If we find non- living autopoietic systems in our world, then and only then will we need a truly general theory of autopoiesis which carefully avoids references which hold true only for living systems. (Luhmann 1986: 172).
Seidl, David. "Luhmann's Theory of Autopoietic Social Systems." Münchner Betriebswirtschaftliche Beiträge Munich Business Research 2 (2004): n. pag. Web. 5.

[12] Luhmann looks at the nature of observing and of the need for drawing distinctions. He borrows the principles of self-reference and autopoiesis from the cognitive biologists Humberto Maturana and Francesco Varela.
Lee, Daniel. "The Society of Society: The Grand Finale of Niklas Luhmann." Sociological Theory 18.2 (2000): 320.

governed by the three interwoven features of communication, differentiation, and evolution[13]. His conceptual outline details the means by which complexity in different levels of interaction in society, from intimate relations to politics; take place within a common systems dynamic.[14]In the next sections of our analysis, we explore the curatorial in these terms - as a complex social system within the system of society with its own levels, qualitative differentiations, and limits.

2.2 - The Autopoietics of the Curatorial Field

2.2.1 – Elements

The first characteristic that underpins the complexity of a system is that it is composed of a large number of interacting, dynamic elements.[15] However, the complex system itself is not formed as the sum of these elements, but the emergent interactions that occurs between them. ‘Because complexity results from the interaction between the components of a system, complexity is manifested at the level of the system itself.’ (Cilliers 2)

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[13] The first part of Die Gesellschaft der Gesellschaft, Chapter One, offers an introduction to the fundamental concepts used in system theory. Among other things, Luhmann discusses meaning (Sinn) communication, system and environment, structural coupling, functional equivalents, complexity, and the world society. The first part of the book makes the case for viewing society as a single, autopoietic, self-referential social system. In the second part of the book, Chapters Two through Four, Luhmann addresses three distinct aspects of the societal system (Gesellschaftsystem): communication, evolution, and differentiation.
(Lee 321).

[14] 'The unity of society is not to be sought in ethico-political demands, but rather in the emergence of comparable conditions in systems as diverse as religion or the monetary economy, science or art, intimate relationships or politics - despite extreme differences between the functions and operational modes of these systems, our theoretical proposition offers the following: a clear demarcation of external system boundaries of different domains and compatibility between different systems.' (Lee 327)

[15] Complex systems consist of a large number of elements. When the number is relatively small, the behaviour of the elements can often be given a formal description in conventional terms.
Cilliers, Paul. Complexity and Postmodernism: Understanding Complex Systems. London: Routledge, 1998. Print. 3.

Luhmann, however, specifies that in the complex systems occurring in human society, these interactions always take the form of communications.[16] In his sociological approach, communications and only communications are the basic element of society, regardless of the intentions of the individual who produces them. [17] He radicalises the separation of the individual and his/her output of communication. For him, the identities of individuals are separate from the communications they generate. These communications belong exclusively to society. ‘Hence, Luhmann asserts, society is communication.’ (Lee 232) and, 'Humans cannot communicate; not even their brains can communicate; not even their conscious minds can communicate. Only communication can communicate.' (Luhmann 884)

To give an example, in Luhmann’s notion of the system of society, a society is not formed of the number of people in its population, but of the interaction that occurs within this population, in the form of communications, such as language. Without participating in the act of communication, individuals are not a part of society. [18] Inversely, without the constant participation of members in society in communication, society as a system ceases to exist.[19]

Likewise, in the complex social system of the curatorial, the curatorial does not manifest as the number of artists, curators, or critics who are involved, but the communications that they generate. In the curatorial field, communications take the form of exhibitions and discourse: Exhibitions, for Paul O’Neill, are communications in that they are ‘contemporary forms of

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[16] Social systems use communications as their particular mode of autopoietic reproduction. Their elements are communications which are recursively produced and reproduced by a network of communications and which cannot exist outside of such a network. (Luhmann 1986: 174)
(Seidl 7).

[17] The fundamental unit of society is communication, he suggests, not the individual human actor. (Lee 322).

[18] One does not locate society inside individuals but between them. Society exists only when individuals communicate. Until they begin to communicate, individuals are not in society. And when they do communicate— when they do participate in society—individuals do so to a very limited extent, never as “whole persons.” The limits of society are established by the limits of communication. All that is not communicated remains outside of society.
(Lee 322).

[19] Hence, Luhmann asserts, society is communication.
(Lee 320).

rhetoric, complex expressions of persuasions, whose strategies aim to produce a prescribed set of values and social relations for the audience.' (O'Neill 16) For Elena Filipovic, exhibitions can be 'vehicles for the production of knowledge and intellectual debate,' (O'Neill 18) in the form of discursive events or curatorial discourse. [20]

The same tautologies hold in the system of the curatorial, which is an inherently social field of interaction, where 'actors (individuals and institutions alike) participate in the field of the curatorial through the various activities they take on temporarily, in mutual exchange, and – at least potentially – never exclusively.' (Bismarck 12) In a complex systems reading, the curatorial therefore only exists at any given time as the on-going forms of communication between its agents - as all of its existing exhibitions or projects, as 'forms of rhetoric' - as well as all of its on-going modes of discourse, as 'vehicles for the production of knowledge.'[21] Without the constant generation and interaction of these forms of communication, the curatorial system ceases to exist.

Furthermore, these curatorial forms of communication also only exist as a part of the curatorial system of interaction. According to Irit Rogoff, who formulates a split between the ideas of 'curating,' and 'the curatorial' - 'The curatorial is an ongoing process: it doesn't think it is over when the event of knowledge has taken on some sort of tangible form and is materially sitting there. (Bismarck 37)

2.2.2 – Self-Reproduction

What is crucial for complex systems in society is that its elements of communication not only allow the system to exist - they also must be able to sustain it, by reproducing themselves.

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[20] [. . .] in the case of some exhibitions, such as Documenta X and especially Documenta 11, discursive events formed the very foundation of the project. As Elena Filipovic suggested 'This striking expansion goes in tandem with curatorial discourses [. . .]
O'Neill, Paul. "The Curatorial Turn: From Practice to Discourse." Issues in Curating Contemporary Art and Performance. By Judith Rugg and Michèle Sedgwick. Bristol, UK: Intellect, 2007. N. pag. Print. 18.

[21] This striking expansion goes in tandem with curatorial discourses that increasingly distinguish the biennial or mega exhibition as larger than the mere presentation of artworks; they are understood as vehicles for the production of knowledge and intellectual debate. (Filipovic 2006: 66)
(O'Neill 18).

This trait, called *autopoiesis*, is derived from complexity studies in cognitive biology, [22] and is a crucial trait of all complex systems. It refers to the ability of elements to recursively reproduce themselves. [23]

In complex social systems, Luhmann posits that the self-reproduction of communications, in particular, is mediated by their capacity for self-reflexivity - in which forms of communications are able to reflect on themselves in relation to their environment and reproduce themselves accordingly. [24]

For example, we might say that in the complex social system of society, the form of communication that is language reproduces itself *autopoietically* – not only does the usage of language lead to more language, it leads to a greater diversity of language, making language itself more developed and complex.[25] Through self-reflexivity, language develops itself to take more specialised forms. The development of slang, for example, can be said to have developed through the self-referential capacity of language to reproduce itself in a form that allows for more

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[22] The theory of autopoiesis was developed by the two Chilean cognitive biologists Humberto Maturana and Francisco Varela in the sixties and early seventies.
(Seidl 2).

[23] Central to the concept of autopoiesis is the idea that the different elements of the system interact in such a way as to produce and re-produce the elements of the system. That is to say through its elements the system reproduces itself.
(Seidl 2).

[24] Luhmann uses the term self-reflexivity to describe social systems' analysis of themselves and optimisation of their own actions based on this analysis (Luhmann 1984)
Hulsmann, Michael. Understanding Autonomous Cooperation and Control in Logistics. N.p.: Gardners, 2010. Print. 185.

[25] When specific forms of speech are differentiated from noise and given meaning in a social context, a language emerges that can function as a structural coupling between communicants. According to Luhmann, Speakers may creatively combine meaningful words and phrases to stretch the language, producing new words in an autopoietic, recursive manner.
(Lee 326).

specialised communication between youth.[26] It is important to note here that no agents are responsible for such a form of development- it develops itself. The rising usage of slang in society, in our example, is a collective, emergent process, rather than one that is instated.

In the system of the curatorial, we argue that communications also reproduce themselves autopoietically through self-reflexivity, directed by no hand but that of the system. As an example, we identify a specific moment in the curatorial field, in which the two forms of communications of curatorial practice (exhibitions and discourse) become self-reproductive. This takes place during what Paul O'Neill describes as 'the ascendency of the "curatorial gesture" in the 1990s.[27]

'The curatorial turn,' according to O'Neill, was characterized by the act of 'demystification,' in which "curators were beginning to make visible the mediating component within the formation, production, and dissemination of an exhibition.' (O'Neill 13) What he speculated was that for many curators - 'this interest in discourse [was highlighted] as a supplement or substitute for practice.' (O'Neill 19) For many, including Mick Wilson[28] or Beech and Wade[29] whose observations are invoked in his analysis, this trend led to a shift in which curating "[becomes] discourse" where curators are willing themselves to be the key subject and producer of this discourse.' (O'Neill 25)

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[26] In terms of a general theory of complex systems, one would say that these dynamics of the system of language are a result of the way in which the system self-organises in order to meet the needs of the community.
(Cilliers 40).

[27] The ascendency of the curatorial gesture in the 1990s also began to establish curating as a potential nexus for discussion, critique, and debate, where the evacuated role of the critic in parallel cultural discourse was usurped by the neo-critical space of curating.
(O'Neill 13).

[28] The Foucauldian moment in art of the last two decades and the ubiquitous appeal of the term "discourse" as a word to conjure and perform power', to the point where 'even talking is doing something' [. . .] (Wilson 2007: 202)
(O'Neill 20).

[29]This interest in discourse as a supplement or substitute for practice was highlighted in Dave Beech and Gavin Wade's speculative introduction to Curating in the 21st Century, 2000.
(O'Neill 19).

Here, he points out the increasing obligation of curators to expound upon their own modes of engagement, through a more explicit form of communication that extends or supports the exhibition. In this light, discourse becomes reciprocal to practice. He cites - 'As [Buchloh] identified in 1989, there is an urgent need for articulating the curatorial position as part of art discourse, where practice as “doing” or “curating” necessitated a discourse as “speaking” or “writing” in order for the curator's function to be acknowledged as part of the institutional superstructure, at the level of discourse.' (O'Neill 19) The two forms of communication are therefore bound in a reciprocal, self-generating process, by which though continuous self-reflexivity, practice reproduces discourse, and discourse reproduces practice.

Buchloh also attests that the reciprocity of these two forms allow the acknowledgment of the curator’s function as part of an ‘institutional superstructure.' However, their reciprocity also reproduces this ‘superstructure,’ in that self-reproduction is shaped by an adherence to it. Indeed, not only does self-reproduction sustain the communications that form the complex system, it also gives rise to its own structures of organisation. This is what drives the evolution of the system – it must reorganise itself in relation to its environment, in order for the system to survive.[30]

This brings us to the notion of self-organisation, in which it is recognised that the system at large also reproduces and develops itself structurally through autopoiesis.[31] Again, no hand but that of the system directs this.[32]

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[30] In order to ‘survive’ an autopoietic system constantly has to produce further elements. If this (re-production stops the system disappears; e.g. if a plant stops producing its cells it is considered dead. (Seidl 4).

[31] In other words, in its reproduction the system produces and reproduces its very own structures of reproduction. This aspect, i.e. the self-determination of its own structures, is referred to as self-organization.
(Lee 4).

[32] What concrete elements are produced at any moment is determined by the structures of the system (the system in this sense is structure determined [. . .] The structures themselves however are not pre-given in any sense, as in structuralist theories, but are themselves the product of the autopoietic system. (Lee 4).

2.2.3 – Self-Organisation

In complex social systems, self-organisation occurs due to the ability of the system to distinguish itself from its environment. This is possible because of operational closure[33] - for Luhmann, social systems can only be influenced internally through its own forms of communication.[34] Due to being closed in such a manner, the system autopoietically 'produce[s] and organise[s] the relationships between its components.' (Smith 6)

In Luhmann's theory, society itself has self-organised since the advent of modernity through functional differentiation, in which specialised, functional subsystems organise themselves toward generating a certain form of communication. For example, the system of society has functionally differentiated into the subsystems of art, politics, law, education, science and religion. [35]

These functionally differentiated sub-systems are then themselves self- organised into their own, 'operatively closed' structures on a secondary level,[36] which also reproduce themselves according

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[33] We stress interdependence, and indeed the co-postulation of both 'ecology' and 'operational closure,' Or: an animal or a phenomenon, like a social fact, is only recognizable on account of its closure or identity vis a vis an environment.
(Smith 7).

[34] In this sense, one can say, autopoietic systems are operatively closed: there are no operations entering the system from outside nor vice versa. A system's operative closure, however, does not imply a closed system model. It only implies a closure on the level of the operations of the system in that no operations can enter nor leave the system.
(Seidl 3).

[35] In the course of its evolution society has undergone three major structural changes; [. . .] With the emergence of the modern society, around the 18th century, this has been replaced by the current, functional differentiation, where we find several societal subsystems specialised in serving specific societal functions; e.g. law, science, economy, art, religion.
(Seidl 13).

[36] Each of these primary forms of differentiation can be combined with the other forms of differentiation on a secondary level; e.g. in stratified society the different strata were often differentiated internally into equal subsystems (segmentation) or according to the difference centre/periphery. Similarly the different functional subsystems might be differentiated internally into equal subsystems, into centre/ periphery or hierarchically.
(Lee 13).

to their own 'binary coding,' or minor forms of closed communication.[37] For example, we observe that the system of religion has self-organised itself into a hierarchy of various positions, institutions, and modes of communication.

As we see in Figure 1, there are three levels of self-organisation. First, we have distinguished between the complexity of natural (living) systems, and social (non-living) systems, which operate according to different orders. The system of society, as well as each of its sub-systems, also self-organise into structures such as societies, organisations, and institutions, which also each operate according to their own form of communication, or binary coding.

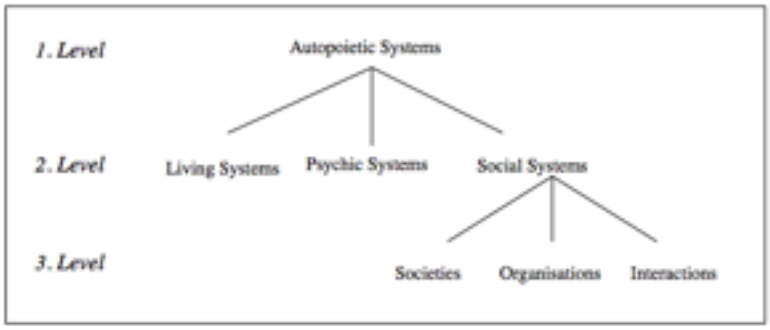

Figure 1

In the previous section, we observed that the output of communication that forms the curatorial field has itself differentiated into the reciprocal forms of discourse and practice. However, in reaction, we see that the curatorial system also self-organises into various 'professions, institutions, and disciplines' in relation to producing them, within the wider environment of society.

Bismarck elaborates on this ‘field of overlapping and intertwining activities, tasks, and roles’ that have ‘driven the curatorial turn’ as including, 'the professions of: artist, curators, museum educators, publishers, scholars, critics, and theoreticians; the institutions of museums and exhibition spaces, galleries, art and culture magazines, publishing houses, press companies, and art academies or schools; and the disciplines of art, dance, theatre, film, design, and architecture, with their related research areas. (Bismarck 8)

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[37] All of these systems are communication systems that are themselves operatively closed on the basis of a specific binary coding. That is to say, all communications taking part in the reproduction of a particular functional subsystem ‘carry’ a specific code.
(Seidl 14).

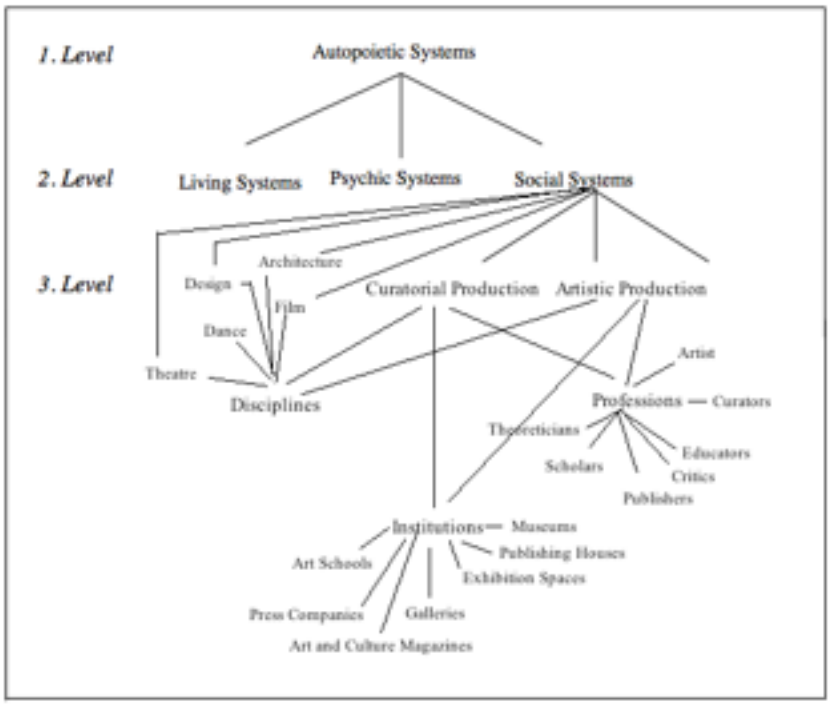

Figure 2

The curatorial field, therefore, is not an indistinct mass of communication - it is highly organised and specialised into its own diverse set of functional differentiations and binary codes. Situating Bismarck's description of the curatorial in relation to Luhmann's bifurcation of systems in Figure 2, we observe the highly evolved form the curatorial field has taken.

It has been articulated into many, diverse functional differentiations, and entails very specific forms of communication. Each functionally differentiated system of institutional practice, professional practice, and interdisciplinary practice, entails it's own structures of organisation, and specialised forms of communication, adapting to itself, which adds to the irreducible complexity of the system. [38]

These subsystems of individual, institutional, and interdisciplinary practice within the curatorial are self-organised toward the function of autopoiesis, to continually reproduce its specific forms of communication – i.e., exhibitions and discourse. For example, we see that the

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[38] For Luhmann, the evolution of the social system is not a story about how society adapts to its environment. As time passes, a society evolves by adapting to itself - to its own internal structures. The evolution of society increases complexity, exhibiting "negentropy" (415).
(Lee 327).

emergence of curatorial discourse since the curatorial turn of the 1990s described by Paul O'Neill has caused the curatorial field to self-organise accordingly into functional differentiated institutions and roles directed toward producing discourse – including the professions of theoreticians, publishers, and critics; the institutions of art and culture magazines and publishing houses. To these, we might also add, in Ralph Rugoff's observation, the 'growth industry'[39] of curatorial studies within art schools, as well as its 'plethora of publications.'

We therefore see how the emergent forces of autopoiesis and self-organisation are the driving forces behind the evolution of social complex systems, such as the highly evolved structures of curatorial production. While in this study we only give an example of the growth of the curatorial system that has been provoked by the 'curatorial turn,' other evolutions of the curatorial field of interaction which have been provoked by the 'educational turn'[40] or the 'digital turn' may reflect even more interesting, and complex bifurcations within the system.

For complexity science, such elaborate structures of self-organisation are central to maintaining the identity of the system in relation to its environment. According to Maturana and Varela, 'it is the circularity of its organisation that makes the living system a unit of interactions, and it is this circularity that it must maintain in order to remain a living system and to retain its identity through different interactions. (Smith 51)

Two crucial concerns arise, however, when we consider the sustenance of the diverse, and highly evolved specimen that is the curatorial system, which nevertheless must continue to evolve, whether through the collapse of these roles and positions or by their elaboration.

The first is, if complex social systems, in their functional differentiation, become increasingly differentiated from one another, how do they maintain circularity to generate interaction? It is crucial that the functional differentiated subsystems within the system, for

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[39] Last year saw a plethora of publications devoted to the musings and opinions of contemporary curators, including Stopping the Process?, Conversations at the Castle and Cream, and as exhibition-making becomes a new focus for so-called critical theory, curatorial studies are developing into a growth industry.
Rugoff, Ralph. "Rules of the Game." Frieze Magazine Jan-Feb 44 (1999): n. pag. Frieze. 1990. Web. 2014.

[40] In recent years there has been increased debate about the incorporation of pedagogy into art and curatorial practice – about what has been termed 'the educational turn'.
Open Editions and De Appel; London & Amsterdam. Curating and the Educational Turn. Paul O'Neill. N.p., 2010. Web. 5 Jan. 2014.

example, those of as museum practice and scholarly practice, continue to interface even as their own subsystems evolve. According to Cilliers, ‘complex systems need a constant flow of energy to change, evolve and survive as complex entities. Equilibrium, symmetry and complete stability mean death. Just as the flow of energy is necessary to fight entropy and maintain the complex structure of the system, society can only survive as a process. (Cilliers 122)

The second is, in being functionally differentiated on even more intricate, specialised levels, how does the system continue to interface with its environment? We must keep in mind in the analysis of our complex system, that ‘though self-organisation obviously signifies autonomy, a self-organising system ... must work to construct and reconstruct its autonomy and this requires energy.... The system must draw energy from the outside; to be autonomous, it must also be interdependent. (Morin 2002: 45, following von Foerster 1984)’ (Smith 6)

2.3 - Evolution: The repercussions of growth

For Luhmann, an increase in structural complexity, exemplified by the highly elaborate, and highly self-specific structure of production within the curatorial, does not lead necessarily to a more robust system - 'A repercussion of operative closure is that the system, in developing its own specialised forms of communication, also become 'stratified.' Systems that are very operatively closed are limited in that 'functional systems can only "understand" or use their own distinctions. […]' (Lee 328)

We observe these outcomes of structural complexity also to manifest in the case of the evolution of the curatorial field, which has been repeatedly warned against the crisis of stratification: Paul O'Neill, criticises that 'the concentration on an individualisation of the curatorial gesture has created a particular strand of discourse that is hermetic at times. At the same time, it is self referential, curator-centred, and most evidently, in a constant state of flux: curatorial knowledge is now becoming a mode of discourse with unstable foundations.' (O’Neill 26) Marion von Osten also questions its effectiveness: 'to what extent [are] curatorial concepts, in dialogue with other cultural players, really capable of generating diversified and contextual publics?' (Von Osten) Dan Fox remarks, 'For the most part, the conversation about curating has largely been

dominated by curators. This does not strike me as the healthiest situation.' (Fox) Alex Farquharson even points to the binary coding, or sub-form of communication, to be so self-specific that 'new words, especially ones as grammatically bastardised as the verb "to curate" emerge from a linguistic community's persistent need to identify a point of discussion." (O'Neill 15)

We therefore examine the concept of structural coupling in Luhmann's theory, to observe the way that separate, operationally closed, and developed structures in society are able to interact and influence other systems in its environment, in an exchange of energy, in order to avoid equilibrium. Indeed, though its communications have become extremely functionally self-specific, the system of curatorial practice is not isolated – it still exists within the environment of the world society, alongside the fields of law, economics, and politics, in which 'functional systems constitute environment for each other.' (Lee 14)

2.3.1 – Structural Coupling: Feeding the System

The concept of structural coupling in the sociological theory of complexity is a part of autopoiesis, and occurs when one functionally differentiated system in society becomes a function within the system of another.[41] Their structures are therefore 'interpenetrated' in that the changes in one system result in perturbations in the communications of the other. [42] As systems they become dependent on each other's influence - or 'mutual irritation' to continue their respective forms of self-reproduction. [43]

2.3.2 - Irritations within the Curatorial Field

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[41] According to Luhmann, 'Interpenetration' can only mean: the unity and complexity (as opposed to the specific conditions and operations) of the one is given a function within the system of the other.' (Luhmann 2002a: 182).

(Lee 6).

[43] The systems are however structurally coupled; i.e. their respective structures are adjusted to each other in such a way as to allow mutual irritations.
(Seidl 10).

For example, in the system, curatorial practice is not autonomous, but a significant function of artistic, critical, and institutional practice, and vice versa. The stratified 'individualisation of the curatorial gesture' described by Paul O'Neill therefore provokes these other systems of practice to be reorganised in relation to the curatorial production of exhibitions and discourse. As stated by Bismarck, 'Both complicities and competitions among artists, curators, critics, and theoreticians turn the curatorial into a contested arena over participation in the process of the production of meaning.' (Bismarck 12)

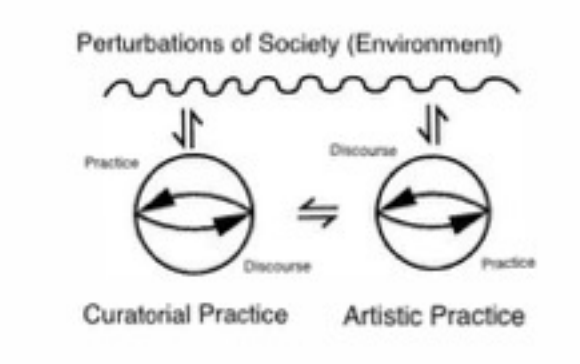

Figure 3

The critique generated from other sectors of the system, in response to the stratification of curatorial practice, surrounding these activities clearly exemplify the friction generated in the recurrent debate of who does what, to what extent, and why. For example, Liam Gillick defends the 'sovereignty' of the artist, in the field between artist and curator, arguing that the artist faces more difficult conditions of production that 'should not be confused with the job curators have and the work they do.'[44] Carmen Morsch argues in favour of a begrudging alliance between institutional curators and museum educators, in which curators, in their investment in an 'educational turn' must '[recognise] gallery education as an independent cultural practice of knowledge production [. . .] while simultaneously questioning and processing the aforementioned

[44] 'An artist can aspire to a certain sovereignty, which today implies in addition to producing art, one also has to produce the conditions that enable such production, its channels of circulation. Sometimes the production of these conditions can become so critical to the production of work that it assumes the shape of the work itself. This should not be confused with the job curators have and the work they do. (Bismarck: Gillick 226)

heirarchisation of production and reproduction/distribution.[45] An even more contentious discussion around this kind surrounds the integration of the 'curatorial turn' into institutional practice, as 'New Institutionalism' has earned the ire of institutions, artists, critics, and other curators alike. Gordon Nesbitt, for example, claims that socially inclusive museums intrude on artist-run territory.[46] Alex Farquharson argues that the institutional critique that has been absorbed in such practices, as seen in the viewpoint of artistic production, is 'oxymoronic.' [47]

We see, therefore, the mutual irritation of different subsystems of professional practices manifests in increased communication within the system, centred on the friction between roles and positions within the curatorial field. This may or may not prove problematic for the system - on one hand friction is energy. That the stratification of curatorial practice causes problems for other forms of practice, with which it is structurally bound, is a healthy sign that integration is causing them to re-evaluate themselves toward the development of their own functional differentiations. According to Smith, 'It is only on the back of the dynamics of differentiation that any systems/ environment relationship is conceivable, and only on the back of that finite homeostasis, or relative ecological robustness, that complexity can co-evolve.' (Smith 9)

On the other, there is the problem demonstrated in this particular example - that the communication generated by this friction is expressed largely in a form that feeds curatorial discourse, rather than these other forms of practice. Mutual irritation in this sense, points to the lopsided development between these different subsystems.

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[45] Mörsch, Carmen. "Alliances for Unlearning: On the Possibility of Future Collaborations Between Gallery Education and Institutions of Critique." Afterall: A Journal of Art, Context, and Enquiry 26 (2011): 5-13. Print.

[46] Gordon Nesbitt goes as far to suggest that new institutional models like the Roooseum are not only indebted to the history of artist-run spaces, but actually depend on them as raw material, and their success is thus at the expense of artist-run spaces.
(Bismarck 370).

[47] In some senses 'new institutionalism' represents the absorption of institutional critique as theorized and practised by artists since the 1970s. […] But to most artists of the 1970s the idea of an institutional critique being practised by institutions themselves would have been oxymoronic. Farquharson, Alex. "Bureaux De Change." Frieze September 101 (2006): n. pag. Frieze Magazine. 2006. Web. Winter 2013.

A systems evaluation of these arguments therefore ironically points to an exacerbation of the stratified condition of the curatorial. By critiquing curatorial practice by responding with curatorial discourse, these forms of criticism feed into curatorial production, causing curatorial practice to become even more stratified. Paul O'Neill points to the danger of this - 'So far, for those unwilling to accept the provision made for the figure of the curator within the reconfigured cultural field of production, critical response has been maintained at the level of an oversimplified antagonism, where the practices of artist and curator are separated out. If it is to continue, the gap between curatorial criticism and curator-led discourse will only widen further.'

2.3.2.1 –Systems Analysis

O’Neill points out that curatorial discourse is, through these developments, being even further functionally differentiated and stratified, separating into forms of ‘curatorial criticism’ and ‘curator led discourse.’ For him, this causes the risk of ‘becoming a mode of discourse with unstable foundations.' (O’Neill 26)

However, it is here that complexity contributes an alternative perspective on how this risk is to be approached. As exhibited in this case, the interpenetration of the functional systems of the different professions within the curatorial field does cause an alarming amount of mutual irritation and stratification. However, in a complex view, this irritation should be overcome not by the re-integration, or collapse of the division of labour, in which curators give up their function. Instead, and rather counter intuitively; curatorial practice should be further stratified within the system. For example, there might be the possibility that the widened separation of artist and curator becomes an agonistic form of mutual reproduction.

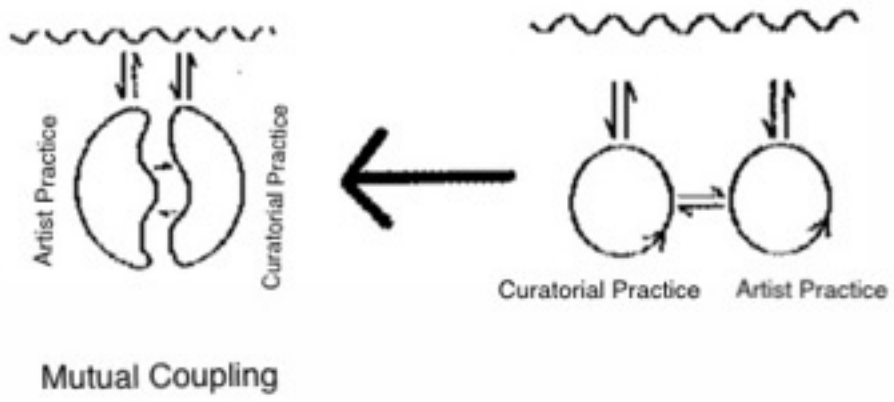

Figure 4

From a systems perspective, Paul O'Neill needs not worry about the 'hermetic discourse' or 'unstable foundations' of curatorial practice – according to Luhmann, society does not need more integration, for the autopoiesis of its communications lend it 'more than enough stability.'[48]The ‘oversimplified antagonism’ of its critical response that it invokes, however, does endanger it from within the system not because it actually detracts from curatorial agency, but because these other professional practices continue their interpenetration and irritation with it by generating communications within it, as opposed to reacting with the competitive constructive development of their own systems.

Cilliers also provides a viewpoint that regards the stratified communication on different levels of the system not necessarily as negative: it may be strategic on a higher level of the network for survival. He says, 'It is clear that the system 'combats entropy,' that it generates

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[48] Modern society is over-integrated and thereby endangered. In the autopoiesis of its functional systems it has more than enough stability: [. . .] at the same time however, it can irritate itself more than any previous society.'
(Lee 328).

meaning, not noise or chaos. To optimize this process, the system has to be as diverse as possible, not as structured as possible. Self-organized criticality is the mechanism by which networks diversity their internal structure maximally. The more diverse the structure, the richer is the information that can be stored and manipulated. The network has to walk the tightrope between solid structure, on the one hand, and disorder, on the other. In our network model, this process is the consequence of fierce competition among units or groups of units.' (Cilliers 117) In such a view, it may be in fact that the preservation of these contradictory positions of artist, curator, educator, institution, critic, etc. in an unclear hierarchy allows for the constructive, competitive, complex development of each of these fields, perpetuating the curatorial system. 'The evolution of structures in the social fabric, causing continuous alterations, is an integral part of its dynamics.'

2.3.3 – Irritations from Beyond: Penetrating the Curatorial

The process of structural coupling does not only account for the transfer of influence between different subsystems of communication within the curatorial - it also accounts for the means by which the system at large necessarily derives energy from its environment, which is the rest of society, without which it would not exist.[49]

As we have discussed, in complexity theory, changes to the hierarchies within complex systems occurs through 'structural coupling' with the environment, in which '[an autopoietic system] couples to its environment structurally, i.e., through recurrent interactions, each of which triggers structural changes in the system. As we have observed, for example, in the curatorial system, changes to curatorial practice cause irritations that lead to changes in artistic practice.

On the level of the system, however, this same interpenetration occurs with society at large – as its first-order environment. The self-organised structures of the curatorial system, functionally differentiated into professions, institutions, and disciplines - are therefore as a whole subject to change that is triggered by environmental perturbations - i.e. from the wider system of society into which the curatorial is integrated. For example, a change to the role of institutions in the curatorial

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[49] Autopoietic systems are, nevertheless, also open systems: all autopoietic systems have contact with their environment (interactional openness). Living cells, for example, depend on an exchange of energy and matter without which they could not exist. (Cilliers 15)

might be caused through the influence of a perturbation from the field of economics, politics, law, or science. Developments in technology, for example, continuously overhaul the organisation of museums to create digital engagement. However, this is simply a trigger. We re-emphasise: ‘The contact with the environment […] is regulated by the autopoietic system; the system determines, when, what and through what channels energy or matter is exchanged with the environment.’ (Seidl 3) Changes must still be enacted from within the system itself.

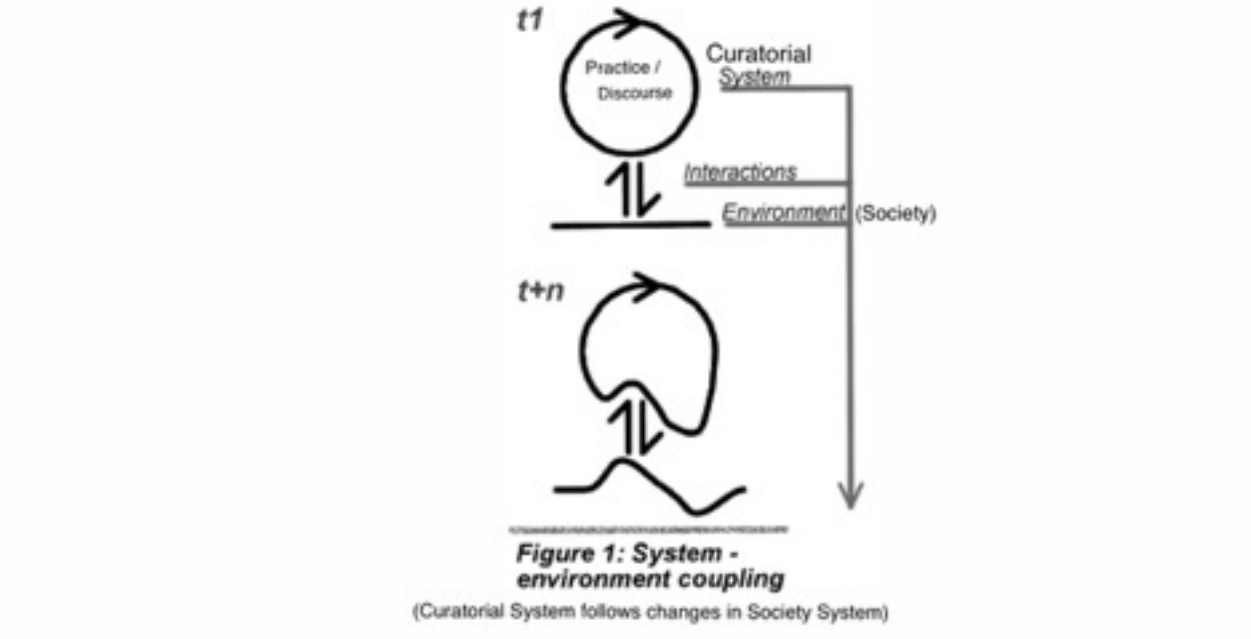

Figure 5

We therefore observe the structural coupling between the curatorial system and society, especially where curatorial discourse acts as such a channel that introduces mutual irritation from other parts of society, imparting communications that generate friction and challenge the stasis of the structure of the system. We find two examples of this phenomenon in two essays from 2007 by Dorothee Hantelmann and Maria Lind, published in defence of curatorial agency. In their texts, both draw from the communications of other systems of society, i.e., the socioeconomic system and the ethical system, to make their cases expanding the function of the curator in the system of the curatorial.

In 'Affluence and Choice', (Bismarck 42-50) Hantelmann accords a radical power of selective agency to the agent of curator, attributing this power to his/her place in the socioeconomic system of society. She says, 'Aesthetic criteria have become the primary point of

reference for individual action and choice today.' For her, 'the curator is 'embedded' in the present socioeconomic order of Western societies. […] Only in recognizing this embeddedness can we understand the curator's relatively visible position in contemporary culture.' For Hantelmann, the agency of the curator in the exhibition making process is framed by the system of advanced consumer culture, in which the agent communicates through choice. Her essay, as a part of curatorial discourse, is therefore a channel by which the system of advanced consumer culture influences the system of the curatorial.

Maria Lind, on the other hand, in ‘Notes on the Curatorial’ (Bismarck 76-82) chooses to defend the creative agency the curator within a 'post functionalist,' or 'formalitist' paradigm, wherein the task of 'openly and actively question[ing] and redefin[ing] inherited models for what art is and how we work with it' is expressed in her argument a form of duty, originating ‘more in the character of the art and its needs than in the traditions and demands of arts institutions.’ The curator here finds agency in his/her responsibility to fulfilling of what are described 'formalities - procedures that are unavoidable and at the same time valuable, but not ends in and of themselves […]’. Lind therefore stresses the dependence of agency on the principle of professional allegiance: '[Post functional curating] does not stop at curating as service provider or the curator as facilitator, it moves beyond the purely functional in relation to the requirements of art, artists, the institutions, and the publics.'

While in both these texts, the authors justify the agency of the curator in the exhibition making process; they do through different discursive strategies that bring the communication of these transdisciplinary domains to the curatorial - whether through the framings of economics, for Hantelmann, or professional ethics, for Lind. Hantelmann credits the curator's radical agency in exhibition making to the 'Western socio-economic order' of relations by which individuals gain their self-definition through the expression of 'affluence and choice.' Lind, however, sees self-definition of the curator bestowed in quite another order - that of his/her 'formal' responsibility.

Whether or not these arguments hold sway within the curatorial field, able to convince its participants of whether or not the curator has selective or creative agency, their importance lies in that they both draw the influence of other parts of society into the system, if only in the minor act of discourse, contributing to the diversity of a multifaceted debate that may, by being modulated

along a path of wide ranging interaction, shift the structure of professions, institutions, and disciplines. This is the nature of complex systems of communication – whether the essay, the event, the exhibition, or the biennial – these forms all generate rich, short-ranging forms of interaction that, by being modulated across different elements,[50] self-organises emergently into the complex field we call the curatorial. Though the two essays differ significantly in their persuasive approaches, in even their slightest differences, they constitute irreducible parts of the curatorial system; minute communications within a diversity of voices, perspectives, and narratives that ascribe the role of the curator as inseparable from the curatorial system, and the curatorial system as inseparable from society. The movement of this irreducible complexity is succinctly described by Cilliers:

'Complexity is the result of a rich interaction of simple elements that only respond to the limited information each of them are presented with. When we look at the behaviour of a complex system as a whole, our focus shifts from the individual element in the system to the complex structure of the system. The complexity emerges as a result of the patterns of interaction between the elements.' (Cilliers 5)

2.4 - Zooming Out: From Contextual to Polycontextual

For Luhmann, therefore, social systems are inherently myopic – they are only able to gain information about its environment self-referentially, using its own distinctions and making sense of itself. (Lee 329) Returning to Bismarck's characterisation, if the fluctuating nature of the curatorial relates to Bourdieu's 'sociological definition of a field whose rules are constantly defined and redefined by those participating in it' (Bismarck 37) we assert from a systems perspective that this constant, almost narcissistic self-redefinition of the field, are what necessarily give rise to the emergent patterns of interaction that cause the curatorial to take the form that it does today. No system is able to look outside of itself. In this respect – society as a whole is what Luhmann refers to as 'polycontextual.' No single context can give universal meaning.' (Lee 328)

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[50] The interactions usually have a fairly short range, i.e. information is received primarily from immediate neighbours. [. . .] This does not preclude wide-ranging influence —since the interaction is rich, the route from one element to any other can usually be covered in a few steps. As a result, the influence gets modulated along the way. It can be enhanced, suppressed or altered in a number of ways. (Cilliers 5).

The principle of multifarious points of observation, for Luhmann, is crucial to a description of society that does not reduce the complex subjectivity of social relations. 'When something happens in the world, Luhmann asserts, it happens many times. A single event may be observed by several different societal systems, and may be given just as many different meanings.' (Lee 328)

If Luhmann offers to sociology, the field which studies society as a science, the approach of systems theory to ‘clarify the forms (distinctions) and media used by particular systems, to compare and contrast systems, to relate understanding to form, and to relate form to context,’ (Lee 329) we might also extend the same to the curatorial, which is the field that, according to Claire Bishop, ‘is always an ethical negotiation of pre-existing authorships, rather than the artistic creation of meaning sui generis.‘ The curator is therefore, also an observer of the environment of systems – albeit an environment of artistic systems, which operate, communicate, evolve, and maintain their boundaries. Systems theory offers the curator the means to play within this unstable, polycontextual ecosystem of evolving, self-referential perspectives, conscious of how his/her own short-range interactions may lead to wide-ranging influences.

2.5 - The Curatorial Field: The Story of a Complex System

Having discussed the key concepts within the sociological study of complexity, and discerned specific examples within curatorial discourse to support an understanding of the way interaction occurs in the curatorial, we draw an outline of our analysis, for the sake of clarity:

1) The curatorial field is not formed of artists, curators, publishers, theoreticians, or scholars at all – it is formed of their interactions, in the form of communications.

2) These communications, generated by the curatorial field, take the form of exhibitions and discourse, which reproduce each other and sustain the curatorial field in society. (Autopoiesis)

3) The self-reproduction of communications in the curatorial field causes it to self-organise into a closed system of various disciplines, professions, and institutions, to carry out specific tasks and activities. (Self-organisation)

4) These various disciplines, professions, and institutions self-organise further into closed subsystems, with their own internal positions and hierarchies, and forms of exhibitions and discourse. This signals the evolution of the system into a higher, more complex form. (Functional differentiation)

5) Interaction only on the level of communications (exhibitions and discourse) cause mutual influence between the various curatorial disciplines, professions, and institutions. (Structural coupling)

6) Interaction only on the level of communications (exhibitions and discourse) also draws the influence of other systems in society into the system of the curatorial. (Structural coupling with the environment)

7) No system in the curatorial is able to directly influence any other system – they are only able to enact change through short-range interaction on the level of these communications (Exhibitions and discourse). (Operational closure)

8) The curatorial field, as an ecosystem of individual practices, is therefore an irreducibly complex system of interaction through communication. In order to evolve, it should be as self-referential as possible in order to induce even more interaction, exchange, and energy within society. (Polycontextuality)

9) There is no authorial agency in the curatorial field. (Emergence)

3 - POST HUMANISM : CURATING DOES NOT PRESUPPOSE A CURATOR

Luhmann's complex theory of social systems represents a radical shift in that it takes the human out of society altogether. [51]It therefore radicalises the debate of human authorship of communications, such as artworks or exhibitions, in a crucial aspect – if communications beget communications, humans are not responsible for their ideas - humans are not even a part of the curatorial.[52] Furthermore, that all social systems co-exist in interaction does not mean that the artist-curator or curator-artist lives a contradiction – one person can participate in two, three, or multiple social systems without reduction, just as a criminal can also be a lawyer and a mother in society,[53] or speak multiple languages. Consequently, the debate of power relations between artist, curator, or critic becomes meaningless. Agents release their communication into society as a form of participation.

This is counter to the basis of arguments such as Lind's or Hantelmann's, which, in defence of curatorial agency, are also bound in the preoccupation with 'power relations and the distribution of roles in the art system -' an issue which has been a subject of heated debate in curatorial symposia and publications over the last decade. (Richter 7) Dorothee Richter, points out that this issue is indeed polarising - '[the question of curatorial agency] by all means implies hierarchy, and thus largely revokes the notion of divided authorship. (Richter 8) 'The theory of complexity repudiates the paradigm of 'authorship' which ties human identity directly to its communication, as extending from the humanist understanding of the predominant importance of the human to the ontological construction of society. (Smith 25)

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[51] Banishing people to the environment of society completes the decentralization of the humanist cosmology.
Bechmann, Gotthard, and Nico Stehr. "The Legacy of Niklas Luhmann." Society 39.2 (2002): 67-75. Print. 71.

[52] Luhmann introduces three premises into his analysis of society […] (1) Society does not consist of people. Persons belong to the environment of society. (2) Society is an autopoietic system consisting of communication and nothing else.
(Bechmann and Stehr 71).

[53] Individuals are always more outside of society than inside it – they can only communicate about one thing at a time. Illustrating Luhmann's point, this is why spies, thieves […] are able to order pizza, attend a football game […]
(Lee 322).

For example, if Osten remarks, on the perpetuated ‘crisis’ of arts institutionalisation – ‘the division of labour between curators and artists, critics and gallery owners, and the related economy, for example, is amazingly constant.’ (Osten 59) – from a complex view, this is no wonder. The system only grows through specialisation, and stratification through institutionalisation (self-organisation) is the natural movement of the system that cannot be overcome by the simple rhetoric of designating it a ‘crisis’. What is essential, however, is not to regard the division of labour as a division of identities but a division of communications, whose players are interchangeable, and able to participate in multiple stratified systems.

In Luhmann’s theory, communication alone forms society, whereas the human, and his/her consciousness or psyche, belongs to the environment. [54]By separating the reproduction of communications into the social world, and the reproduction of human beings into the physical world,[55] social complexity provides the possibility that we would see communication as not a self-invested, but ' a genuinely social (and the only jointly social) operation [. . .] in that it presupposes a majority of collaborating systems of consciousness while (for this very reason) it cannot be assigned as a unity to any individual consciousness.' (Bechmann and Stehr 71) Despite the best intentions of its agents, the curatorial field directs itself.[56] However, that it evolves as a system also predisposes it to become increasingly self-referential and closed[57] – a fact that no amount of discourse on participation or interdisciplinarity will fix.

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[54] 'The thesis of the separation of social systems and physical systems makes it possible to understand clearly the relationships between society and humanity and follow them over their historical course. Both are in this sense autopoietic systems, one operating on the basis of consciousness and the other on the basis of communication.
(Bechmann 71).

[56] Luhmann sees society as a complex, self -organising system. Since we are part of this system—we can actually never stand outside it—we have no choice but to accept that the system will organise itself in the way best for its survival. The system will ‘evolve’, but cannot be ‘transformed’
(Cilliers 138).

[57] Sociology, like any other social system, becomes a society at the expense of narrowing its field of vision.
(Lee 324).

Due to what Luhmann calls “operative closure,” only members of a group can understand what it is like to be in that group.
(Lee 323).

3.1 - A Post-human answer for curating?

This idea of a truly collective generation of society through collaborating systems of consciousness, dividing any human and his/her subjectivity from direct agency within society - the realm of communication - is meaningful to optimizing the aims of our communicative systems, including the curatorial, which tends still to privilege 'individual consciousness' in grasping at a demarcation of roles in the competition for authorship. Instead it is crucial to realise the communications that are society, and the human identities that perform them, can never be understood as the same.

Perhaps what complexity offers to the curatorial, then, is the possibility of a polycontextual existence, transcending the gravity that locks our bodies into the curatorial constellation and being able to disappear, if for a moment, into other social systems. This becomes increasingly important as, Paul O'Neill describes, 'one of the most evident developments in contemporary curatorial practice since the late 1980s has been occurring on an increasingly international, transnational, and multinational scale, where the local and the global are in constant dialogue.' (O'Neill 16)

'Global complexity derives from what I have described as the dialectic of moorings and mobilities. If to express this far too simply, the social world were to be entirely moored or entirely mobile, then systems would not be dynamic or complex. But social life seems to be constituted through material worlds that involve new and distinct moorings that enable produce and presupposed extensive new mobilities. So many more systems are complex, strangely ordered, with new shapes moving in and through space-time.' (Urry 138)

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