Author's Response

Preliminaries to an Integrative Metatheoretical Explanation of Art

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>Abstract · As my commentators accepted my second-order science approach, I re-enter their reflections as advanced explanatory blocks for further validation of the integrative metatheoretical explanation of art and aesthetic practice in the framework of Science II. Positive energy is re-entered as a determinant of the dynamic structural relations of living systems. Following von Foerster's neo-cybernetic cognitive confession, the performing arts provide protected spaces for a holistic aesthetic experience and can have therapeutic effects.

Handling Editor • Alexander Riegler

Introduction

« 1 » I appreciate the commentators' recognition that my target article on the theory of autopoiesis is an important contribution or starting point for an integrative systems-theoretical explanation of the complex interplay of body, mind, and communication in artistic creation and aesthetic practice. So, I feel compelled to re-enter their reflections as new explanatory blocks for a more integrative metatheoretical explanation of the complex structural interrelationships at the various systemic levels of the human being in the domain of art. I am thus already on the way to the "critical discourse" that Lowell Christy (§29) believes my target article can open up. Finally, as I pointed out in §9, an integrative approach to a systems theory of art practice should live up to Heinz von Foerster's neocybernetic cognitive confession and fulfill the co-constructing ethical and aesthetic imperatives to increase the number of options for maintaining self-referential system operations, and to guide them from the perspective of secondary reflection. These two imperatives, also referred to as "social," set positive value standards for beneficial co-constructive interaction to grasp the com-

plex supplementary rather than exclusive relations of system–environment pairs in a consensual understanding (Clarke 2009: 58).

« 2 » My response is structured according to the points of criticism and integrates their relevant content in a targeted manner. The commentators question certain steps of the methodological approach, namely the re-entry procedure and whether recursive self-constitution is a process of continuous breaks or emotional flow, which will be discussed in the next two sections. Reflections on Gregory Bateson's (1972) fundamental definition of information ("the difference that makes a difference"), on the autopoietic feedback loop, and on the creative power of positive energy in the final section are re-entered to further validate the metatheoretical approach.

The re-entry procedure in observing systems

« 3 » I agree with Tom Scholte (§2) that my target article is an attempt towards enabling higher degrees of generality fulfilling the methodological requirement to "create common ground between insights" (§5) – although I have tried to do this without "modifying one or more concepts or theories and their underlying assumptions" (§6). Scholte takes my work as an illustration of the powerful role that second-order systems theory can play in coordinating theories in the Integrated Model of Interdisciplinary Research (IMIR). I would also agree here, but this can only be a first step. In a second step, the theories need to be re-entered as partial explanations (building blocks) into a metatheoretical explanation of dance performances as multilevel works of art. In this respect, IMIR plays an integrative role within the framework of Science II, not the other way around.

« 4 » One critical point in Scholte's commentary (§2) that needs to be discussed concerns the difficulty of finding clear examples of the re-entry procedure in my target article. Derrida's concept of différance should be a suitable illustration of this procedure of secondary reflection. As a supplement to Luhmann's macroscopic descriptions, it is introduced in §§18f as a paraphrase of the smooth analogous process of relational transformation in human experience. In the context of Erika Fischer-Lichte's (2016, 2019) theory of the performative, différance is de-

scribed as an equivalent of autopoiesis in the operative processes of psychic and social systems (§24). It becomes a more and more integrative partial explanation of individual and social experiences within the complex cross-systemic structural relations in dance theater (§§31, 37), as the title *Danse de Différance* also indicates. The general generative mechanism of recursive coordination of structural relations explains itself (§7) and also différance as recursively constituted in the domain of language.

Recursive self-constitution as continuous breaks or emotional flow

« 5 » Following von Foerster, Dirk Baecker (§9) describes the functionality of systemic phenomena as a self-referential process, namely the constitution of their own value and autonomy in relation to one another through the resonance of resonances. It is a precise theoretical application of second-order cybernetics to explain how artistic dance events are recursively created or performed. The mode of operation of living systems at any level is generally a recursive, self-referential functionality. In this respect, there is agreement with Maturana's position of structural determinism. However, Maturana describes the self in this constitution as a dynamic entity in an emotional flow of relational behaviors with other beings (§6 in the target article). This is an important difference, as will be argued in the next paragraph.

« 6 » Baecker (§2) agrees that différance reflects the differentiation in systemic self-organization and structural coupling, but he describes it as a process of continuous breaks in the eigenbehavior of individual and social experience. In §4 he objects that the "I" in consciousness and the "we" in communication are not systemic features to begin with, because they are "highly demanding" and "improbable" features, "that emerge only when they are made helpful in solving problems of unity." From a constructivist perspective, it may be impossible to analyze the multidimensional processes and nested phenomena in psychic and social systems separately in binary codes, detached from the human body, and without reflecting individual and social intentions. However, Baecker's (and Luhmann's) understanding of communication and consciousness would ben-

efit from further integration with Maturana's structural-deterministic explanation of living systems. If linguistic operations are to be seen as abstract expansions of bodyhood (as pointed out in §6), then there must be an equivalent self-referential flow of structural relations in both domains, the physical and the domain of interaction. To this end, self-consciousness occurs whenever we operate in the feeling of being two beings: the observer and the observed self, i.e., a relational dynamic entity of coordinated linguistic reflections of the bodyhood (Maturana 2005: 70). The system-specific selves "me" and "we" do not only emerge when problems of unity need to be solved. As observed self-references in the relational dynamics of feelings (in consciousness) and emotions (in communication), they are constitutive systemic features. This is exemplified in the target article by the analysis of the dance performance, *Soul Chain*, whose complex artistic work and holistic aesthetic experiences can be explained metatheoretically as constituted by the secondary reflections of the artist ("I") and by consensual understanding in the community of observers ("we").

Différance is the process that makes the differences

« 7 » With regard to the transdisciplinary approach I pursue, **Maiya Murphy** ⑪ asks why Jacques Derrida's concept of différance takes precedence in my argument, when so many other (constructivist) concepts have taken more overt account of the many embodied factors of performance. The reason for this lies in the intention to show that transdisciplinary heterogeneous explanations of art and aesthetic practice, which seem theoretically distant, can nevertheless be useful explanations of specific systemic processes and can be consistently integrated into a systems metatheory within the framework of Science II. The possibility of doing this with the concept of différance also demonstrates the explanatory potential of the general generative mechanism (cf. Footnote 1).

« 8 » **Murphy**'s ⑫ about whether it would not be better to further develop the (often biologically inclined) versions of autopoiesis rather than leave the realm of autopoiesis altogether, shows that I was not clear enough on this point. I never intended to leave the realm of structural determinism, with which

the theory of autopoiesis is inextricably linked. It is the foundational component in my metatheoretical explanation of the complex interdependent structural relationships in the performing arts. However, Maturana himself objected to the application of the concept of autopoiesis to processes in psychic and social systems, because it is the description of the system-specific operation in the physiological domain of existence. Nevertheless, autopoiesis is also the description of the basic foundational generative mechanism of orthogonal interactions and relations (§6). In addition, différance is a solid building block within a metatheoretical explanation of systemic processes. In congruence with autopoietic self-constitution, it describes the processing of structural relations in the manifold domains of the human being's interactions.

« 9 » **Baecker** (§6) describes différance as a mode of complex and reflective coupling that traces the organizational operations of human beings as well as their interactions in psychic and social processes. According to this rather dichotomous understanding, it takes place in reflective negativity and continuous breaks: "informing the system of the risky selectivity of its operations within its environment and of the difference within its environment." In this context, **Scholte** (§8) asks whether différance is not the cross-systemic extension of Bateson's fundamental definition of an information unit itself. Does the différance makes a difference in the unfolding dance of "chained signs"? I would affirm this consideration, while keeping in mind that "difference" as an informational unit is rather a dichotomous distinction (eigenform), and différance is a continuous process (eigenbehavior).

« 10 » From Maturana's (2005: 70) perspective of structural determinism, différance can be explained as an adequate description of the linguistic reflections within the multidimensional matrix of structural coupling in the emotional flow of relational behaviors with other beings (§6). Although focusing on linguistic processes, différance vividly metaphorizes the complementary and simultaneous systemic eigenbehavior of both, the intelligible, structurally discrete differentiation and the sensually connecting, creative energy flow in psychic and social systems, which is the primordial force that Sharon Eyal calls "it."

The autopoietic feedback loop

« 11 » It is particularly noteworthy that **Lucía Piquero Álvarez** and **Murphy**, who both work in theory and practice in the field of post-dramatic performing arts, share Eyal's belief in the language of the body, emphasizing the importance of emotional relationships in the artistic construction of dance performances. Both refer to Erika Fischer-Lichte's (2016, 2019) concept of the autopoietic feedback loop to explain how energy or its rhythm allows for resonance in emotional interaction. It "facilitates a joining together of the roles of the choreographer, the performers, and the audience" (Piquero Alvarez §6).

« 12 » **Piquero Álvarez** (§7) argues that dance is inherently ineffable and suggests that it can only be understood as a lived experience and the inextricable link between cognition, emotion and embodiment. Perhaps she is inclined to agree that the metaphor of différance conveys an idea of the vivid intertwining of language and emotion, as it metaphorizes the intelligible, structurally discrete differentiation and the sensually creative flow of energy in human relations. In any case, I can fully agree with her (§4) extended considerations of the complex multi-level system interrelationships within post-dramatic performances as a temporarily "integrated larger system" that is co-constituted by the cognitive activity of all participants and curated by the choreographer.[1] As **Piquero Álvarez** explains in §5, her description of this field of interrelations of autopoietic systems co-constituting their experiences at different individual and social levels as a distributed process is consistent with mine of an "interaction system." This also shows that within the framework of Science II, in the sense of **Scholte** (§3), it is possible to bring together cross-disciplinary findings into a new, coherent and comprehensive understanding.

« 13 » Following her integrative intention, **Piquero Álvarez** (§2) focuses on two of my concluding thoughts about the importance of relationships in the performing

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1 | Accordingly, scientific authors can co-constitute an integrated-larger-systems theoretical understanding of the performing arts in *Constructivist Foundations*, curated by its editor-in-chief.

arts, which she considers "key aspects of the discussion of spectatorship and the experience of dance": (A) In their relationships, all participants co-construct the process of experience, and (B) the artist directs the entire show in action, allowing for a holistic experience. Piquero Álvarez's coordination corresponds to the neo-cybernetic confession that ethical and aesthetic imperatives should be kept in mind for mutual understanding: According to aspect A, all participants are called to follow the ethical imperative of expanding their options within an integrated larger system. The conclusion of B is that the artist bears the aesthetic responsibility of directing the whole show. In post-dramatic dance theater, she must reflect and anticipate the feelings of the performers and participants, and especially their emotional interactions. She guides them in her choreography to open up spaces for cross-systemic resonance in the performance event.

The creative power of positive energy

« 14 » Murphy (§3) draws attention to what resonance creates rather than what distinction negates. She emphasizes the eminent importance of "energy" as a perceptible quality in the generativity of the performing arts and argues for the re-entry of an "energy system" into a second-order description of art. Murphy (§§3–6) suggests replacing the logocentric explanation of art with the *qi* concept of Eastern culture, which can point to a micro-level description based more on embodied dynamism and positive cross-systemic resonance than on différance. It describes a perceptible enlivening force that circulates in individuals and links mind, body, and people. Performers can control and channel the energetic dynamic, to create positive relationships and larger multi-unit systems. Certainly, this concept would provide a nuanced elaboration of Eyal's "it" as the energetic force or general generative factor in human structural relations. In reflection on the positive value standards for good (beneficial) and co-constructive interaction to create (beautiful) experiences in consensual understanding (§1), the ideas about the positive potential of qi in the building of integrated larger systems are very intriguing and positive incentives. In our time of destruc-

tion[2] at various levels of society, caused by the selfish intentions of individuals without regard for basic human rights and the earth's ecosystem, this artistic force could play a decisive role in counteracting such tendencies.

« 15 » I wonder, though, why Murphy wants to replace one re-entry by the other, i.e., différance by autopoiesis. Their coordinated integration within the framework of Science II allows for a more appropriate, differentiated explanation of the multi-level systemic processes in the performing arts. Christy's cornucopia of ideas may help further integration here. In §26, he refers to Gregory Bateson, who maintained that language usually emphasizes only one side of an interaction and that a "new organizational science of relationships" (Bateson 1979: 60) is needed. In the introduction of the same book, *Mind and Nature*, Bateson writes about the intention to achieve a greater systemic (social) connectedness: "What is the pattern which connects all the living creatures?" (ibid: 8), and gives himself a first answer: "The pattern which connects is a metapattern. It is a pattern of patterns" (ibid: 11). His "Instead of a hierarchy of classes we face a hierarchy of orders of recursiveness" (ibid: 201) might be the appropriate vision of an integrative systems metatheory. In Maturana's concept of structural determinism, the organizational/structural relations at the different levels of living systems are consistently explainable in terms of generative orthogonal interactions and relations (§6). Autopoiesis and différance are descriptions of recursive processes at different (hierarchical) orders of systemic organization. Instead of contrasting these concepts, it is necessary to analyze, from a metatheoretical perspective, which specific and general mechanisms can explain their differences and similarities.

« 16 » Systems theory and the performing arts should play a leading role in enabling identification with the positive values of our societies. The dance performance event is a space for ethical and aesthetic experiences – and can have therapeutic effects (Christy §27) through its positive energy. Systems theory provides the methods to understand them.

The performing arts increase the possibilities for each participant to individually experience or feel the energy of emotional resonance in social relationships. Christy (§18) states that art challenges collective constructions, but also assembles new unities that counter previous unions of (only) meanings and language. Instead of the passive pages of academic research, works of art leap into a "life-giving" construction of reality. Performance events offer sheltered spaces where positive energies connect, as in the example of *Soul Chain*.

References

Bateson G. (1972) Form, substance, difference. In: Steps to an ecology of mind. Chandler Publishing, San Francisco: 455–471.

Bateson B. (1979) Mind and nature: A necessary unity. Hampton Press, New York.

Clarke B. (2009) Heinz von Foerster's demons: The emergence of second-order systems theory. In: Clarke B. & Hansen M. B. N. (eds.) Emergence and embodiment. Duke University Press: Durham: 34–61. ▶ https://cepa.info/3015

Fischer-Lichte E. (2016) Performativität: Eine Einführung [Performativity: An introduction]. Third unabridged edition. Transcript, Bielefeld.

Fischer-Lichte E. (2019) Ästhetik des Performativen [Aesthetics of the performative]. 11th edition. Suhrkamp, Frankfurt.

Maturana H. R. (1988) Ontology of observing: The biological foundations of self-consciousness and the physical domain of existence. In: Donaldson R. E. (ed.) Texts in cybernetic theory. American Society for Cybernetics, Felton CA: III.1–53. ▶ https://cepa.info/597

Maturana H. R. (2005) The origin and conservation of self-consciousness: Reflections on four questions by Heinz von Foerster. In: Riegler A. (ed.) Heinz von Foerster – in memoriam. Kybernetes 34(1–2): 54–88. ▶ https://cepa.info/702

2 | A systems-theoretical definition of "destructive interaction" related to his concept of structural determinism can be found in Maturana (1988: 15).