

# Emergence: A Response to João Mattar

## *Emergência: Uma Resposta a João Mattar*

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**Abstract:** Response to João Mattar's article "Science (not that) new", published by *Cognitio*, v. 4, n. 1, p. 15-26, jan-jun. 2003.

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**Resumo:** *Resposta ao artigo de João Mattar, "Ciência (não tão) nova", publicado em Cognitio, v. 4, n. 1, p. 15-26, jan.-jun. 2003.*

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Although the word itself does not give it away, "Manifestos," in their generic tradition, want to be provocative – and in order to be provocative, they tend to exaggerate. In the spirit of this tradition of writing, João Mattar's response to our collective "Manifesto on Emergence" (published last year in the "Folha de São Paulo") was what we all had hoped for, and what we really needed: a well-informed and intelligent commentary which, by provoking back, took up our provocation, thereby helping us to understand where our deliberate exaggerations had gone too far. Now, if we have decided to respond to João Mattar's response, it is mainly with the intention to show how much we have learned from him, and how much we owe him – although there are numberless issues and answers in his response which, despite their potential interest, our response to the response will not address. Here are the four problems (and in some cases, perhaps: the "misunderstandings") to which we would like to come back:

1. João Mattar objects – and let me anticipate that I think he is right in doing so – that we qualify as "trivial" a type of "interdisciplinary academic work" that has been responsible for some of the most important discoveries in our (not only recent) intellectual and academic history. For, with the word "trivial," we are referring to that type of research collaboration where, in order to find solutions to a well-circumscribed problem, it is necessary, for researchers from different fields, to join forces and share their respective treasures of knowledge. "Obvious" would have been a more appropriate adjective to characterize this intellectual style than the adjective we chose: "trivial." For nothing is of course wrong with (to quote a recent Stanford example) biologists, physicists, and medical researchers coming together to jointly tackle the still-unresolved question of how cancer

emerges. The reason why we spoke so (too) dismissively about this type of “interdisciplinarity” depended on the internal assignment of our discussion group, an assignment that, it appears, our Manifesto did not manage to describe clearly enough. Our assigned question was which types of interdisciplinary collaboration deserve specific funding (funding based on their character of being “interdisciplinary”) because they promise to produce results that one could not obtain without setting – interdisciplinary – goals together at the beginning. The example that João Mattar is referring to, i.e. the deciphering of the human genome, would not belong to this very rubric. For it is fair to assume that the kind of disciplinary complementarity on which the deciphering of the human genome relied, was a necessity which, at some point, had to necessarily emerge within an ongoing research process. It could have been initiated in any of the participating disciplines – without any interdisciplinary impulse. So our (admittedly narrow) concept of a “specific interdisciplinarity,” was that of a type of research that could not have come into being without joint discussion as a point of departure, and without specific financial support, under the heading of “interdisciplinary.” Once again, there is nothing wrong with the exchange of knowledge across disciplinary borders, especially if it is geared towards the solution of specific problems. But such type of research does not always need specific financial support. In other words: interdisciplinarity that is “funded” for being interdisciplinary has an obligation to produce results that could / would not have happened otherwise.

2. The conception of a co-emergence between an observer and the objects of his observation that we tried to promote in our Manifesto, seems to fascinate João Mattar. Obviously, we share his critique of the so-called “Constructivism” and its lopsided view that tends to give all epistemological power to the observer. João Mattar is simply right, however, in blaming us for not having sufficiently emphasized the potential historical depth of this co-emergence in our key-example, i.e. the hypothesis of a co-emergence between the cosmos and humans as its observers. I agree, in the first place, that all pre-scientific conceptions and representations of the cosmos (and perhaps indeed human knowledge production in general) would have to be a part of this process of co-emergence. I also agree that the concept of “cognition” is one that needs – and is fully capable of – its own historicization. What I wanted to emphasize, however, is the fact that not only does our human physical and psychic disposition make us see the world and the cosmos in a certain way; on the other side, we of course also have to acknowledge that we, as observers, would not have emerged in the way we did if this evolution had happened, for example, in a different corner of our cosmos. Perhaps we could formulate our point in the following way: while “our” view of the cosmos could not exist without the human observer (this tautology is all that Constructivism has to offer), it is equally obvious – and needs to be acknowledged, equally – that we, as observers, could not exist without the cosmos, and that we would have emerged in different ways had we emerged in different regions of the cosmos. This being influenced and shaped, as observers, by the environment that we are observing, is what we mean by the epistemological thesis about “co-emergence.” Needless to say that, compared to the “history” of the cosmos (as a process of emergence), the stretch of time within which humans have produced visions of this cosmos is less than a “fraction of a moment.”

3. If I understand him correctly, João Mattar takes (mild) offense in our renewed interest – or should we rather call it: a renewed “sympathy” – for the intellectual tradition of Theology. “Have we not known, for quite some time now,” he asks, “that the cosmos was *not* created by a God?” Our first reaction to this question has to be: “Do we really know?” – meaning that, today, we are well capable and obliged to historicize (and thereby relativize) even the premises of the Enlightenment world view, on which our own world view still mainly relies. We should therefore mention (although this was not a specific concern of our Manifesto) that, precisely because we agree with João Mattar’s insistence on the historical limits of our knowledge, we cannot completely and systematically exclude the possibility of the existence of a God (although, from a 20<sup>th</sup>-century point of view, if he existed, one would have to qualify his existence as “surprising,” as an existence “behind our backs” indeed). Much more decisive for our interest in Theology, however, was the impression that certain concepts, arguments, and metaphors from the great theological tradition, can help us to grasp, today, at least tentatively, certain motifs and concepts within our own epistemological reflection that still have the status of “uncharted territory.” To mention just one (again: randomly chosen) example: if it is true, as many present-day cosmologists believe, that what we call the “Big Bang” (homogeneous or inflationary) was just one of an infinity of turning points in a universe that has always been alternating between episodes of expansion and episodes of contraction – and if, therefore, the universe had neither a beginning nor an end, it may be worthwhile to recycle and rethink what the theological traditions have had to say about the concept of “eternity.” Or, if we think of (or if we imagine or desire) an observer whose observation and experience would not be as partial as our specific points of view, then a reconsideration of the concept of God might be a good idea. The times, however, in which we took great intellectual (and perhaps even political) pride in the exclusion of Theology and theologians, are definitely over.

4. Finally, I also agree with João Mattar’s point that “emergence” is not all that new a concept – neither from the long-term perspective of the western intellectual production, nor within contemporary epistemological debates. What I find useful about this concept – independently of how new or old it may be – and deserving of further promotion, are two “academico-political” aspects of which we have already mentioned one: i.e. that the type of interdisciplinary collaboration that is entitled to receive funding on behalf of its “interdisciplinarity” *needs to be* a kind of thought that could not have emerged in the progress of “normal science.” In concluding, let me emphasize, as a second academico-political point, that the concept of “emergence” should also have an impact on the actual organization of research-funding. Far too often, today, he or she who writes an application for a research grant has to act as if all of the results that this research will be capable of producing had already been produced. But what would be the point of undertaking a research project if this indeed was the case? So we think that it is urgent to allow, today, for more freedom and indeterminacy in writing applications for research grants. A high price may be attached to the continued neglect of this requirement: it would be the price of all the research being funded not allowing for anything unpredictable to happen – i.e. not allowing for that emergence of knowledge that shares some properties with “epiphany.”