Some introductory comments to the topic of the distinction between inside and outside, and the attending topic of boundaries, seem specially useful in presenting the subject matter of this issue. Indeed, and in spite of the deliberately kaleidoscopic whole, one major thought runs through the sequence of contributions.

Almost everything we can think of or imagine exhibits insides, outsides and boundaries. To think in terms of boundaries, inclusion and exclusion forces itself upon us. It seems to be a matter of necessity. There are two basic ways in which the phenomenon can be approached. Both of them imply a certain limiting perspective on the subject matter of the inside/outside distinction.

On the one hand, we can start from the given phenomenon. Things in general, including we all, present boundaries, interiors and exteriors. We can classify them, observe or manipulate them. We can ask for the status or function of boundaries, interior and exterior for the thing at issue. We can try to trace the coming about or origins of insides and outsides, and the way in which they are maintained by the thing at hand. We can wonder how certain systems succeed in establishing insides, outsides and boundaries, and how they mark themselves off from their environment. Philosophers inspired by biological sciences and dynamic-systems-theories employ a perspective in which the phenomenon is approached objectively, from the front side.

On the other hand, we can try to look at the backside of the objective phenomenon, and ask how it is possible that we necessarily perceive and think in terms of inside/outside distinctions and boundaries. It is the Kantian style of reasoning, in which the necessary conditions of possibility for a certain perspective are being tracked. In other words,
this line of research looks for the subjective conditions of possibility of the above objective perspective. To trace the conditions of possibility of a certain perspective, allows us to ask whether the perspective at issue is adequate. Once we are aware of the constitutive conditions of a certain perspective, the road for commenting, criticizing or changing the perspective is open.

However, it would not be pertinent to arrange the contributions to this issue according to this divide, for in trying to do so, two odd twists appear. The first one is familiar and does not offer much surprise anymore. The phenomenon taken objectively in the first approach turns out to be connected to the subjectivity of the second approach.

The second twist is a bit more tied up, and it is here that a justification for focusing on inside/outside matters in connection to living beings – individually or in community – comes in sight. Living beings are exemplary cases of beings that bring about insides, outsides and boundaries. Once the complexity of a living system and its actively constituting part in maintaining its coherence, integrity and functionality is acknowledged, the distinction inside/outside and the issue of boundaries becomes particularly interesting. For how does a living bring about insides/outside and boundaries – not only of itself, but of things in general? The genesis and the functioning of the inside/outside distinction are of basic importance for this question, as they learn us something about the conditions of the capacity to relate oneself to something other, both in the first living cells which differentiate between themselves and their environment, and in humans as multi-layered living systems. The role of the living system in the differentiation between inside and outside is in the first place an active one. First, a living system must constitute itself as something cohesive in order to relate to something other. Second, there is maintenance of coherence, integrity and functionality of the system in interaction with its environment. The emphasis on the study of living systems as beings that try to realize the conditions of their continued existence – biologically as well as psychically or socially – can contribute to answering the question for the genesis and continuation of the distinction between inside and outside, and for the status and functionality of a boundary.

This, however, is only a partial justification for limiting the issue to living beings. The other part of the justification explains why a divide between so-called objective and subjective approach is not useful. To
study from the objective perspective how living beings constitute insides, outside and boundaries precisely enables us to learn more about our own subjective conditions for distinguishing outside and inside. It is not only the case that distinguishing inside from outside has subjective conditions of possibility, it is also the case that we see the subjective conditions of possibility at work in the phenomenon studied from an objective perspective. This situation is rather exceptional and makes it difficult to disentangle front and back side of the phenomenon. After all, the researcher who studies how living beings constitute insides, outside and boundaries, first has to draw boundaries himself. What is to be considered as a living system or as a whole? What belongs to it and what does not? Why do we think the boundary for a living system is to be situated such and so? Those are the same questions and tasks the living being faces. This moebius-strip like convergence of front and back in the domain of the living suggests that the neat distinction between subjective conditions of possibility and objective result is rather artificial. The recognition, however, of this artificiality in no way opens up the way for relativism. This becomes clear in each of the individual contributions. In investigating the inside/outside distinction and matters of boundaries, each author – from his own, particular perspective – implicitly or explicitly leads us to recognizing the intertwinement of subjectivity and objectivity, and does so against relativist tendencies.

This issue combines contributions from different fields, as to get a better grip and understanding of the all-pervading yet eluding phenomenon of insides, outsides and boundaries. The first contribution focuses on the inside/outside distinction from a biological, dynamic-systems-theoretical perspective and establishes a naturalized account of how certain systems are capable of making the required inside/outside distinctions for their maintenance as a system. Alvaro Moreno & Xabier Barandiaran start from the pertinent position that the adoption of a particular point of view does not necessarily lead to relativism. In other words, it is not because the decision what is to be considered as a system results from a certain perspective, that the observer’s choice happens at random or arbitrarily. Starting from this point of view, the authors offer us an intriguing account of the origin of the inside/outside distinction and the role of the boundary in living systems.

The second contribution by myself focuses on the implications of the epistemological perspective and shows that matters of internality and
externality are based upon and mediated by a particular part-whole metaphysics. The underlying choice for a particular part-whole metaphysics, however, has consequences for what can count as part and as whole. Different sorts of objects need different kinds of perspectives from which the particularity of the object can become visible.

Alan Rayner focuses on our perception on space and reality and speaks out for an alternative view on space, natural form and boundaries. As such, he criticizes the logic underlying our conventional point of view on reality (such as a rationalistic perspective on discrete objects), and defends an inclusional logic (with emphasis on reciprocally coupled insides and outsides through intermediary spatial domains). This keen contribution thus emphasises the subjective implications of the perception of objective reality, and points to the consequences for daily scientific and social reality. He nicely shows that relativist claims – which lead to denying access to natural reality – are not in place here, because they are precisely based on the ‘box logic’ rejected here.

From another point of view, Bernhard Waldenfels approaches modernity, in which the cosmic order is under question and in which compromises between individualism and holism, particularism and universalism, relativism and absolutism are general practice. Against this turning around alternatives, Waldenfels defends a constitutive paradox of self-bounding orders. In this, the status of the boundary is one of self-reference and self-withdrawal, and produces an asymmetry with the alien. The alien is that which continually challenges our individual and collective existence, and makes the borderlines visible.

The last contribution goes back to the individual person and tackles the question why the inside/outside distinction is so obvious or commonsensical for the rest of us, but so problematic for patients with schizophrenia. Aaron Mishara bases his investigation on philosophy, literature and neurosciences, and shows that inner/outer experiences are not merely ways of talking that, in turn, shape our experience. Neurological and psychiatric disorders may disturb or disrupt the commonsensical inside/outside distinction, and this shows that the brain systems and process that underlie such experiences are both tenacious and frail. Once more, we are invited to recognize the hidden twist: the commonsensical oppositions we commonly use to describe mental
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experience are often uncritically applied to our understanding of how the brain works.

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