



Gabriele Sofia

University Paul Valéry Montpellier 3 – Montpellier, France

When I approached professor Gilberto Icle with the proposal to dedicate a thematic section on *Theatre and Neuroscience* in the *Brazilian Journal on Presence Studies*, he asked me not to contact scholars who had already been published by the journal. On the one hand, such a request prevented me from contacting some scholars who have always worked on such a theme, but, on the other hand, this allowed me to dedicate good part of the thematic section to a new generation of researchers who, in the last years, have sought to connect theatre studies with cognitive neuroscience. As it is known, the interest of theatre cultures towards brain science is nothing new. What is new, however, is the way in which neuroscience has begun to study the human being as a deeply relational, necessarily intersubjective system. The advent of new fields of interdisciplinary investigation, such as, for instance, the so-called *social neurosciences*, highlights the need to overcome experimental paradigms which isolate the subject from the environment in favour of a study of cognitive mechanisms in situations of interaction with other individuals. In such a panorama, theatre cultures have not only found certain neuroscientific approaches to be more appropriate to the study of the actor-spectator relationship, but they have also shown how theatre can be a special space for the study of the relational potentials of the human being. In selecting contributions for this section, we have, therefore, chosen to especially represent this new phase of interdisciplinary investigations between performing arts and neuroscience.

Enrico Pitozzi's article opens the section with a reflection on how new technologies influence the perceptive processes of performers and spectators. Analysing the creative practices of some contemporary choreographers, Pitozzi shows us how certain devices enable the performer to have a different perception of the self and of the spectator, thus multiplying the creative potentials of such perceptions. Pitozzi's article is followed by an essay in the form of a *letter* written by the performer and researcher Victor Jacono. Ambitious in its scope, the letter starts from the basic idea that both cognitive scientists and theatre researchers explore the potential of the human being's cognitive functions in their investigations. Even so, an adequate circulation of learning between the two fields is as yet lacking. The letter highlights the issues which render such a circulation

of knowledge difficult, the advantages that such an exchange would bring to both fields, and a few possible points of departure for a dialogue that is now overdue. The third article, by Dorys Calvert, presents us with a historical excursus of the relationships between theatre and science, focusing particularly on the matter of emotions, an issue that is as thorny as it is central to the current interdisciplinary debate. The fourth article reports one of the very first scientific experiments realised to investigate the spectator's experience: the author, Yannick Bressan, in fact presents us with the methodological challenges and the scientific outcomes resulting from a collaboration between neuroscientists, theatre scholars and artists. Following Bressan's article, the reader will have the possibility to access two founding contributions advocating an interdisciplinary approach to theatre studies. The first article is by John Schranz, a theatre director, pedagogue and scholar from the University of Malta. Since the 1990s, Schranz has coupled his performative research with numerous collaborations with neuroscientists and cognitive psychologists. The article, first published in 2004 and here provided in translation, represents one of the most articulate epistemological reflections on the potential of an *Encounter* between the paradigms of the sciences and those pertaining to theatre cultures. What follows is the translation of an article by Rose Whyman, a scholar from the University of Birmingham. First published in 2007, the article develops a close historical reflection on the influence which some important physiologists and psychologists have had on the thought and terminology of Stanislavski. A deep understanding of the epistemological basis of the sciences can, in fact, furnish a new perspective onto theatre history. With such an idea as my point of departure, in the closing article, I posit certain criteria for a vertical analysis of the encounters between the theatre and the brain sciences in the 20th century, reflecting on the recurring issues which have traversed the two fields.

Clearly, such a thematic section does not aspire to be exhaustive, but it proposes an outlook – one that is necessarily partial – onto contemporary studies. In juxtaposing two founding contributions to five articles from the new generation of researchers, we have attempted to provide the reader with an up-to-date reflection on the various matters, while, at the same time, keeping in view the roots which have rendered contemporary interdisciplinary perspectives methodologically accurate. I wish you a good reading.

Translation from Italian by Victor Jacono.