## Virtual Reality, Artificial Intelligence, and Robotic Actors. The Contemporary Polish Theatre and New Media

The aim of the project is to examine the broad spectrum of implementing new technologies in Polish theatre practice over the past fifteen years. Therefore, the subject of the research will be Polish performances that employ new technologies, such as augmented and virtual reality (AR and VR), artificial intelligence (AI), and robotics/cyborgisation. The analysis will be conducted in two ways: first, examining performances that use these technologies as a means of artistic expression, and second, thematising these issues in the content layer of the performance.

The research will explore how creators of Polish dramatic theatre address topics related to the development of the aforementioned new technologies and how they use these technologies in theatre creation. Despite the increasing presence of such new technologies in theatre, so far no attempt has been made to provide a comprehensive analysis of the phenomenon in the context of Polish theatre in both Poland and internationally. The activities of directors such as Krzysztof Garbaczewski, Łukasz Twarkowski, Natalia Korczakowska, Katarzyna Kalwat, and Grzegorz Jarzyna will be subjected to particular observation.

The main purpose of the project is therefore to map the field of technologisation of Polish theatre, identify the main artistic trends and tendencies within this field, and present the results of a comprehensive analysis of this phenomenon in the form of academic articles and a doctoral dissertation.

The expected results of the research project are multiple. Firstly, for the first time, Polish thematising and using new technologies will be systematically and comprehensively analysed. It will be determined whether theatre using the new technologies is part of global culture and whether the categories resulting from existing Western theatre studies are adequate to describe the development of Polish theatre, or whether a different conceptual framework is necessary. If so, an attempt will be made to formulate such a framework, and its usefulness in analysing similar theatrical phenomena in other countries of the former Eastern Bloc will be initially assessed. Institutional aspects related to the use of new media in theatre, such as the costs of production and maintenance, the availability of theatre spaces adapted for the use of new technologies, and other limitations affecting the still relatively low objective popularity of such solutions, will be examined. The impact of new technologies on acting and directing will be analysed, i.e., the issue of the possible replacement of the human body and mind by new technologies. The theoretical frameworks, research methods, and collected source materials will play an important role in further research on the new technologies in the Polish theatre.

In order to implement the project, whose main difficulty lies in the fragmentary existence of academic studies on the problem, a series of interviews will be conducted (with creators at all levels: directors, actors, and those responsible for the technical support of such projects) during the research, based on which it will be possible to specify answers to questions about the present and anticipated future of Polish theatre in the field of implementing the new technologies. In addition, a series of performance analyses and related metatexts (programmes, scripts, reviews) will be conducted. To compare the Polish situation with the international one, and to identify similarities and differences between them, research will be conducted at international festivals and in artistic research laboratories where advanced research on the connections between art, science and technological development is carried out.