STUDIA UBB DRAMATICA, LXX, 2, 2025, p. 149 - 158
(Recommended Citation)
DOI:10.24193/subbdrama.2025.2.09

The Coexistence of Humans and Non-Humans on Stage

Mercè SAUMELL[1]

Abstract: The contemporary scene has redefined the concept of acting by moving away from the psychological identification between actor and character. The presence of new technologies and their intermediate nature have led to the growing prominence of non-human actors in today's theatre and dance and, on the other hand, the coexistence of humans and non-humans on stage. In this way, digitized images, avatars, robots and AI creations displace the traditional role of the carnal actor as the sole bearer of meaning on stage through programming and its intermedial potential. Undoubtedly, a hot topic is the impact of AI on the present and future of the performing arts. We are now in a time of transition as we grapple with what the rise of AI will mean for creativity. In this article, we will focus on specific proposals from European companies that already use it in their proposals: the British Forced Entertainment, the Spanish Compañía Señor Serrano, the Italians Anagoor, the French Shonen or the Dutch Ulrike Quade, among others.

Keywords: humans, robots, Artificial Intelligence, interaction, post-humanism.

Nowadays, the posthuman generates anxiety and enthusiasm at the same time: it is a time of interconnection between human and non-human actors.

[1] Department of Theory and History of the Performing Arts, Institut del Teatre, Barcelona, Spain. E-mail: saumellvm@institutdelteatre.cat

©2025 STUDIA UBB DRAMATICA. Published by Babeş-Bolyai University.
This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.

This article addresses the possibility of reflecting on the presence of new scenic bodies, humanoid robots, consistent with posthumanism postulates, and also the use of AI as a generator of scenic material, taking as a reference the thought of the Italian-Australian philosopher Rosi Braidotti and her research into the Posthumanist aspects most related to historical humanism, but without neglecting the impact of new technologies on our current thinking. Braidotti posits the existence of the other as an extension of our own individual self with respect to the natural and cultural world (including the technological). In contemporary stage productions, there are frequent scenarios of dystopian imaginaries in which new subjectivities appear (cyborgs, robots, avatars, AI, etc.) that raise numerous questions.

The French psychoanalyst, philosopher and playwright Félix Guattari already spoke of machinic autopoiesis, at the end of the 70s of the last century, when he established a connection between organic matter and the machine, which can now be considered not only intelligent but also as a generator of its own thought. Actually, Braidotti and other philosophers advocate the overcoming of the Anthropolatry, human superiority over the animal and plant kingdoms, and for the importance of ecological sustainability: "At present, there is a shift in the lines of demarcation between ontological differences, for example, between the organic and the inorganic, the original and the manufactured, flesh and metal, electronic circuits, and organic nervous systems."[2]

Braidotti reflects on post-colonialism and post-feminism and on the existentialist level of discomfort and uncertainty left by everything mentally conservative. "The posthuman does not imply the end of humanity but that of a specific conception of the human"[3]; finally, she reflects very eloquently on the inhuman of post-humanism and relates it to capitalism and bioengineering (the commodification of everything alive). Scenarios of dystopian imaginaries are the basis of much of contemporary artistic production. Are they posed as new subjectivities, new human identity? Or are they a complaint or a scream?

---

[2] Rosi Braidotti, *The Posthuman* (Oxford, Polity Press, 2013), 108.

[3] Braidotti, *The Posthuman*, 121.

There is an important change in human relationships because they are intervened by machines and technologies like AI and there is anxiety about the future of the human species.

This multiplicity of structures that are neither hierarchical nor subordinate, and unfolds an arboreal and decentralized consciousness where the subject is not fixed but a living network of multiple connections without beginning or end, opposing the humanist, anthropocentric and colonialist thought of the late twentieth century. Post-humanist thought is intimately related, specific to contemporaneity, with technological interaction in all areas of life.

It is in this area that we can talk about transhumanism (biotechnological improvement of the human being), which explores and expands the limits of the body, and resizes the concept of the subject. In this sense, and with regard to the morality of technology, Braidotti states that technology is normatively neutral[4] and that the body has gone from being a stable entity to a hybrid entity that includes technology and other forms of life. The British visual artist Robert Pepperell (1963), in his *Posthuman manifesto* (2005) states, among other topics, that technology will transform the human species and delves into the origin of human consciousness by decentralizing it from the brain and reconsidering it as an effect of cooperation between the body and the environment.

Robots on stage

In recent decades, as robotic technology has advanced, stage creators have been incorporating robots into their work, especially interactive and articulated ones. Since 1990, the proposals of Sterlac, Artemis Moroni or Marcel·lí Antúnez Roca and, from 2000, Richard Maxwell or Mirja Fiorentino, among others, stand out. In this presentation, however, we will focus on those humanoid stage robots, which promote interaction between actors and robots on stage. Currently, these robots are not only instruments operated by performers, computer engineers, choreographers, theater directors, etc. Humanoid robots acquire a magical dimension on stage, beyond their instrumentality and also influence the configuration of our behavior as spectators.

[4] Braidotti, *The Posthuman*, 59.

The British Steve Dixon, a specialist in robotic performance, points out that: "Although robots are not yet aware of themselves, they are quintessential 'conscious' entities, which calculate their every move. When a humanoid robot moves, as when someone does, it is a self-conscious action; its codification, artificiality and difference with the norm are underlined."[5]

The Japanese theater director Oriza Hirata has been one of the pioneers in its stage use. Hirata collaborated with roboticist Hiroshi Ishiguro at the Robotic Intelligence Lab at Osaka University. Both staged classic texts such as *The Three Sisters, Android version* (2012), based on Anton Chekhov, with actors and humanoid robots, which was an emblematic staging. For robotics, Hirata used his theater experience to attempt to make robots that act similarly to humans. While his work has been used to generally fulfill this role, he has also brought his work in robotics back to the theater, where he has incorporated robots in plays to explore themes of humanity. His play, *I, Worker* uses two robots as main characters to explore this very idea.

School of Moon

In the next paragraphs we will focus on the proposal *School of Moon* (2016) by the company Shonen. Shonen was founded in Paris in 2007 and, since then, has made fifteen creations between shows, installations, performances, and films. Shonen connects dance with new technologies (humanoid robots, drones, or augmented reality). Its director is Éric Minh Cuong Castaing (born in 1979 in Seine-Saint-Denis, to a Vietnamese father and a French mother). For years, she worked in the world of animated film, before becoming interested in choreography through hip-hop, *butoh* dance and contemporary dance by training with the German choreographer Va Wölfl. With her company Shonen, Cuong Castaing creates projects associated with the body and movement, using new technologies and being interested in new structures of visual perception. Shonen proposes "in socius" projects, born in specific socio-cultural realities, often in collaboration with non-artistic institutions such as the CNRS robotics research in Paris, NGOs, motor education institutes or palliative care centers.

[5] Steve Dixon, *Digital Performance: A History of New Media in Theatre, Dance, Performance Art, and Installation* (Massachusetts: The MIT Press, 2007), 2.

What we are interested in highlighting in this paper is the coexistence between carnal bodies and synthetic bodies on stage, how they establish relationships and raise questions for the viewer about automation, trust and dependence on our present and future contact, on the role that robots will play in our daily lives in the coming decades. And how these devices appeal to our vulnerability, to our vulnerable bodies, in what the American philosopher and choreographer Eric C. Mullis calls "the quasi-otherness of the robot". This "alter ego" is communicated to us on stage in an almost specular way. They are becoming more and more sophisticated, and although robots cannot understand the vulnerability of humans and, precisely for this reason, the relationship of trust that is established between them and us is not bidirectional. Undoubtedly, its fiction and interrelation in the *mise-en-scène* awaken our empathy.

Let us not forget that technology allows to develop robots that are increasingly capable of interacting with their environment and more humanoid in their appearance. In the near future, their exchanges with humans will evolve and be refined, becoming more similar to human-to-person interaction, as voice and gesture recognition software and hardware are developed to the point that robots begin to see and move fluidly, like humans. When this happens, the ontological differences between the carnal body and the synthetic body will be blurred and, consequently, it will be easier to "experience" robots as similar. The Belgian philosopher Mark Coeckelbergh, currently a professor at the University of Vienna, a specialist in robotic ethics and Artificial Intelligence, even speaks of a certain degree of intimacy between them and us (already existing, for example, between elderly or dependent people and their robot caregivers in highly technological societies such as Japan).

We'll talk about an example from before *School of Moon*, one of the first examples of NAO robots on the scene. We are talking about *Robot*, by Spanish choreographer Blanca Li. Premiered at the Montpellier Dance Festival in 2013, its success led to an important international tour, with great echoes in New York (and among other places, the proposal could be seen at the Teatros del Canal in Madrid or at the TNT Festival, Teatro Nous Territoris, in Terrassa, also in 2013). In the show, eight adult dancers shared the stage with five NAO nano-robots who danced synchronized to the rhythm of live music generated by cybernetic robots produced by the Japanese dance collective

Mywa Denki. Some aspects that appear in Shonen's commitment can already be seen in *Robot*, such as the mimetic learning of gesture between humans and robots, although, on this occasion, from a more spectacular perspective when interacting with movement professionals.

Returning again to *School of Moon*, the coexistence on stage between children and mini robots in a kind of mutual learning is very interesting. This is a choreography for ten children, six NAO humanoid mini-robots, four Poppy mini-robots and two dancers. Children (small people) and mini robots create an inter-corporeal relationship in which machines stop to imitate children's movements and vice versa, or even collaborate by transporting objects together. Human and mechanical bodies are physically linked throughout the piece, alluding to a common world in which their reduced dimensions contrast with those of adult dancers.

One of the most relevant aspects of the proposal appeals to the notion of learning and transmission, in relation to aesthetic aspects, since the digital connective devices rescue the importance of the poetics of light and image throughout the show. *School of Moon*, 48 minutes long, was born from the collaboration between Minh Cuong Castaing and roboticist Thomas Peyruse, who works with the Poppy robotic platform, from the INRIA laboratory in Bordeaux. Peyruse has been doing research on humanoid robots since 2012 and on the development of their mimicking and human movement generation capabilities. It should be noted that Poppy, of whom we have previously seen the image, is an open-source robot, which can be built at home with a 3D printer, thus moving away from the exclusivity of patents. And although it does not have the sophistication of the NAO, it is a mini robot of great versatility.

School of Moon is a choreographic show for ten children, between 5 and 7 years old, recruited on site, in each city where it is performed after a period of rehearsals and familiarization between children and machines, NAO robots, Poppys robots and two adult dancers, who together make up a "disturbing community". The narrative of the proposal is divided into three parts or periods that develop as *tableaux vivants*: the human era (a community of children interacts with robots), the post-human era (robots, two adult dancers and a group of children perform coded ballet steps mixed with mimetic movements between human gestures and the replicas of the robots) and the non-human era (the ending where only the robots are presented, already autonomous, on stage).

Let us refer to Braidotti and recall that "the posthuman does not imply the end of Humanity but that of a certain conception of the human". In this way, the playful-creative relationship between human bodies and electronic objects, the mini-robots, which is proposed in the three parts of the work, enables the viewer to reflect on the artistic experience that sets in motion a process of questioning what links us to these "other" bodies, in a field of uncertainties and relationships of interdependence.

AI as a co-author in the scene

Undoubtedly, nowadays one of the most debated topics is AI, Artificial Intelligence, and its present and future impact on the performing arts. We are now in a moment of transition as we grapple with what the rise of AI will mean for creativity. There are already shows from large European companies that work with AI. One of them is *Signal to Noise* (2014) by the British Forced Entertainment. This is also the case of the Italian company Anagoor, founded in 2000 in Castelfranco Veneto, which defines themselves as a collective laboratory between theatre, philosophy, and hypermedia scene. In their case, AI supplants the tragic chorus in proposals such as *Mephistopheles* (2014). This company won the Golden Lion at the Venice Biennale in 2018 for its production of Aeschylus' *Oresteia*, in which they already experienced with greater solidity the digital metamorphosis of the tragic chorus into a videographic presence with AI techniques, a choir that becomes a very important character in the development of their performance also altering the boundaries of the stage.

Agrupación Señor Serrano is a company born in 2006 in Barcelona and led by Àlex Serrano, Pau Palacios and Bárbara Bloin. They stand out for their controversial shows and for their outstanding experimentation with stage languages. In 2015, it won the Silver Lion at the Venice Biennials. In July 2023, they premiered at the Grec Summer Festival in Barcelona *An Island* about the utopian possibility of coexistence on an island, a bounded territory, us and the others, an increasingly difficult coexistence in today's polarized world. Agrupación Señor Serrano proposes a stage piece based on dialogue between humans – in this case, the stage directors and playwright Àlex Serrano and Pau Palacios – and various Artificial Intelligence tools. The

Barcelona-based company became interested in AI at the beginning of 2022, with the appearance of the Open AI Interface, when they saw the opportunity to investigate further with this new language.

In the creation process, they used several AI applications for text generation such as GPT-3 or ChatGPT, initiating a series of conversations with the AI, as another collaborator. During the performance, the actors do not speak, the text is projected (depending on the language of each country in which it takes place) with the human font text in white and the AI-generated text in yellow. In this way, the spectators can follow the dialogues that advance with an Aristotelian structure of presentation, middle and end. It is a discussion on the creation of the dramatic text itself. But in this one-hour proposal, the visual part created with DALL E, an AI image generator with those produced by Runaway global AI, stands out. Images of islands appear, but there is a permanent presence on stage of a human dancer.

In the central part of the work, another technique stands out, that of holographic images created by AI that recreate a series of anonymous opera singers. The constant transformation of the images provides the viewer with a journey through numerous attempts at coexistence with some well-known recreations of emblematic paintings or other documentary recreations. After a denouement that suggests understanding between us and the others, a *coup de théâtre* marks an ending full of doubts.

An Island poses the conflict between human playwrights and AI to reconcile and jointly create a piece of work for stage. At one point, the words of one of the human playwrights reproaches the AI for soon leaving him without a job, a widespread fear among artistic professionals, the fear of impersonation and the victory of the machine over the human, the plot of *R.U.R.* (1921) by Karel Čapek and its multiple revisions in the theater and in science-fiction cinema.

Contradictions

But the use of AI also involves contradictions, as Professor Jennifer Stuart-Parker, Head of Department of Drama, Theatre & Dance in Royal Holloway, London, pointed out at the IFTR World Congress (International Federation for Theatre Research) held in Cologne, Germany, in June 2025.

Exactly, the use of AI on stage raises questions about its environmental impact (using the chatbot for about fifty queries consumes about two liters of water), just when eco-dramaturgy is another emerging field of scenic research and creation. On the contrary, another teacher at this institution, Will Shuler, points to the promising future of using new technologies to teach theater and performance-making; we are talking about tools such as AR (Augmented Reality), VR (Cinematic Virtual Reality) and XR (Augmented Reality). It is clear that we are in a moment of trial and error regarding the impact of all these new technologies on the entire creative process, from the transmission of the knowledge to future professionals to the reception of the viewers.

Another challenge is whether AI agents (avatars, robots, chatbots) will be our future co-authors, the same doubt that Agrupación Señor Serrano showed in their proposal. For this part, the Dutch company Ulrike Qaude, based in Amsterdam, collaborates closely with the Center Stage Robotics of Utrech University, led by Professor Maaike Bleeker, precisely on this human and post-human co-authorship. Not only do they their work with robotics, but they also explore the impact of other technologies, such as mixed reality, virtual reality, and of course, AI, to see how these new forms of technology can help create new benchmarks. As a result of this collaboration, they created *Orito*, a kind of contemporary opera starring a Japanese doll named Orito, whose voice has been created and interpreted through an AI program.

And we must not forget that since 2010, all data can be linked and reused by automated systems. In that sense, AI processes can generate data with new content. Nowadays performances are modular, combinable, no longer related to a single author. A present full of questions but also full of opportunities opens up before us. We have talked about different examples that staged these challenges that, far from nostalgia, show us the inevitable path towards post-anthropocentrism.

REFERENCES

Braidotti, Rosi. *The Posthuman*. Oxford: Polity Press, 2013.

Dixon, Steve. *Digital Performance: A History of New Media in Theatre, Dance, Performance Art, and Installation*. Massachusetts: The MIT Press, 2007.

Mullis, Eric C. "Performing with Robots: Embodiment, Context and Vulnerability Relations". *International Journal of Performance Art and Digital Media*, Vol. 11, No. 1 (2015): 42-53.

Parker-Starbuck, Jennifer. *Cyborg Theatre: Corporeal/Technological Intersections in Multimedia Performance*. Houndmills: Palgrave Macmillan, 2014.

Posner, Dassia N., Claudia Orenstein and John Bell. *The Routledge Companion to Puppetry and Material Performance*. New York: Routledge, 2014.

MERCÈ SAUMELL *is PhD in Art History, specialist in contemporary theatre. She is Professor (MA, PhD) at Barcelona's Institut del Teatre where she is Head of the Department of Theory and History of the Performing Arts. Mercè Saumell wrote books about contemporary theatre and has published articles in international research journals. She was co-organizer of the IFTR Barcelona 2013. Currently, she is working on a project on the Independent Theatre in Spain led by the Reina Sofia Museum in Madrid. Her last books are about the Catalan company* La Fura dels Baus *(2019) and* El papel de las mujeres en el teatro español *(*The role of women in Spanish theatre*) (2020).*