Playing Bodies

PLAYING BODIES

Research on the state of the art of technology on music and movement

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Erasmus+ KEY ACTION 2:

SMALL-SCALE COOPERATION PARTNERSHIP IN ADULT EDUCATION

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INDEX

1.INTRODUCTION

Technological evolution is a constant in the development of human kind. Just as it influences day to day life of people and life in general, it also influences art and the way in which it is articulated within society. This has always been the case.

In recent years, this scenario has been accentuated and the technological evolution has been so noticeable that it seems appropriate, in order to understand our time and, above all, our artistic environment, to undertake an investigation that reveals how artistic expressions are being combined with the implementation of these "new technologies".

A few decades or centuries ago, innovations such as the mere use of electricity and artificial light meant a great change in the way stage artistic pieces were performed. It was the same with music, where the possibilities of recording, reproduction and amplification profoundly altered the forms, formats and textures in which everything musical unfolded. Today, the influence of the "new technologies" extends in surprising and unexpected ways in artistic discourses, with greater or lesser success, but reaching a contamination that leaves few gaps unconquered.

This conquest is what we try to elucidate in this research. To know how and in what way the new technologies are deploying their power and influence in the field of Living Arts, how they are being used and for what purpose artists are opening the doors for them and giving up spaces. Because this penetration into the space of art may or may not be permeable with the elements that, in their own right, already occupy certain disciplines. New technologies may or may not enter in peace. They may or may not sweep away everything they encounter and take over territories that are not their own.

This is how each one of the partners in this project will analyze and exemplify how this is happening in their own country. In this way we will reach a common ground of understanding from which to discover how we can influence each other and with what new tools or what new use of technological tools we can contribute in our efforts to develop a common methodology for the movement arts in which each partner is involved.

This will be, then, the theoretical basis of investigation from which we will begin to share methodologies and our own ways of doing with others. This will be the linguistic and conceptual foundation on which to articulate our common praxis and the triangular braiding between the three different understandings of movement that we bring from each country to this Erasmus+ project.

2.CURRENT SITUATION IN EACH COUNTRY

2.1.L'espace

This research stems from our artistic experience and from the specific investigation in the field of live entertainment, inscribed in the category of avant-garde and contemporary research; our point of view therefore relies on active experience in the artistic field as professionals in the field.

After a long journey in Northern Europe, in particular in France, Belgium and Germany, we have voluntarily located our operational and research base in Sicily, in Palermo, our homeland. Getting out of North-European fashions has allowed us to develop our own language to find in a more pertinent way a cultural identity in continuity with our past, as well as to lead artistic investigation to a more universal contemporaneity, rather than linked to specific and recognizable fashions of the time.

During the sad period of fascist dictatorship, Italian politics hindered the artistic research of the avant-gardes of the time, forcing the authors to a diaspora or an abrupt interruption of their work. Therefore, in the field of live entertainment Italy has witnessed a remarkable slowdown if not a total break in the natural evolution of its artistic discourse, creating a temporal gap compared to other countries. An attempt has been made to close this gap since the 1980s, when young artists, with their North European or American experience, decided to invest by returning to their native Italian soil. Nevertheless, even today it is complex for contemporary artists to receive the right institutional support because the economy and attention are aimed above all at classical academic institutions.

From our perspective, moreover, the social framework is even more complex because there has historically been another cultural gap, which has affected northern Italy compared to southern Italy. The latter is the result of numerous foreign influences that have culturally enriched the territory, creating fertile ground for an eclectic art.

Contemporary art, in every time and place, has always been a reactionary and challenging art towards power and socio-critical dynamics. Thus, the artist has always been a spokesman for the issues of his time to express his precursor and political thought. This is why, in times of

dictatorship, we tend instead to focus on the classical artistic heritage, which wants to entertain the public rather than awaken their consciences.

Today, with the aim of reconnect as artists to the contemporaneity of the Italian territory and heritage, we cannot but consider the greatness and beauty that have characterized some moments of the history of Italian performing art, such as the Greek theatre, the *commedia dell'arte*, the neoclassical melodrama and the neo-realism of the 50s, but we must also consider the evolutionary travail of Italian society in recent years. Today, on a global level, we have witnessed an exponential growth in technological potential and its widespread diffusion from the socio-economic point of view. This automatically leads to the use of technology at all levels, for every age group and social class. The possibility of having a technological tool that allows you to create content leads to a historical misunderstanding. In the world of social media, we often witness a phenomenon of editing and dissemination of pseudo-artistic videos, as well as the use of artificial intelligence creates the illusion of authorship in the absence of the necessary skills.

From our point of view, technology is meant to amplify human potential, but it should never replace it. The human mind has an infinite capacity, it is not by chance that all this technological evolution comes from it. But if we let technology compensate for our weaknesses, this will lead to a lack of investment in our creative potential and thus to increasing ignorance and passivity.

In the artistic field the question is not different: technology could be a fundamental ally for performative art, as well as a driver for greater impact and better communication to the contemporary public, which would lead to a correct activation of the personal critical vision and therefore of the collective consciousness.
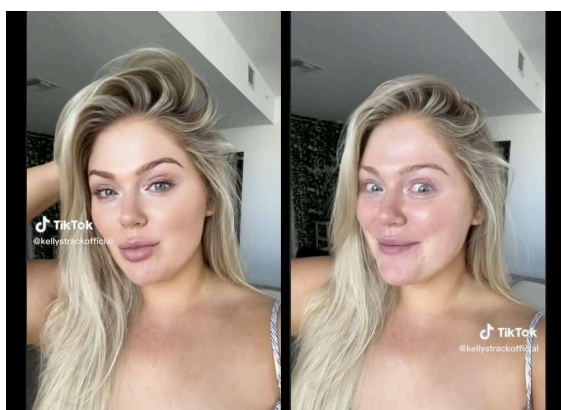
2.2.Body Architects

Vienna and Austria have been epicentres of significant artistic movements, particularly from the late 19th to the early 20th centuries. Those included the Vienna Secession, Art Nouveau, Expressionism, and the Viennese Modernism movement. These movements collectively contributed to Vienna's reputation as a vibrant cultural and intellectual hub. Although historically seen as a place for innovation in art creation, today Vienna is also a place for the preservation of art with over 100 museums and tourists from around the world coming in specifically to visit them.

Contemporary dance, although in other parts of the world, evolving from the modern dance and contemporary music contexts, in Vienna and Austria is often linked and even intertwined with performance art (a performative genre of visual arts). The contemporary dance era in Austria began after Vienna Aktionismus[1]. Hence, it is only natural that the methods, topics and ways of thinking popular in the visual arts are also present and explored in contemporary dance.

In Austria, dance exists in a plethora of alternative (non-stage) spaces. In museums such as Sezession or MAK, dance often enters as an installation performance as well as in various forms of artistic remediations - mostly in photo or video (for example, the works of Willi Dorner[2]). A special example of a museum space often inhibited by dance is Ars Electronica Centre's Deep Space[3] - a large performance room with high-quality rear and floor projection that is also equipped with motion sensors. It offers possibilities for teams of software artists and movement makers to create experiences where the entire performance space (since the projections cover the majority of the space) reacts in high fidelity to the dancers' movements[4]. The dance in Austria also inhabits public spaces, interacting with the surroundings (Willi Dorner, us, Claudia Bosse) and as such incorporates technology to enhance the reach and contact with the audience (portable light, sound, also in the form of silent disco headsets). Recently, the dance also inhabits virtual spaces such as in the case of the ACT OUT Vimeo performance database[5] or the tarot headset performance experience[6].

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[1]Vienna Aktionismus, a radical and provocative art movement of the 1960s, emerged in Austria, characterised by its intense, often violent performance art that sought to challenge societal norms and explore the extremes of human experience.

[2]The "Bodies in Urban Spaces" performative project originated as a photo project.

[3]Ars Electronica Center, https://ars.electronica.art/center/en/

[4]Some of the dance and performance artists that have worked in the Deep Space: Klaus Obermayer, Tanz Linz, Lange Nacht der Bühnen - event, Hygin Delimat.

[5]ACT OUT https://vimeo.com/actoutaustria.

[6]Magdalena Seil.

For a long time, dance in Austria embraced the new and trendy technological solutions such as electronic music and projections in the 90s such as in the works of Klaus Obermayer or Liquid Loft[7]. Today VR and robotics[8] seem to be the next new thing.

From our study and observation of the art scene in Vienna and Austria, we notice a tendency for the artists to strongly innovate at the start of their careers but then to remain doing a vastly similar practice for the continuation of their artistic career. This can be attributed to most of the successful artists such as Willi Dorner, Chris Haring, Klaus Obermayer, Claudia Bosse, or Florentina Holzinger. It is most likely caused by the nature of the artistic funding structure and the pressure from the only 3-person committee that decides on the entirety of the Viennese (and in consequence - Austrian) free scene funding. It does not help that the serving term in this function often outlasts the full artistic careers of contemporary dance makers.

As Body Architects, we embrace technology where it is necessary and where it enhances the experience of contemporary dance. On stage, we use portable wireless microphones to transmit the intimate sounds of the dancers in movement. We experimented with self-made light and music installations. However, the performing experience has shown us that the dancer and the analog experiences are what we are truly passionate about. We embrace raw movement excellence and stage sets that do not rely on high technology (wood, metal, concrete). We know that in the reality of freelance contemporary dance making, it is often a choice - complex lights, stage set, live music, sensors… Every element needs effort and attention to be done well and of which there is never enough. Hence, we choose the set and the body (and live music).

Where we use the technology however is within the dissemination and education aspects. We continuously use video (dance films, YouTube vlogs and Vimeo publishing) and social media to make our work visible and accessible to a global audience. We were the first in Austria to use the medium of podcasting in the contemporary performing arts context. Our platform Mind Culture Podcast[9] was motivated by the genuine curiosity to learn from our fellow artists and the need to immortalise contemporary dance-born knowledge.
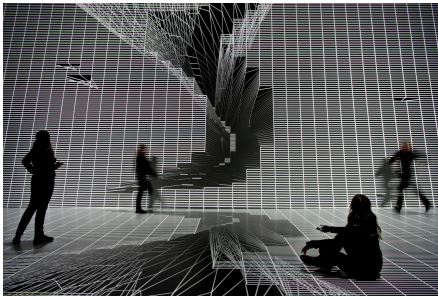
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[7]Liquid Loft, https://liquidloft.at/
[8]Silke Grabinger - Spotshotbeuys, https://www.silk.at/actual-projects/spotshotbeuys-impulstanz-2
[9]Mind Culture Podcast, www.mindculture.eu
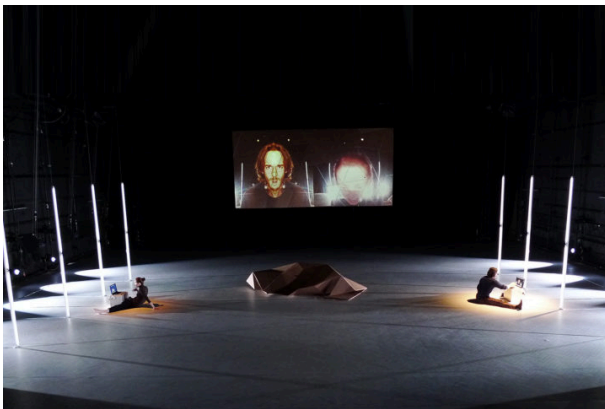
espazoaberto

Ars Electronica Center - Deep Space

Willi Dorner

Florentina Holzinger

Liquid Loft - Chris Haring (Talking Head)

2.3. espazoaberto

The situation of technology applied to the arts of movement in Spain is not very different from the situation in any other country of the European Union. Precisely because of this European identity and policy that encompasses and enhances the economic and social transitions of all the countries that make it up, it is not possible to find watertight compartments, geographically speaking, where some expressions are clearly delimited with respect to others. With this in mind, we will speak from a local situation but transfer the discourse to a more general understanding of the issue at the European level.

Music, theatre and dance have always been relatives on an artistic level, they have always had a lot to do with each other and the tendency for contamination between them has always been present. The need for the use of music in dance and theatre, for example, has always been present in their history and evolution.

With regard to technology in particular, its relationship with music, movement and art in general, has to do with the fact that technology is a space that has not yet been fully explored, and this results in an excess of its use in the very search involved in that exploration, which prevents a truly organic contamination, from assumptions that are already established and firm. It has not yet had enough time to be integrated in a natural way and become indispensable, as happens, for example, with music and dance, or with lighting and theatre.

In the struggle for it to become fully integrated and to become something consubstantial to art, to become indispensable, we go through a time in which we fall into an excess of its use, in which it supplants and occupies spaces that are not its own in formal discourses, displacing and annulling the necessary contents of the disciplines in which it tries to be integrated and of the artistic discourse itself, which is invaded by a vacuous effect.

Something similar happened with lighting in the theatre, when between the 1970s and the 1990s, and given the technological advances that made it more versatile, lighting took on too much prominence, and lighting designers wanted to become artists instead of just lighting designers. But they did not succeed, because theatre and dance need this technology, lighting, not to put themselves at its service, but to put themselves at the service of the discipline. They wanted

the acting and the theatrical act to be at the service of the lighting, in this example, when it was they who had to be at the service of the discipline that embraced them.

This is the same big problem that happens today with current technology. Either it is an organic application of the same, just like that, in such a way that it proves empty for the artistic discourse of the discipline it helps, or else there is a struggle for prominence in such a way that it tends to want everything else to serve its benefit and put itself at its service. This happens because it is what comes in as a novelty, and it seems that it is what has to impose change and that everything else has to adapt to it. This is a mistake that results in the deterioration of the artistic discourse towards a gimmicky result, formally spectacular but lacking in content. The solution to the problem is that the creative part of technology and the creative part of the acting and theatrical fact have not yet occupied the space that corresponds to each one in such a way that they feed each other and that there is no struggle for prominence.

3.EXAMPLES IN EACH COUNTRY AND OWN EXPERIENCE

3.1.L'espace

We decided to structure our survey based on examples of artists and companies in Italy according to a tripartite geographical logic (north-central-south). Among the most representative authors, we find Romeo Castellucci. From the article written by Viviana Raciti "Romeo Castellucci, between vision and electrocution" (see bibliography) comes to the surface a summary of the life and works of this great Italian artist, born in Cesena in 1960 and told in the documentary *Theatron*, directed by Giulio Boato. Regarding the artistic vision of the documentary, the article presents:

> *In just under an hour they come to life, between excerpts of interviews and short images of his repertoire (with a sort of demonstration of the artist's latest engagements around Europe), intense suggestions linked to the philosophical and artistic ability of a «Deep problematization of the human dimension of language» (Di Matteo) considering that the contemporary theatrical one is composed by the plurality of the directional, interpretive, scenographic, luministic, sound languages (most often thought by Castellucci himself), able to structure the scene - «the stage comes to life and becomes an entity» (Gibbons) - according to a mode «intensely strange, never seen» (Ridout), really free to create powerful images, alienating and recognizable, never reassuring, conciliatory, but always aimed at creating a theatre that instigates «poison», that is «a form of awareness that then becomes pleasure» (Castellucci).*

Every show in Castellucci is a deep sensory and intellectual experience, which crosses emotions and stimulates reflection. His works are characterised by a continuous search for truth and the essence of the texts, which are explored in depth to bring to light new perspectives and meanings. His work challenges viewers to confront their beliefs and question what they thought they knew.

Moreover, the aesthetics of his shows are often revolutionary and innovative, using cutting-edge technologies and unusual materials to create unique and evocative atmospheres. The use of elements such as video projections, complex stage machines and artistic installations contributes to creating an immersive and engaging theatrical experience, which leaves an indelible mark on the viewer. In short, Romeo Castellucci is one of the most influential and controversial directors of the contemporary theatre scene, capable of transforming a classical opera into a

modern and innovative experience, that challenges and stimulates the public to reflect on the essence of art and life itself.

His shows, the article continues:

> *bind man to issues such as power, technology, radical beauty, loneliness, piety, never treated as mere literary material but as a scenic trigger, the spark of which can occur from the most varied elements, arriving at an artistic synthesis that comes each time to involve all the possible sign and interpretative levels.*

These themes undoubtedly raise many ethical and moral questions, but it is clear that Castellucci's intent is always to provoke a deep reflection in the public, to take it out of its comfort zone and to compare it with universal and often uncomfortable issues. In his works, the use of technology plays a fundamental role, offering new expressive possibilities and expanding the boundaries of traditional theatrical performance. Castellucci uses technology in a creative and provocative way, experimenting with video projections, digital interactivity and advanced sound design. This innovative approach creates visually stunning and engaging shows that challenge the viewer to reflect on deep and complex themes. However, Castellucci's use of technology can also provoke controversy and divisions between the public and critics. Some see his technological research as an opportunity to broaden the theatrical language and reach new levels of artistic communication, while others consider it as an artificial addition that diverts attention from the true essence of theatrical performance. In any case, the relationship between Castellucci and the use of technology is indisputably a key element of his artistic practice, which continues to amaze and provoke in equal measure. His ability to combine technical mastery with a radical artistic vision has helped to redefine the limits of contemporary theatre and create unforgettable show experiences.

Another Italian example of the use of technology in the field of live entertainment is the project of the company NoGravity, founded and directed by Emiliano Pellisari, which brings on stage multidisciplinary performances that mix dance, theatre, music and illusionism.

NoGravity's poetry is inspired by the Italian Baroque tradition, where art blends with theatrical mechanics to create extraordinary apparatuses that enchant the audience. Emiliano Pellisari, with a background ranging from Hellenistic theatre to the Renaissance, has created a style that stands out for its beauty, its magic and its illusion. Through his shows, NoGravity has travelled around the world, bringing his artistic vision to countries such as Russia, China, Colombia, Uruguay, Switzerland, Germany, France, Spain, Poland and Italy. With new choreography and music, the company offers an experience that goes beyond the physicality of the human body through the wise use of technological means. NoGravity wants to convey a sensory experience: with its innovative technique and its ability to create artificial scenic spaces, the company manages to transform the stage into a surreal and magical place, where time and space bend to the laws of fantasy.

Our experience regarding the use of technology, as an avant-garde contemporary dance company and research resident in Italy, is varied since for years we are engaged in the development of a dramaturgy that takes into account the technological instrument as a means of expression.

Our association, *L'espace centro coreografico* located inPalermo, promotes and administers the company ZappullaDMN, founded by choreographer Giovanni Zappulla who also developed the method *Danza Movimento Naturale* (DMN), the result of over twenty years of study and research on energy, body and movement. Starting from the aesthetics of its new language, this method has over time required precise technological support to carry out the dramaturgical purposes of the company. Specifically, we refer to a technology developed by the composer and sound designer Giuseppe Rizzo that employs experimental resources such as the digital capture and reworking of live sound produced by an original string instrument and the voices of the artists on the scene. For some shows, the company also uses video projection and a digital scenography live-created and projected in an impromptu way, always interconnected to the emotional flow of the show. This choreographic research has led in the last year to a further evolution of the creative use of technology, leading artists to engage with the capture of both sound and visual image and their reworking on the projected background.

3.2.Body Architects

One of the 90s era pioneers of connecting dance and new technology is in fact coming from the field of musical composition. After experimenting with the use of real-time video projections and sound, soon enough, Klaus Obermaier decided to employ a dancer body as a part of his installation work. Obermaier's work involves motion sensor triggered projections, projection mapping as well as 3d scans and various types of digital image transformations. Although not highly sophisticated from the point of view of choreography, it is a great example of placing dance in the digital context. One of Obermaier's most renowned works, "Apparition," exemplifies the fusion of dance and technology. In this piece, dancers interact with a constantly shifting digital landscape, where their movements trigger changes in the visual and auditory environment. The use of motion-tracking technology ensures that the projections are not mere backdrops but active participants in the performance, blurring the lines between the performers and their digital counterparts. Obermaier's work challenges audiences to reconsider the role of the human body in a technologically mediated world, demonstrating how art can evolve through the integration of cutting-edge technology to create immersive and transformative experiences.

Chris Haring and his Viennese based company Liquid Loft, on the other hand, takes a more conceptually coherent approach. He draws significant inspiration from Donna Haraway's "Cyborg Manifesto." Haring's choreographic work often explores the intersections of the human body, technology, and identity, reflecting Haraway's vision of the cyborg as a hybrid of machine and organism. It is achieved both in the type of movement that is being created and as well as in the ways of using technology on stage. By integrating multimedia elements such as video projections, soundscapes, and interactive installations, Haring creates performances that blur the boundaries between the organic and the artificial. One of Haring's notable projects is "Deep Dish". In this performance, dancers interact with a constantly shifting digital environment, where their movements trigger and alter visual and auditory elements. He uses live feed from cameras on stage, closely linked soundscape and choreography, real-time video projections on stage dramaturgically integrated as "conversations" with the live performers. Through his work, Haring challenges audiences to rethink the relationship between the body and technology, offering a thought-provoking exploration of the post-human condition.

Based in Linz, Ars Electronica Centre is a research and exhibition institute in the field of new media art. As such, it welcomes numerous projects that combine live performance and technology. One of the AEC highlights is the "Deep Space," an immersive multimedia room, equipped with state-of-the-art projection technology on both the walls and floor of the space as well as motion sensors. As such, it enables a very unique experience for the audience and a spectrum of possibilities for the artists and performers. The dance is often guest at the Deep Space, as in occasion of events such as Lange Nacht der Buehnen[10], including our own work - "Absorption" in 2011 and "Beton" in 2013, or with bigger scale artistic productions such as "Apparition"[11] by Klaus Obermaier and most recently "WHAT IS REMAINING"[12] by TANZ LINZ.

The famous stairs of the Ars Electronica building are also host to the other artistic installations, such as "Steps Untold" by DARV collective - a Mixed Reality performative intervention. Several choreographers and artists performed their work on the stairs in an analogue form but also in a digital form, as a Mixed Reality projection (through an app on an ipad).

In a very similar way, the Viennese based collective and art space Das Lot aims to immortalise their yearly "Art Walk" event - a performative walk through the neighbourhood including shows and interventions by the associated artists (including dance performance by Nikola and Marcin). The walks utilise "silent disco" headsets for the audience, which makes the whole experience intimate for the audience and non-invasive for the inhabitants. The next step is to create virtual avatars of the performances and also enable them on an app for the future audiences to experience - "an interactive museum".

Today, there are other artists working in this art and technology symbiosis, such as Maximilian Prag or Magdalena Salner. There is a strong cross contamination with the new media arts, especially since there are several University courses[13], exhibition places and festivals[14] dedicated to the technology-enhanced arts.

Finally, as Body Architects, we choose for the more analogue approach in our arts. We do however embrace technology through our dance films and dissemination projects. One of them is

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[10]https://langenachtderbuehnen.at/
[11]http://www.exile.at/apparition/project.html
[12]https://ars.electronica.art/center/en/events/deep-space-experience-what-is-remaining/
[13]Linz Kunstuni, Vienna Uni.
[14]Pixel Festival.

Mind Culture Podcast, a platform born in the times of pandemic, a platform designed for sharing and exchanging contemporary performing arts knowledge. With over 25 long form video and audio podcasts, the Mind Culture is rich with invaluable information from over 50 artists including names such as Florentina Holzinger, Willi Dorner, Chris Haring or Simon Mayer.
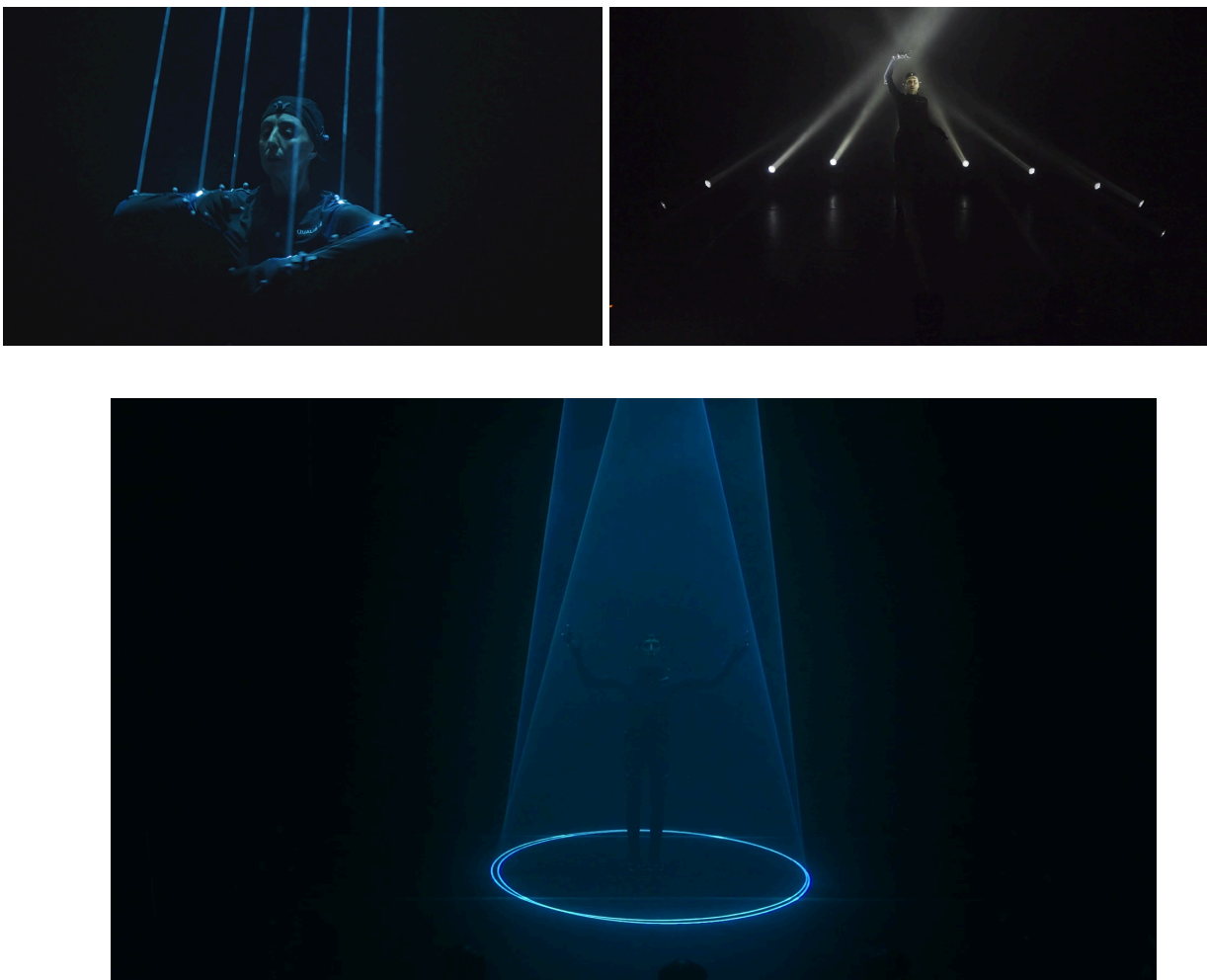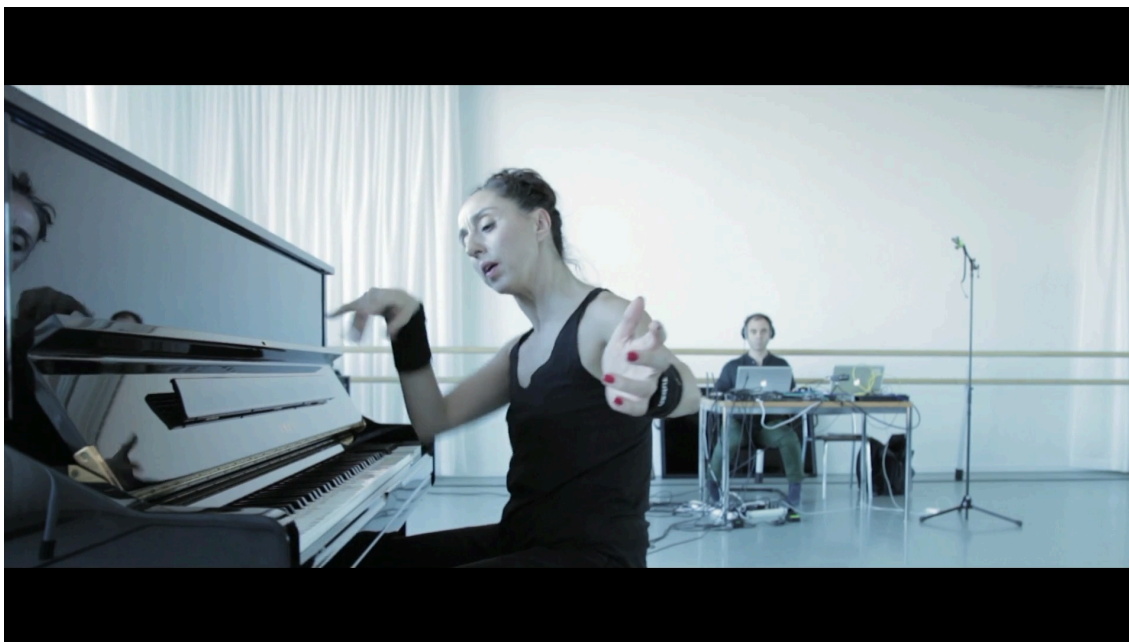
3.3.espazoaberto

Examples in Spain

We have found a Spanish dance company, Stocco, which allows us to exemplify the arguments put forward in this research. From our point of view, this company still represents an attempt to explore the possibilities of technology, opening up a space of exaggerated relevance that ends up conquering the discourse and displacing the artistic fact and that concludes in an empty result, devoid of discursive interest, in which technology has ended up being the protagonist of the work, technology has usurped the leading role that the artistic fact should have. In the following photographs you can see some moments of some of this company's pieces. By following the link, you can access the videos currently available on the internet:


Video link - https://vimeo.com/710062075

Video link - https://vimeo.com/182424752

Video link - https://vimeo.com/299418095

Another case we have found, however, and apart from subjective considerations regarding the artistic magnitude of the general proposal, makes use of technology in accordance with the role it should have, adapting it to the theatrical codes and allowing it to have a weighted influence on them without allowing it to cover the whole of the space of the work. We are talking about *Cristo está en tinder*, by Rodrigo García. In this piece he makes use of a dog-robot, a technologically novelty and hyper-actual mechanism that is inserted into the dramaturgy in an organic way and in interaction with the rest of the elements of the theatrical framework. It achieves an authentic dialogue and a measured presence with the discipline in which it is inserted, a balanced and not arrogantly protagonist eagerness of presence.
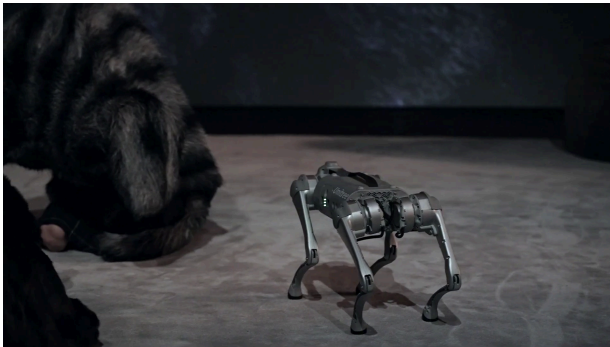
Video link - https://www.youtube.com/watch?v=oazjZWYrR80&ab_channel=LaAbad%C3%ADa

Own experience

We move on to talk about our own experience with technology in the professional stage proposals of Carlos Neira, director of **espazoaberto**, with his theatre company. Apart from more or less established uses of devices related to image capture and their projection on stage, we are particularly interested in mentioning the tests and experiments carried out with movement and position sensors.

According to his particular experience, he encountered a factor that is always present and difficult to forget when deciding to apply this type of new technology advances. This factor is the arbitrariness of technology and the professional tension it induces, apart from the dramatic tensions inherent to the scene. We are referring to the fact that technology is fallible, that it can work well or not well at all, or even not at all at a given moment. Although, ultimately, it always arrived in time to be properly activated in the shows, there were occasions when only at the last moment was everything ready, just before the performance began. This was a drain and a mistrust that can take its toll on the energies available before the start of a public performance. The Living Arts are not yet ready for devices that may have a higher margin of error than any other device already implemented in professional practice. It is likely that with the passage of time these margins of error have been reduced as we are talking about an experience of a decade ago, however, one senses that computers and sensors have not yet become as reliable as would be required for a show where live time makes or breaks the success or failure of the performance.

On the other hand, the use of the sensors, which triggered effects and sound recordings, never reached the level of perfection that was expected and that was achieved by working purely with the actors and actresses. The sensors, placed on the wrists and ankles of the performers, were set up to modulate the texture of the recordings, their volume and intensity depending on two factors: the momentum of movement and their inclination with respect to the axes of the space. Despite working relatively well in terms of their timely activation, they did not manage to provoke the extreme modulations in the sound that they were trying to achieve, causing the need to have to make up for these spaces with other elements, acting or otherwise, different from the technological one. From this point of view, this phenomenon can be attributed to the different communication one must have with technology, as this communication is bidirectional with actors,

with a subjective response, and unidirectional with the technology, where only parameters are applied from the human to the machine until the exact point is found. The aim was to achieve this with the performer as an intermediary, that is, to direct the movement of the performer and for this to vary the sound that was emitted, but the result of this interaction did not work in the way that was expected.

In a different experience, working with heel pressure sensors, the use was, however, optimal. Despite the factor of the possibility of technological failure in the devices and software, the presence and prominence of the sensors was more measured and the dramatic intensity did not depend in this case exclusively on them, so it was experienced in an optimal and low-profile way, i.e. they were used as other usual elements such as lighting or video cameras could be used and did not leave a sense of frustration, facilitated by the prudent presence given to them.

4.REFLECTIONS ON THE SUBJECT AND THOUGHTS ABOUT THE FUTURE

4.1.L'espace

The most important aspect for us to consider when talking about the use of technology is the awareness of the risk of falling into an addiction that could compromise our creativity. It is essential that the use of technology is a tool to expand our authorial potential and not to replace our human essence. We need to make sure, especially as artists, that technology remains at the service of our personal and collective growth, rather than anesthetizing our capacity for critical thinking. Art, in particular, must be a field in which technology is an ally to promote greater social awareness. Only then can we really appreciate the positive potential of technology and avoid its possible negative effects.

As a company that makes use of technology in the creative process and in its shows, our intent is to create a possible future of the development of all digital technology and in particular artificial intelligence, addressing it through our artistic needs, because from our point of view the risk is that if you use technology in a passive way the result will be the hijacking of authorial ideas to purely technological ends, while the goal of art is just the opposite: making use of technology for the purposes of expression and awakening of the collective consciousness.
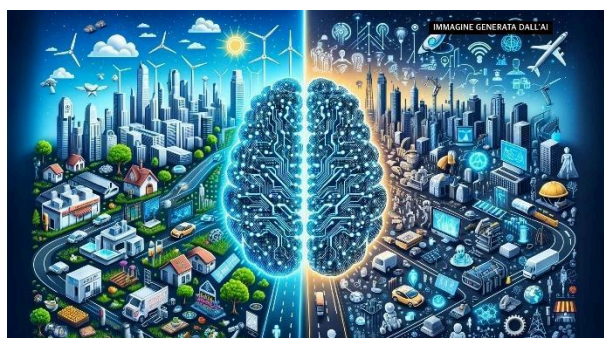
4.2.Body Architects

In contemporary society, technology is an extension of our expression and communication. It allows us to learn faster and to access knowledge quickly. It is indispensable. On the other hand, dance, especially contemporary dance, is about discovering the honest foundational qualities that make us human. It is about the empathy, non-verbal, often more primal way of reaching the other person. In such, it may seem that the pure art of dance stands in opposition to the current evolution in the society. We are ok with it remaining this rebellious, mythical place where people have to actually turn off their electronic devices and give in to the more ancient ways of experiencing.

On the other hand, there is poetry to be found in the ways of integrating new forms of expression in the practices of performance making, education and dissemination. It is going with the times and art should speak to those who live in the contemporaneity. But is it a genuine interest of the artists, or just a marketing gimmick?

4.3.espazoaberto

The case of video in Live Arts serves to exemplify the general situation we consider with regard to the use of any technology in these disciplines. Video began to be used some time ago and was incorporated into stage pieces, but it has not yet reached a complete hybridisation. We mean that video is used, for example, in dance or theatre pieces, and the result is video *plus* dance, or video *plus* theatre, but it is not video and theatre or video and dance together in the same code. These codes must be permeable and malleable to the appearance of these new technological elements, but this mixture is not yet complete. The theatrical or dance codes have to be modified, as well as the audiovisual ones, so that the combination is complete and indistinguishable, so that everything happens simultaneously, and we cannot speak of *one thing or the other*, superimposed or consecutive. And at the moment this is what is happening, that the two codes are present, in this case, audiovisual and theatrical or dance, but they are present as in a mixture of water and oil, where at all times one can distinguish one from the other and the separation between them is not resolved.

We apply this example of video in general to all technology, which must surrender to the discipline it penetrates in order to reach a complete amalgam where the osmosis is bidirectional and the contamination of codes is also bidirectional, mutually influencing each other and abandoning their watertight plots of codes immune to the contacts to which they are subjected. This will prevent technology from taking advantage of a space that is not its own in order to conquer it and subjugate the disciplines that are legitimately located in that space.

On the other hand, and speaking in general about technology and art, we point out that technology on its own has only a gimmicky result, lacking in content but with a flashy but rather empty packaging. This makes it lose its artistic character. But this may be a transitory state that could, one would hope, evolve towards a balanced contamination, a weighted hybridisation, where each element has its place. If not, it would mean the death of the Living Arts, because technology can enter the artistic environment in other ways different than the artistic work in a very simple way. For the very survival of the Living Arts, technology has to occupy a space of balance with the Artistic Fact in this very Living Arts.

Everything new comes with a certain amount of failed trial and error that must be exhausted before it begins to bite into valuable stone. The hope and expectation is that there will come a time when technology will begin to be effectively assimilated into the Living Arts, specifically dance and theatre. These disciplines should be able to differentiate between what is important and appropriate for their organic growth and evolution and what is not. What is not worthwhile will have to remain outside, outside the artistic sphere, because technology also lives outside art. Art has to know how to filter that when it has matured its relationship with the new technologies.

5.Conclusions

In this research, we have seen how artistic and technological evolution has developed differently in the different countries from which we have analyzed our own reality. There have been historical events or political dictatorships that have kept some countries "on pause" for decades while others have not. On the other hand, the different economic development of each region allows a greater or lesser speed in implementing the latest technological advances in life and art, to make them accessible when their cost is still high. It is true, on the other hand, that in the last decade the differentiation in artistic speeds and advances in Europe has diminished and there is now a greater homogenization than fifty years ago.

It is curious to note, also, how this different cultural background of each partner brings a different way of proceeding to the research itself, each country contributing a different ingredient in this mixture of cases of analysis.

On the other hand, we have verified and analyzed an important variety of cases where the latest technology is applied to art. These cases are a sample, spread over three different countries, in which we can perceive the constant attempt by artists to include technological developments in their forms and discourses. As expected, there are cases where the attempt is more successful and others where it is not. Cases in which technology is allowed to appropriate a space that does not belong to it and others in which it is not, in which its use is restricted to the role it should have, that is, to be at the service of the Artistic Fact. In some of them the artistic quality accompanies the proposal and in others the piece makes a good use of technology, but the result turns out to be, at an artistic level, mediocre. In any case, it can be seen that its penetration covers a multitude of formats, discourses, applications and different objectives.

Finally, it is clear that we are all aware of the dangers brought by the exponential development of technology in recent decades. New technologies bring with them a brutal contribution to humanity in many aspects, so great that the benefits that can be obtained from them are comparable to the dangers they hide. We all see how this is palpable at the social and individual level, in the development of human beings and their collective organisation. And also, of course, at the artistic level, since the power that the latest technology brings with it has the capacity to devastate everything in its way, to appropriate artistic discourses and spaces that are not its own,

in other words, to enslave art and put it at its service, perverting it. When the desirable, the optimal, the good thing would be for us to put the new technology in its place, submissive and controlled by the human being, and, in this case, at the complete service of the Artistic Fact, this which is what really has encapsulated within itself a sweeping power of change and evolution in the history of humankind.

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6.2. Body Architecs

Written within the text.

Playing Bodies

PLAYING BODIES

Research on the state of the art of technology on music and movement

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