



# The Laboratory as a Site for Research on Acting: relationships between art and science

Martín B. Fons Sastre<sup>1</sup>

<sup>1</sup>LADAT, Universitat de las Islas Baleares – UIB, Palma, Spain

**ABSTRACT – The Laboratory as a Site for Research on Acting: relationships between art and science** – This article focuses on new knowledge perspectives proposed by research on onstage practice within the performing arts. It is based on the notion of the laboratory as a backbone, methodological framework, and place for exploring research-creation projects. Our study offers critical reflections on research procedures, taking the actor's creative process as our object of study. We go on to establish a connection between theoretical dimensions and practical expressions, through analysis of two research projects that confront performance practice with its underlying scientific premises. Lastly, different modes for publishing and disseminating the results of research on onstage practice are discussed.

Keywords: **Actor. Methodology. Laboratory. Performative Research. Neurosciences.**

**RÉSUMÉ – Le Laboratoire comme Espace de Recherche pour l'Interprétation Scénique: les relations entre l'art et la science** – Cet article met l'accent sur les nouvelles perspectives de connaissances proposées par la recherche performative dans le domaine des arts de la scène basée sur la notion de laboratoire comme axe vertébré, cadre méthodologique et espace d'exploration pour les projets de recherche-création. L'étude propose donc une réflexion critique sur les procédures de réalisation de ces recherches, considérant ainsi comme un objet d'étude le processus créatif de l'acteur. En outre, il établit un lien entre la dimension théorique et la mise en pratique à partir de l'analyse de deux projets de recherche qui confrontent la pratique scénique aux fondements scientifiques qui la sous-tendent. Enfin, il évoque les différentes modalités de publication et de diffusion des résultats de la recherche basée sur la pratique scénique.

Mots-clés: **Acteur. Méthodologie. Laboratoire. Recherche Performative. Neurosciences.**

**RESUMEN – El Laboratorio como Espacio de Investigación para la Interpretación Escénica: relaciones entre arte y ciencia** – El presente artículo se centra en las nuevas perspectivas de conocimiento que propone la investigación performativa respecto a las artes escénicas a partir de la noción de laboratorio como eje vertebrador, marco metodológico y espacio de exploración para proyectos de investigación-creación. El estudio plantea una reflexión crítica de los procedimientos para llevar a cabo dicha investigación, destacando como objeto de estudio el proceso creativo del actor. Además, establece una conexión entre la dimensión teórica y la plasmación práctica a partir del análisis de dos proyectos de investigación que confrontan la práctica escénica con los fundamentos científicos que la sustentan. Finalmente, plantea las diferentes modalidades para publicar y difundir los resultados de la investigación basada en la práctica escénica.

Palabras clave: **Actor. Metodología. Laboratorio. Investigación Performativa. Neurociencias.**

## Performative Research as an Emerging Field

The advent of programs of higher education in Dramatic Arts to the field of European Higher Education (EHEA) has meant the birth of new relationships between learning, creation, and research in theater in European countries. It has been a special challenge for the Spanish State. This new academic context lays the foundations, legitimizes, and promotes possible research strategies on artistic practice within the broad field of the performing arts, and highlights the contribution of specific scientific research programs to the generation of knowledge and innovation.

This fact has also made it possible to open up largely-unexplored terrain to European Theater Studies, which has relied mainly on humanistic methodologies (Balme, 2013; Lesage, 2010, p. 67-76). We are referring to the study of processes of artistic creation and artistic *practice as research*, areas that offer multiple working possibilities for the study of performance and onstage practice (Carreira; Cabral; Ramos; Farias, 2006, p. 77-103) and therefore also serve as a basis for creation-research projects. It is marked by the emergence of a new perspective or field of research in the arts, performance research, which many authors have already pointed to as an emerging paradigm (Borgdoff, 2012, p. 104-127).

These new methodological horizons have also initiated debate and critical reflection on what to research in relation to artistic practice, and about how to go about it. In the case of the performing arts, we have European and Ibero-American references on creative process research at our disposal. Within Europe, there are master's and doctoral programs in different universities and schools of Theater Arts, largely concentrated in the Anglo-Saxon countries the Netherlands (Pérez Arroyo, 2012, p. 27-32). Among them are the programs focused onstage practice research in the theater departments of the University of Exeter in the United Kingdom<sup>1</sup>, Goldsmiths University of London<sup>2</sup>, the Royal Central School of Speech and Drama – University of London<sup>3</sup>, the Academy of Creative and Performing Arts of Leiden University<sup>4</sup> and the Amsterdam School of the Arts<sup>5</sup>. In Latin America, there are programs worth mention, such as the research groups and the projects in onstage creation processes at Brazilian universities with master's and doctoral programs in the Performing Arts, affiliated through the Brazil-

ian Association for Research and Graduate Studies in the Performing Arts (*Associação Brasileira de Pesquisa e Pós-Graduação em Artes Cênicas* (ABRACE))<sup>6</sup>.

In Spain, the early years of the 21st century have also wrought a variety of spaces for reflection on research in the arts. We highlight the *Scanner* conferences on research and creation, a forum for debate that has been hosted by the *Institut del Teatre* in Barcelona since 2008<sup>7</sup>. Its 2016 edition, focusing on practice as research, is worth special mention here, as is the incessant work on artistic research carried out by the ARTEA group, led by Art History Professor José A. Sánchez, and yielding multiple results: from publications and specific doctoral theses to the creation of the *Archivo Virtual de Artes Escénicas* (Virtual Archive of Performing Arts) and the Master's Degree in *Práctica Escénica y Cultura Visual* (Performing Arts Practice and Visual Culture) at the University of Castilla-la-Mancha, in collaboration with the Madrid institutions, *Museo Reina Sofía* (Reina Sofía Museum), *La Casa Encendida* and the *Matadero Madrid*<sup>8</sup>.

In this vein, and aligning ourselves with arguments made by Professor Henk Borgdoff (2010, p. 25-46), we distinguish three types of research within the broad field of the arts: research *on* the arts, research *for* the arts and research *in* the arts. The first type is related to analytical study of artistic manifestations, done from the distance of the realm of theoretical knowledge and based on the application of methodologies coming from the humanities and the social sciences – History, Philosophy, Philology, Sociology or Anthropology. The second type focuses on applied research, where art is not so much the object of study but, rather, its goal. The third, in turn, unfolds through guided or practice-based research, that is, artistic practice as research, as a source of knowledge, and is also referred to as performative research (Feral, 2009, p. 75-82; Lorente; Díaz, 2016, p. 155-166; Sánchez, 2009, p. 83-95). At the 2016 *Scanner* conference at the *Institut del Teatre*, another type was added to those described above: research on the methods and procedures of performative research themselves.

Henk Borgdoff, academic director of the Academy of Creative and Performing Arts at Leiden University, maintains that artistic practice as research should meet a series of qualifications, characteristics that clearly differentiate it from artistic practice itself. In his view, practice counts as research when:

[...] its purpose is to increase our knowledge and understanding by conducting original research in and through artistic objects and creative processes. Research in art begins by asking questions that are relevant to the research context and to the art world. Researchers employ experimental and hermeneutical methods that display and articulate the tacit knowledge that is located and embodied in specific artistic works and artistic processes. Research processes and results are documented and disseminated appropriately within the research community and amongst the wider public (Borgdoff, 2010, p. 40).

From the above definition, which clearly specifies the parameters that distinguish performative research or artistic practice as research, we can establish a series of criteria:

- The objective of all research is to generate knowledge through original contributions.
- Research must address clearly articulated issues or problems, defining working hypotheses.
- Such questions and hypotheses must be incorporated into a specific research context, including their interrelationships with other research in the same or related areas of knowledge.
- The research methods that are adopted, and how they are applied to address enunciated problem(s) must be specified.
- The results of the study or research process must be duly disseminated and documented, to enable their sharing. That is, findings must be socialized

These criteria must be fulfilled in the study of onstage practices, taking their creative processes as a form of knowledge. Consequently, the present study is conceived as critical reflection on the procedures implemented in performative research on processes of onstage creation, in general, and on the creative process of the actor, in particular, from the perspective of the laboratory as a place for research and creation. As practical examples, we turn to two project-laboratories financed with European funds, carried out at the *Escola Superior d'Art Dramàtic de les Illes Balears*<sup>9</sup> (ESADIB) between 2013 and 2016.

### **Onstage Creation as a Form of Knowledge**

What kind of knowledge derives from the onstage creation process? Whatever answer is given to this question, it will be the fruit of a previously

established premise: when associated with research, artistic creation produces knowledge. And this research, in the field of performing arts, refers us to the notion of the laboratory. Within laboratories, work becomes a creative device in which artist-researchers produce knowledge not only at the end of the process, when findings are presented, but throughout all stages of their work, fueling the search for the operating principles that propel dramatic creation.

Performative research obliges us to examine processes of onstage creation, inquiring into the mechanisms that sustain it from within the creative process itself. Thus, boundaries between the subject and the object of investigation tend to blur. Yet, although subject and object may merge through the devices of performative research, artist-researchers must know how to distinguish theoretical reflections from the critical analysis that emerges from the artistic process of their own onstage practice. In this way, knowledge can be built from within the creative process<sup>10</sup>.

Let us now look at how this form of knowledge acquisition materializes in the practical cases we have chosen to examine. During the 2012-2013 academic year, ESADIB created a research, innovation and creation space called *Espai de Recerca, Innovació i Creació* (ERIC) (Research, Innovation and Creation Space) to host different interdisciplinary groups for the study of onstage creation and acting, from the perspective of performance research. The ERIC project was thought up as a locus of research on the performing arts whose objective was to promote research-creation projects for students holding university degrees in the dramatic arts. It was also meant as a platform to stimulate and encourage troupes of artists to put together competitive projects for professional implementation.

For the above-mentioned purposes, a research group composed of ESADIB professors, researchers and creators, and external national and international collaborators, *Grupo de Investigación Procesos de Creación Escénica* (GIPCE) (Research Group on Onstage Creation Processes) was created. The group is devoted to the study of the performing arts, with a focus on creative processes. It implements experimental research and analytical and critical study, confronting practice with its underlying theoretical, pedagogical, and scientific foundations. The group proposes the following major lines of research:

- Onstage creation processes: methodologies and scientific foundations.
- The creative processes of the actor: techniques, dramaturgy, and scientific foundations.
- Poetics of the body and the voice in contemporary onstage creation.
- The pedagogy of the actor: principles, interpretative methods, and pedagogical schools.

The first research project that the group launched over the 2012-2013 academic year was *Laboratorios teatrales como espacio de investigación, innovación y creación* (Theater Laboratories as a Space for Research, Innovation and Creation), focusing specifically on the study of the dramaturgy of the actor, through the two basic components used by performers in their artistic practice: voice and movement. During the 2015-2016 academic year, a second project, *Artes escénicas, creatividad y neurociencias: laboratorios de creación escénica contemporánea* (Performing Arts, Creativity and Neurosciences: Contemporary Performance Creation Laboratories) examined onstage interpretation and memory. Both projects were fully financed as special actions for research and development (R&D) with resources from the European Regional Development Fund (ERDF), (project references AAEE011/2012 and AAEE59/2015, respectively), obtained through competitive concurrence in the 2012 call put out by the *Direcció d'Universitats, Recerca i Transferència del per de la Conselleria d'Educació, Cultura i Universitats* and 2015 call from the *Direcció General d'Innovació i Recerca de la Vicepresidència de la Conselleria d'Innovació, Recerca i Turisme del Govern Balear*. These funds enabled the ESADIB to conduct its research with complete autonomy. The creative process of the actor became the specific object of study, and the concept of the laboratory was conceived as fundamental axis, methodological framework, and locus of exploration.

### **Investigating the Creative Process of the Actor: research perspectives**

Actors occupy a central place in theatrical performance, appearing as the axis of a representation which tends to revolve around them. Yet despite this onstage prominence, the study of their creative processes also poses significant methodological difficulties.

On the issue of studies of acting and actors, theater director and professor Juan Carlos Gené (2010) provides an interesting point of view,

through his three master lectures on the nature of the actor and the perspectives for their study: *El actor en su historia*, *El actor en su sociedad* y *El actor en su creación* (Actors and their histories, Actors in their societies, and Actors and their performances). The first lecture discusses actors from the perspective of what has been written about them, that is, within the context of existing documentation, such as historiographic studies. The second responds to the studies of the so-called social sciences, concerned about the actor as a social and cultural being. The topic of the third lecture, that of actors and their creative role, thrusts us into the study of the performer as a living body that is set into action during a given time and space, a dimension in which artistic practice is involved, and with regard to which the discoveries of 20th and 21st century director-pedagogues and those of the theater sciences go hand in hand.

From this perspective, the study of the creative process requires an understanding of the *science of the actor* as a *human science*; or, more specifically, we can understand *performing sciences* as *human sciences*. This leads to two possible movements:

- Scientific knowledge as applied to the actor's work, a path that expresses the attraction that the arts have always felt for the sciences.
- Scientific knowledge as applied to the study of the actor, a mode that expresses the way in which different scientific disciplines have attempted to study artistic phenomena.

The first movement reflects the influence that emerging scientific discoveries and disciplines have had on specific historical moment in views on the training of actors. From here it is possible, as authors such as Joseph Roach point out, to examine how Western theories, techniques and interpretative methods can be interpreted, in light of advances in the history of science (Roach, 1993; Pitches, 2006). As examples, let us think of the impact that French psychologist Théodule Robot's work about the memory of emotions had on the psychotechnics or internal technique of Konstantin Stanislavski's System, of the significance that Ivan Petrovich Pavlov's reflexology had on Vsevolod Meyerhold's biomechanics, of the influence of anthropology and neurobiology on the thinking of Jerzy Grotowski and Eugenio Barba or of the psychoanalytic trend applied to acting exercises developed in the United States by Lee Strasberg.

The second movement responds to the different approaches that scientific disciplines take in the study of the actor's work. When we look at the different methodological approaches that have been implemented, over the course of the 20th and 21st centuries, for its study, we encounter other points of view. Beginning with the structuralist and semiotic studies of the 1930s, we see that, as an analytical option, they sought to overcome the textual research orientation in theater studies, initiating research on the play, as object, and its component elements – amongst them, the actor as a significant communicative phenomenon. In the 1980s, studies grounded in the anthropological perspectives led to the formulations of *Performance Studies*, inspired in the works of theater director and anthropologist Richard Schechner, neurobiological perspectives on *human performing behaviors*, advocated by ethnoscenology and promoted by psychologist Jean-Marie Pradier, and research on the principles of the actor's pre-expressiveness enunciated by the anthropology of theater, developed by director Eugenio Barba, within the framework of the *International School of Theater Anthropology* (ISTA). This carries us through to the early 21st century, to the new orientations arising from the neuro- and cognitive sciences which currently provide us with new and interesting study perspectives.

From the above discussion, we identify three levels for the study of actors' creative processes:

- Technical foundations.
- Pedagogical foundations.
- Scientific foundations

These three levels are perfectly integrated within the experimental framework of the laboratory, promoting research and, at the same time, creativity, and even encouraging the formation of artistic nuclei where performers' operating principles may be studied, leading to proposals for innovative onstage work.

The ESADIB laboratories which were developed within the framework of the two above-mentioned projects set out to study processes of onstage creation from the perspective of the performer as a living body, mobilized within a specific time and space, in order to analyze the emotional and expressive possibilities that actors transmit by training body and voice to attain poetic dimensions. For these purposes, practical work sought direct



correspondence with underlying scientific bases, in what also became an attempt to provide a theoretically based response to artistic phenomena.

### **The Theater Laboratory as a Space for Experimentation, Creation, and Innovation**

Since the beginning of the 20th century, the theater laboratory has been posed as the most suitable medium or space to develop performative research, that is, research guided or based on practice. The theater laboratory, as masters of the contemporary theater from Konstantin Stanislavski to Eugenio Barba have shown (Kershaw; Nicholson, 2011), is a space where creativity and experimentation go hand in hand, taking off from lived experience. Within the laboratory, artistic and pedagogical working groups come together and become the source of innovative proposals for both actors' training and onstage creation. The studio-theaters developed at the Moscow Art Theater (TAM) by Konstantin Stanislavski, Vsevolod Meyerhold, Eugeni Vakhtangov or Mikhail Chekhov, Jerzy Grotowski's theater-laboratory, Eugenio Barba's ISTA, and Peter Brook's research on the Holy and Rough theater in Iran or in Africa (Warnet, 2013) are clear examples of laboratory spaces for the study of acting through its psychophysical dimensions (Zarrilli, 2009), transforming pedagogy from the previous century to the present day.

Jean-Manuel Warnet (2018, p. 1-9) argues that within the laboratories developed by 20th century director-pedagogues, ethical principles based on relinquishing individual ambitions in the interest of the group, on the confidentiality of research, respect for community rules, acceptance of mistakes and failures, openness to the unknown, rigor and high levels of demand, and acquiescence to the experimental objectives set by the teacher were followed. This was all linked to the search for the fundamental principles of the theater, and of the actor as a psychophysical entity. In an exercise of synthesis, Warnet summarizes the basic characteristics of the laboratory through three features that it provides: (1) extended time for research, (2) an isolated and propitious locus for concentration on and shaping of the creative process and (3) distance from the audience, creating a place which thus becomes suitable and safe for trial and error. These characteristics may be applicable to today's theater laboratories.

However, the laboratory models inherited from the 20th century must be rethought and revised from a 21st century perspective. They should not be seen as an isolated and hermetic environment. Rather, they are research settings that are open to interdisciplinarity, places where different methods and interpretative techniques and different professional specialties – direction, dramaturgy, acting, scenography, dance, circus, or new technologies – can be confronted, through practical experimentation, to examine shared issues on creative processes. A close focus on object of study and working hypotheses are also important, in order to guarantee that laboratory work is meaningful. Socialization of findings is also crucial.

From a methodological point of view, if we move on to the scientific world, we observe how the different sciences follow different guidelines: the natural sciences have an empirical-deductive orientation and propose experimental methods to explain phenomena, the social sciences favor methods designed to describe and analyze data, both quantitative and qualitative, the humanities tend to take an analytical approach based on the interpretation of documents, and ethnography or social anthropology advocate participant-observation methods. This latter scientific approach, centered on autoethnography, has been favored as a model for both research in artistic creation (López-Cano; San Cristobal Opazo, 2014, p. 135-182; Melendres, 2010, p. 87-93) and for onstage performance research (Carreira; Telles; Ferracini, 2016, p. 95-104).

On the basis of the above discussion, we argue that research centered on theater practice must incorporate experimentation and experiential participation, which, in turn, require interpretation. Thus, the binary experimentation/critical reflection is a crucial element within the laboratory ambit, introducing creativity as a fundamental concept. These considerations lead us to articulate what we see as the essential characteristics around which today's theater laboratories should gravitate:

- They should be spaces open to experimentation, and where the different interpretative techniques and methods systematized by the 20th century pedagogues converge and confront one another, in the search for new and intersecting principles for actors' creative processes, towards the interweaving of training and performance.

- They should be conceived as multidisciplinary spaces where onstage performance is related to other artistic disciplines such as visual arts, dance, circus, performance, or new technologies. This should, in turn, extend research to other areas of knowledge and encourage feedback, through interconnections that will yield innovative proposals.
- They should be constituted as spaces for research in artistic practice, yet ones in which theoretical approaches and current discoveries in the different branches of scientific knowledge that may be of interest for onstage creation itself are taken into account. This should lead to the creation of a highly fruitful and beneficial exchange of practical and theoretical knowledge for performance research.

### **First Project-Laboratory: the actor, the gesture, and the word**

We now go on to describe how the work of the two ESADIB project laboratories unfolded. The first project, *Laboratorios teatrales como espacio de investigación, innovación y creación* (Theater laboratories as a locus of research, innovation, and creation) was centered around actors' creative processes, as they emerge from the crucial ingredients of acting: body, gesture, voice, word. It branched out into two different laboratories: *the actor and the gesture*, directed by Maite Villar, research chair and professor of movement, and *the actor and the word*, directed by Pere Fullana, academic director of the ESADIB. Both laboratories were coordinated by Martín B. Fons, academic secretary and chair of the Department of Theater Theory.

The *laboratory of the actor and the gesture* explored processes for the analysis of embodied actor's meaningful movement, as well as the mechanisms of creation in what has been referred to as physical or gestural theater. We worked initially on practical definitions for concepts and principles that serve as the basis for a *grammar of the body* with broad and generic value. These efforts took off from comparative study of the most relevant 20th century contributions to understanding the physical work of the actor: Étienne Decroux's corporeal grammar, the works of Rudolf Von Laban, Vsevolod Meyerhold's biomechanics, and Jacques Lecoq's analysis of movement. Laboratory participants all had higher degrees in Dramatic Arts and had specialized in one of the above-mentioned pedagogical schools. Work was guided by the intention to identify the common principles of the

different methods, and then move on the second part of the project - the study of corporeal dramaturgy and the different phases of the creative process in physical theater, in the construction of the performance score. Work was grounded in the thesis that physical or gestural theater comes together through autonomous style and singular identity.

The *laboratory of the actor and the word*, on the other hand, based its research on the examination of the expressive resources of the spoken voice and on work with literary texts, to be subsequently articulated onstage. From this perspective, efforts were concentrated on creative use of elocution for acting, using voice's connection to the sensorial world as the basis for developing the versatility of sound. Most importantly, stimuli coming from sense of smell were mobilized, for later application to elocution and creative interpretation of texts.

Both laboratories were able to rely on the collaboration of national and international researcher-creators whose lines of work much enhanced the research. The Laboratory of the Actor and the Word enjoyed the participation of Jorge Gayón, professor and researcher of the Laban-Decroux project, Sophie Kasser, director of the Moveo physical theater training and creation center in Barcelona and Norman Taylor, international professor of movement analysis, trained at the École Internationale de Théâtre Jacques Lecoq in Paris, took part in the Laboratory of the Actor and the Gesture. Gemma Reguant, professor and voice researcher at the *Institut del Teatre* in Barcelona, Ernesto Arias, actor, and professor of speech trained at *El Teatro de la Abadía* in Madrid, and Gabriele Sofia, Italian theater researcher and professor at the University of Grenoble, whose work was centered around the relationship between the performing arts and neurosciences.

Fruit of the project-laboratory was the creation *Otoño en el jardín del Hades* (Autumn in the garden of Hades) (Image 1 and Image 2), an embodied dramatic interpretation of a text by Franz Kafka, a materialization of the research process. Subsequent critical reflections and theorizing on the work and its creation processes were recorded in a doctoral thesis (Villar, 2015), to which we will return below, in the section on results and documentation.



Image 1 – Maite Villar, Mireia Izquierdo, Jaume Seguí, Diego Ingold, German Conde and Isabel Perdigón in *Otoño en el jardín del Hades*.  
Source: ESADIB (2013).



Image 2 – Mireia Izquierdo, German Conde, Jaume Seguí, Isabel Perdigón and Diego Ingold in *Otoño en el jardín del Hades*.  
Source: ESADIB (2013).

## Second Project-Laboratory: performing arts, creativity, and neurosciences

The second project, *Artes escénicas, creatividad y neurociencias: laboratorios de creación escénica contemporánea* (Performing arts, creativity, and neurosciences: contemporary theater creation laboratories), included the development of three onstage creation laboratories based on acting research conjoined with work in the cognitive neurosciences<sup>11</sup>. Memory became a key concept for exploratory work.

During the 20th and early 21st centuries, issues of memory have been significant within the performing arts, from the training of actors in the interpretative methods of such masters as Stanislavski or Grotowski to processes of dramatic creation. Furthermore, current discoveries from the field of neuroscience open new doors for reformulating its study. This led us to propose two specific lines of research:

- Memory as a tool for the development of actors' pedagogical and creative processes.
- Memory as a mechanism for dramaturgical construction and staging.

Based on these premises, the project was divided into three laboratories, following three different paths: *Actors, memory and testimony*, directed by Pere Fullana; *Actors, memory and body*, directed by Maite Villar; and *Actors, memory and multi-mediality*, directed by Cecilia Molano, professor of visual arts for theater at the institution, with Martín B. Fons as general director. External specialist contributors included director Stefan Kaegi, creator of the emblematic German company Rimini Protokoll, responsible for innovative work on theatricality, Pere Sais, professor, researcher and actor trained at Jerzy Grotowski's Workcenter in Pontedera, directed by Thomas Richards and researchers Gabriele Sofia and Corinne Jola, from Grenoble and Edinburgh universities, respectively, who study the interaction between the fields of the neurosciences and the performing arts.

The result of the research gave rise to two stage creations: *Frontera* (Border) and *Experiencia Queli* (Queli Experience). *Frontera* was about the exodus of refugees, from the perspective of physical theater. *Experiencia Queli* addressed the social problems of hotel maids working in the world of

tourism, a key sector of the Spanish economy. In an interplay of reality and fiction, real testimonies became material from which a play was shaped.

*Frontera* (Border) (Image 3) was the result of a laborious process of creation based on experimentation with physical theater and memory. The performance involved the creation and composition of metaphorical physical structures as vehicles of meaning emerging from the actor's psychophysical work, based on body awareness and techniques that begin in yet go beyond the realm of daily life, such as specific bodily grammars and the development of *embodied memory*.

All these components were brought into play through physical action, which was built up on the basis of objective material coming from improvisation within laboratory exercises on the theatricalization of expressive movement. *Frontera* actors began their work from specific memories related to a theme proposed by the laboratory team: loss of identity. Research was based on the use of these autobiographical memories, not only from the cognitive processes they involved, but also from their corporeality, using bodily memory. Recollections were not primarily approached as mental processes, but as physiological and movement-based phenomena. Thus, memories were constructed from and through the body, working them gradually into detailed imagery. From the performative structures that emerged individually, images referring to the drama of the refugees were wrought. The border becomes a metaphorical and performative structure of conflict, finally taking physical shape in the tragic exodus of the refugees at the end of the play.



Image 3 – Maite Villar, Toni Pons, Héctor Seoane, Joan Maria Pasqual and Lluís Valenciano in *Frontera*.  
Source: ESADIB (2016).

*Experiencia Queli* (The Queli Experience) (Image 4), the result of the Laboratory on actors, memory, and testimony, was developed from documentary research into tourism phenomena, and the specific universe of hotel maids, also colloquially called Kellies (a play on words made from the phrase *que limpian los hoteles*, the Spanish translation of *those who clean the hotels*). Its fruits take the shape of a performance, emerging from the actual experiences of real chambermaids, played by three actresses. The text of the play was thus molded from personal experiences. Reality and theatricality went hand in hand in a staging in which the maids' labor and the acting labor of stage professionals converge. The play was made up of fragments, alternating moments of recollection and actual personal testimonies with the monologues of the three actresses who incarnated the memories of the past cited in maids' testimonies. Fact and fiction merged through theatrical performance.



Image 4 – Alba Flor, Joana Maria Peralta, Vanessa Román and Ana Herrera in *Experiencia Queli*.  
Source: ESADIB (2016).

As we have seen, numerous results were obtained from work which was carried out in the two above-described project-laboratories. They can be grouped into different categories, considering, on the one hand, the scientific dimensions of the research and, on the other hand, its artistic and creative dimensions.

### Dissemination of Results



The results of performance research can be grouped into several areas, according to their different focuses. We can speak of scientific results, since the work conducted may lead to new theoretical formulations on practice itself, or on the processes of artistic creation, or in reference to the actual methodological procedures used to conduct research in the arts. This is a salient point, since this type of research, as we have pointed out above, should generate new knowledge, even when based on tacit knowledge. Tacit knowledge can clearly lead to theoretical knowledge, resulting from the critical and systematic analysis of both practical proposal and results achieved.

On the other hand, practical artistic results should be expected, whether in the form of new works of art, training frameworks or other sorts of performance that this type of research calls for. All these results should be documented using a wide variety of available resources, without prioritizing one in detriment to others. The most academic results can be divulged in the form of publications or written reports (López-Cano; San Cristobal Opazo, 2014, p. 183-204). Hypertexts or hybrid texts that merge formats, in the manner of the video-essay, may also be used (De Blas, 2017, p. 43-44). As for artistic results, documentation may be carried out by linking different types of audiovisual resources, and thereby recording not only the outcome of the completed process, but also the different phases that it passed through – training, workshops, rehearsals –, all of which may offer exhaustive documentation of how the research unfolded.

The results and benefits obtained from the two projects carried out at ESADIB were organized into three different sections:

- *Scientific-technical results*: research led to two publications, *L'actor: de l'art a la ciència* (The actor: from art to science) (Fons, 2013) and *L'actor i la memòria. Arts escèniques, creativitat i neurociències* (The actor and memory. Performing arts, creativity, and neuroscience) (Fons, 2016), several articles published in journals, book chapters and reports or presentations delivered at specialized conferences. The results of the *Actor and gesture laboratory* also enabled the completion of Maite Villar's (2015) doctoral thesis on the creative process of the corporeal actor, which she defended at the University of Valencia on November 30th, 2015, achieving *Cum Laude* recognition.
- *Results in pedagogical innovation*: the development of the laboratories also involved the exploration of new research techniques in onstage creation, as

well as advances in the building of new pedagogical models for higher education in Dramatic Arts. The fruitful interaction of national and international partners made this possible, resulting in both educational and technical innovation.

- *Artistic results attained through the transfer of knowledge to artistic production itself*: in this case, although the laboratory is a space whose importance resides in research processes based on trial and error, the work conducted in laboratory projects led to the creation of three plays: *Otoño en el jardín del Hades* (Autumn in the garden of Hades), fruit of the first project, the physical theater play *Frontera* (Border) and the staging of a post-dramatic documentary production, *Experiencia Queli* (The Queli Experience), fruit of the second research-creation project which was focused on memory.

As we have already suggested, the results and benefits of the two project-laboratories were diverse, combining knowledge generated from theoretical reflection with practical and creative construction of art, as they materialized in the three above-mentioned theatrical productions.

### **By Way of Conclusion**

This study has attempted to draw attention to the new horizons that are opening up for performance research, or the use of artistic practice as a research method in the performing arts. Paths that branch out in many different directions and possibilities that can help build harmonious connections, within the academic context, to two terms that are often considered antithetical – research and artistic creativity. This emerging field opens the door to new methodologies and perspectives for the study of the processes of onstage creation, demonstrating the precise and rigorous development and the concrete tools needed to conduct such research and its epistemological systematization.

Another noteworthy aspect of the approaches discussed above is the use of performance research for the study of the creative processes of acting performance. We believe that these approaches allow us to delve further into inquiry on the work of actors, from training to performance, moving toward deeper understandings of the mechanisms that performers mobilize to transform the daily body into a poetic body, through techniques and meth-

ods of acting that use intersecting and cross-cultural principles for physical and psychological stimulation.

We have also sought to ascertain the importance of the theater laboratory as a methodological framework for experimentation and innovation, highlighting the 21st century reformulation of the concept forged from the laboratories of the previous century. For these purposes, we examined the way the theoretical principles of the ESADIB laboratories materialized in concrete practice, borne out in a research-creation project.

The projects we have discussed above were made possible through funding received from two special calls within the European FEDER. This enabled the creation of research laboratories that became a locus for innovation, where faculty, graduate students and external specialists were able to collaborate to deepen work and reflections on processes of onstage creation and acting methods and techniques. This, in turn, encouraged and stimulated not only the generation of knowledge, but artistic creation leading to the birth of new theater companies and new endeavors in the performing arts.

## Notes

- <sup>1</sup> For detailed information on the master's and doctoral programs, as well as the research groups and lines of research of the European universities mentioned in the text, the following notes, from 1 to 5, provide web pages for consultation: <<http://humanities.exeter.ac.uk/drama/>>.
- <sup>2</sup> Available at: <<https://www.gold.ac.uk>>. Retrieved: Jan 15, 2021.
- <sup>3</sup> Available at: <<https://www.csssd.ac.uk>>. Retrieved: Jan 15, 2021.
- <sup>4</sup> Available at: <<https://www.universiteitleiden.nl/en/humanities/academy-of-creative-and-performing-arts>>. Retrieved: Jan 15, 2021.
- <sup>5</sup> Available at: <<https://www.ahk.nl>>. Retrieved: Jan 15, 2021.
- <sup>6</sup> Their research lines and the work developed by the different groups can be accessed on their website <[www.portalabrace.org](http://www.portalabrace.org)>. Retrieved: Jan 15, 2021.
- <sup>7</sup> For information about the development and proposals generated by the *Scanner* conferences, we recommend visiting their website at: <<https://sites.google.com/institutdelteatre>>. Retrieved: Jan 20, 2021.

- <sup>8</sup> For more information about the ARTEA research group, we recommend visiting their web page at: <[www.artea.uclm.es](http://www.artea.uclm.es)>. Retrieved: Jan 20, 2021.
- <sup>9</sup> To learn more about the academic structure and programmatic axes of ESADIB we recommend visiting their website: <[www.esadib.com](http://www.esadib.com)>. Retrieved: Jan 20, 2021.
- <sup>10</sup> For the study of the research on stage creation processes, we highlight the monographic issue of *Processos de Criação* de la *Revista Brasileira de Estudos da Presença* (Creation Processes of the Brazilian Journal of Studies of the Presence), v. 10, n. 4, Set. / Dez. 2020.
- <sup>11</sup> The interaction of the performing arts and the neurosciences is an emerging line of research that is producing highly interesting and innovative results, from both scientific and artistic points of view. Researchers such as Gabriele Sofia, Clelia Falletti, Victor Jacono, John Lutterbie, Bruce Mc Conachie, Rhonda Blair, Amy Cook, Rick Kemp and Nicola Shaughnessy have through their work induced are a real neuro-scientific revolution within the field of performing arts and acting. They engage in neurophysiological and neurocognitive study based on what is known as new cognitive science or post-cognitivist cognitive theories and embodied cognition, which propose an alternative to classical cognitivism. New models replace the notion of representation of the surrounding environment from previous models with the notion of embodied action, defending the reciprocal connection between body and mind, giving importance to the sensory-motor faculties of human beings and their imbrication with environment as the source of cognitive processes, thereby overcoming the longstanding opposition of perception and action (Bryon; Bishop; McLaughlin; Kaufman, 2018; McConachie; Kemp, 2018; Sofia, 2015).

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Martín B. Fons Sastre is a researcher in Performing Arts and member of the LADAT laboratory of the University of the Balearic Islands (UIB). He completed a doctoral degree in Art History with the thesis *Fundamentos científicos del proceso creativo del actor. Perspectivas de estudio*. (Scientific foundations of the actor's creative process. Perspectives for study). He has taken part in international theater conferences and has published several studies and articles on contemporary stage creation and the creative process of the actor.

ORCID: <http://orcid.org/0000-0001-6974-5594>

E-mail: [martinfonsastre@gmail.com](mailto:martinfonsastre@gmail.com)



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