

**Received:** 03/04/2024 --- **Accepted**: 04/09/2024 --- **Published:** 14/06/2024

# MARIANO FORTUNY AND THE VIRTUALISATION OF THE STAGE SPACE: ELECTRICITY, HERITAGE AND IMAGERY

MARIANO FORTUNY Y LA VIRTUALIZACIÓN DEL ESPACIO ESCÉNICO: ELECTRICIDAD, PATRIMONIO E IMAGINARIO

**Description Juan P. Arregui:** University of Valladolid. Spain. <u>juan.p.arregui@uva.es</u>

Miguel Díaz-Emparanza Almoguera: University of Valladolid. Spain. m.diaz-emparanza@uva.es

## How to cite this article:

P. Arregui, Juan, & Díaz-Emparanza Almoguera, Miguel (2024). Mariano Fortuny and the virtualisation of the stage space: electricity, heritage and imagery [Mariano Fortuny y la virtualización del espacio escénico: electricidad, patrimonio e imaginario] *Revista de Comunicación de la SEECI*, 57, 1-12. <a href="https://doi.org/10.15198/seeci.2024.57.e872">https://doi.org/10.15198/seeci.2024.57.e872</a>

### **ABSTRACT**

**Introduction:** The visual dimension of the theater focused the attention of Mariano Fortuny from very early on, whose principles of structural reconsideration of the scenographic space were to be directed in his experimental process towards two inseparably linked fronts: the physical conception of the scenographic space and the stage lighting, both in relation to the readjustment of the problems derived from the use of the new electric light and to the radical reform of its projection systems. **Methodology:** Critical revisionism in the light of the postulates of the theatricality, scenology or Performance Studies, of a transversal and non-experimental type. **Results and discussion:** The relationship between text, historical setting and stylistic evocation or free abstraction has constituted the development of theatrical figuration in the last century. In this context, Mariano Fortuny brings multiple expressive implications provided by the new possibilities of this type of light that concurred with a substantial rethinking of the bases of naturalistic realism, according to which the



scenographic design was progressively detached from the mimetic adherence to reality for the sake of its creative interpretation. **Conclusions:** The scenography takes a step further towards the so-called spatial design and the lighting technology becomes a dramatic, narrative, locative and diegetic instrument at the behest of the spectacular event, dramaturgical and substantial vector of the staging.

**Keywords:** Staging; electricity; lighting technology; avant-garde; Fortuny.

#### **RESUMEN**

**Introducción:** La dimensión visual del teatro centró desde muy pronto la atención de Mariano Fortuny, cuyos principios de reconsideración estructural del espacio escenográfico van a dirigirse en su proceso experimentador hacia dos frentes inseparablemente ligados entre sí: la concepción física del espacio escenográfico y la iluminación de escena, tanto en lo relativo al reajuste de los problemas derivados del uso de la nueva luz eléctrica como a la radical reforma de sus sistemas de proyección. Metodología: Revisionismo crítico a la luz de los postulados de la teatrología, la escenología o los *Performance Studies*, de tipo transversal y no experimental. Resultados y discusión: La relación entre texto, ambientación histórica y evocación estilística o libre abstracción ha constituido el desarrollo de la figuración teatral del último siglo. En este contexto, Mariano Fortuny aporta múltiples implicaciones expresivas proporcionadas por las nuevas posibilidades de este tipo de luz que concurrieron con un replanteamiento sustancial de las bases del realismo naturalista, según el cual el diseño escenográfico se desvinculaba progresivamente de la adherencia mimética a la realidad en aras de su interpretación creativa. **Conclusiones:** La escenografía da un paso más hacia la llamada "espaciografía" y la luminotecnia se convierte en instrumento dramático, narrativo, locativo y diegético a instancias del acontecer espectacular, vector dramatúrgico y sustancial de la escenificación.

Palabras clave: Escenificación; electricidad; luminotecnia; vanguardia; Fortuny.

## 1. INTRODUCTION

In the necessary and not so recent process of revalidation operated by the historiography of the arts around the singular creator Mariano Fortuny, the critical literature has always placed both the artist and his production in an imprecise terrain between the praxis of a kind of high craftsmanship and pure aesthetic ideation. It is, undoubtedly, a name difficult to be categorized in tight spaces arbitrated by traditional taxonomies given the diversity of areas undertaken, the multiplicity of interests that marked his career and the variety of contexts in which he deployed his activity (Osma, 2012). In these terms, a current look at his career and significance reveals his enormously contemporary transcendence, since they close the semantic circle that conditions the categorization of the arts without favoring, at least in abstract terms, the obvious differentiation between the creative arbitrations of the *ars/techné* binomial and those of the speculative knowledge associated with *scientia/episteme*.

If anything characterizes the memory of Mariano Fortuny y Madrazo it is, perhaps, his restless curiosity, his fertile creativity and the heterogeneous nature of a legacy that

ranges from *Fin de Siècle* eclecticism to the modernizing vertigo of the *Belle Époque* and unites, in an original symbiosis, decidedly contemporary perspectives and attitudes with adherences to the most venerable tradition, anchoring his most innovative proposals for the future in the solidity of the cultural heritage. This intellectual behavior, perceptible in the wide range of fronts approached, is particularly eloquent in relation to his theatrical experiences, with which he achieved his most resounding initial successes and gave him public recognition, "being, at the same time, the medium that the artist made best use of to expose his aesthetic ideas and express his ideological approaches" (Nicolás, 1993, p. 101). It is in this space where the experimentation operated by our protagonist and sustained, fundamentally, in reconsiderations of a luminotechnical order, propitiate a new technology of illusion that, in the end, is verified in a new concept of scenic mimesis, far from both the icastic copy of nineteenth-century representation (Peckham, 1961) and the diegetic abstractions of the avant-garde.

The theater, or to be more precise, the visual dimension of theater focused Mariano Fortuny's attention from very early on, from his attendance to the first shows in Paris to his later and persistent fascination with the mythopoetic universe of Richard Wagner, nourished by his family friendship with Rogelio de Egusquiza, sponsored by his own symbolist inclinations and fostered by some pilgrimages to Bayreuth that began in the last decade of the nineteenth century. The autobiographical references and unpublished typewritten texts of the artist preserved in the Fortuny Museum in Venice review the theoretical, technical and aesthetic bases of his theatrical approaches; In particular, reference is made to the technical descriptions of the socalled "Système Fortuny" (Fortuny, 1904) or "Éclairage scènique par lumière indirecte" (Fortuny, 1906), his aesthetic considerations on theatrical lighting (Fortuny, 1906; 1941) or on the installation known as "Cupula Fortuny" (Fortuny, n.d.a); Théâtre Lumière (Venice, 1941), and even to certain particulars of his *Memoria autobiografica* (Fortuny, n.d.b). All these writings testify how the contact with the productions of the Festspielhaus meant the evidence of an aesthetic fracture that, because of its scenic realization, violated the holistic harmony of the concept of Gesamtkunstwerk. Actually, and despite the sophistication of the dramatic-musical approach of Wagner's work condensed in his great programmatic writings - Die Kunst und die Revolution (Wagner, 2013a) [original publication 1849], Das Kunstwerk der Zukunft (Wagner, 2000) [original publication 1850] and *Oper und Drama* (Wagner, 2013b) [original publication 1852]-the composer's staging criteria remained wedded to a tendentially conservative pattern that-regardless of the mystical reaches of temple-theater or ritual-performance that gradually decayed and even above the conscious need to surpass the ordinary dynamics of the theaters of his time-never detached itself from the common horizon of technical circumstances, infrastructural parameters, and performative routines that informed the stage technology of the time. The need to mend this fracture would be the trigger for a series of investigations that led Mariano Fortuny in his experimental process towards two inseparably linked fronts: on the one hand, the physical conception of the scenographic space, and, on the other, stage lighting, both in terms of readjusting the problems derived from the use of the new electric light and the radical reform of its projection systems.

As for the structural reconsideration of the scenographic space, it must be taken into account that the inveterate technical bases of nineteenth-century scenography were centered on the systematic and practically exclusive use of flat elements, a set of fluctuating canvases, painted with great skill and little art, cut and arranged on the scene either perpendicularly or parallel, simulating the third dimension and breaking up the space into false successions (Frigerio, 1983), whose conventionalism clashed with the new times and their aesthetic expectations. In particular, the elimination of the hitherto inevitable sequence of air scenery used for the construction of the "heavens" would encourage Fortuny to devise the famous dome that bears his name, invented as an effective alternative to banish the system of "hanging clothes" on which the technology of pictorial illusionism in the theater had been based until then: "the first idea of a spherical background to represent the sky came to me in Bayreuth during a performance of the *Rheingold*, it was around 1890; I imagined the background of the Rhine constituted by a spherical concavity that encompassed the stage..." (Fortuny, 1941).

## 2. OBJECTIVES

This article deals with Mariano Fortuny as an individual and his proposal to redefine the image and the scenic space through experimentation with the luminous possibilities offered by electricity: the heritage of technical resources, aesthetic conceptions and tacit conventions, which have been crystallized by the long illusory tradition of Western theater, is reconfigured in atmospheric, enveloping environments that redefine the boundaries of verisimilitude, arouse the widening of the modern spectator's gaze and disrupt the virtual limits of Euclidean space. The main objectives are to analyze the significance of Mariano Fortuny's technical-aesthetic contributions in the context of the performing arts, highlighting his contemporaneity and diversity of interests, especially in the theatrical field, with special emphasis on his contributions to stage technology. It is also necessary to review, from critical positions, the magnitude of his innovative lighting solutions, not only from the challenge of complex technical solutions, but also from the transcendence of its aesthetic and conceptual implications. Finally, it is necessary to contrast and contextualize Fortuny's approach to scenography with the avant-garde poetics of his time, which, without abandoning his adherence to the tradition of a kind of stylized realism and without yielding to the pressures of abstraction, managed to renew and enrich the spectator's experience by updating the figurative mechanisms of scenic mimesis.

## 3. METHODOLOGY

The methodology of this study is developed from the application of several strategic axes from the perspective of a critical revisionism (in the light of the postulates of the theatricality, scenology or Performance Studies), that is both transversal and non-experimental. The approach is articulated around a fundamentally analytical-descriptive examination based on primary and secondary sources, with a qualitative orientation, in order to characterize the reviewed topics and evaluate their repercussions and derivations. Thus, on the basis of the theoretical contributions and the selected critical literature, the possible meanings and eventual scope of the "Fortunian" innovations will be explored.

# 4. RESULTS AND DISCUSSION

Designed to meet a criterion of functionality (Maino, 2010; Cornago, 2006 and Van-Dijk, 1980), the technical scheme of the Fortuny dome, although subjected to successive modifications and improvements over the years, basically consisted of a pneumatic structure in the shape of a quarter sphere covering the entire stage, rigged on two layers of matte fabric whose interstitial space was inflated by means of a compressed air inductor to obtain an extraordinarily regular and smooth apsidal surface which, by means of a novel system of colored, indirect and diffuse lighting, combined with projections, simulated with perfect optical illusion the blue and diaphanous or dark and starry immensity of the firmament. The whole set was mounted on a hinged skeleton that allowed the folding and storage of this horizon or atmospheric dome in a few minutes (Sonrel, 1943; also Fuso and Mescola, 1978; Osma, 1980; Isgrò, 1986 and Morcillo, 2007). The patent published by the French National Industrial Property Office reads: This invention has as its object a new apparatus intended especially for theatrical decoration (.... ) to replace mainly all the decorations that serve to depict the sky and horizons (Fortuny, 1903), emphasizing that although "the old procedures for imitating the sky consisted of hanging canvases on which clouds were painted", with the new dome, and given its concave arrangement, "a much greater illusion and a more artistic effect will be obtained, and a real sky will appear before the eyes of the spectators", being also possible its application to "flat scenery". It is also insisted that the dome is not an "imitative" element in itself, but the surface that "receives the imitation" through an appropriate use of tinted lights and projections made by means of arc lamps and painted glass, so that the public "sees the surprising effects without knowing their cause", being able to "be illuminated either from the front or from behind, so as to provoke any kind of illusion".

In fact, the Fortuny dome arose as a technically updated solution to inherited problems posed by the two-dimensional pictorial scenography of Italian ancestry related to the lack of verisimilitude in the recreation of visually coherent spatial units based on independent pieces (backstage and scenery) that inevitably showed their contours and the distance between one and the other, so they could not create the required impression of continuity. This is a widely debated issue since the beginning of the 19<sup>th</sup> century, when the need to transfer reality to the stage box led to consider it inconvenient to recreate interior architectural spaces based on pieces parallel to the archway and ending in a backdrop (Petitier, 2004), which led to protests against "cette manie de coulisses dans les décorations qui représententent des salons" (Pujoulx, 1801, p. 130). Thus the so-called closed scenes were instituted in France, formed by four armed curtains joined together in cubic form (sides and back - walls - and a drop ceiling or ceiling), to depict rooms, rooms, etc., according to a practice soon systematized on an international scale in the construction of interior scenes (Arregui, 2009), but never applied to exteriors or landscapes, whose systemic conventionalism would only be overcome by Fortuny's invention by "offering the possibility of eradicating the air bands and side frames of such an unfortunate effect", in his own words (Fortuny, 1901).

Meanwhile, the nature of this dome is rooted in another series of instrumental findingsderived from the theatrical application of certain experiences of recreational physics, whose effective development has been the evolution of outdoor scenes since the late eighteenth century with interesting conceptual implications, among which the panorama and the diorama, artifacts that reproduced natural phenomena with unusual skill, stand out. The panorama, invented in 1787 by the Scottish painter Robert Barker and later perfected by Taylor on the previous experiences of the Marquis de Soudiac, consisted of a curved curtain of enormous dimensions where vast landscapes and great urban views were represented that, through the manipulation of the viewer's perceptive conditions, achieved a certain illusion of reality. However, its direct application to theater seems to have been singularly scarce (Bapst, 1891 and Wolff, 1978), its importance being centered on the opening of a new spatial conception and the establishment of the technical precedents of the Diorama (Bordini, 1984). Derived from the previous one and perfected by Bouton and Daguerre around 1822, the Diorama consisted of a translucent surface painted on both sides in which, alternating front and back lighting, the view underwent transformations as images appeared and disappeared, achieving an effect of chained fades. The incorporation of these procedures to the theatrical scenography influenced the planimetric rigorization of the scene-frame, in which a nearby sector suggests a foreground as a referential base where the dramatic play takes place and, behind it, usually more illuminated, the contrast of the horizontal expansion of the background.

The need to visually coordinate all the particular elements that made up a decoration to be enjoyed as a homogeneous whole from any point of view, in contact with the panorama and the diorama, will be resolved by developing broad exterior views of eminently landscape composition and apparently unlimited depth, allowing the vision to enlarge towards a boundary resolved no longer according to principles of geometric perspective but by exploiting purely pictorial means. The Fortuny dome (and the later cyclorama) are, in the end, the perfecting of a compositional principle that, derived from the experience of the *décor diorama*, tended to increase the height of the backdrop to create a homogeneous and consistent atmospheric background, avoiding the backdrops by reducing them only to the foreground, as noted by Charles Garnier (Banu y Kahane, 1990) when referring to the convenient vertical dimensions of the scenic cube. As can be seen, the Fortuny dome, while replacing the hegemony of the traditional graphic exercise with a "pictorial illumination", maintains these principles, but achieves a transcendent variation in the integral reproduction of the image perceived by the spectator, amplified in the dilation of an uninterrupted sky, without fractures, where, in its fabulous immensity, the absence of relative vanishing points by breaking the perspective continuity and suppressing, for the spectator, any intermediate reference of scale—generates an organic and coherent overall result. As explained in the aforementioned patent: "the eye, finding no line or solution of continuity towards the top, will find it difficult to establish comparisons and will judge with great difficulty the distance from the wall of the sphere (...)" (Fortuny, 1903).

The very conception of the device converts the place itself of concrete theatricality into a concave module that, in compliance with its condition of reflector, depends on the light modulations obtained by means of special electric lamps of his own invention,

designed to qualify and avoid problems that Fortuny had already encountered in his first attempt as a set designer (1899) for the staging of Gilbert and Sullivan's operetta The Mikado, commissioned by the Countess Albrizzi. In that circumstance, and as he himself recalled, a misuse of electric light completely ruined the illusion of reality pursued by his sets, revealing all the artifices of painted curtains. It must be taken into account that the transition from gas lighting to electricity was a serious technical trauma as far as scenic painting is concerned. Beyond the superior performance in terms of power, performance, health and hygiene (lack of fumes, heat reduction, etc.) offered by this energy, and apart from the typical disadvantages of a technique still in its infancy, during the first decades of the use of electric light in the theater there was a generalized current of negative opinion (Viale, 1980) that emphasized the aesthetic damage it caused. Among such detriments, one of the main complaints could be the lack of that atmospheric virtue that characterized gas light, as well as the initial inability to obtain half-tones and, fundamentally, a manifest inadequacy between the traditional pictorial discipline on which the skills of scenographic illusionism were based and the new lighting.

The previous morbidity of gas contrasted with the uncontrolled brutality of electric lighting, which gave a flatter effect to the scenic images, explaining the feigned volumes of the decoration and evidencing the deceptions of trompe l'oeil, thus disrupting the essential bases in the achievement of the two-dimensional illusionism that had not been contrasted until then. To this contributed the fact that, at least in its beginnings, it did not chromatically support the pretensions of the scenographic painters due to the optical conditions imposed by the brightness of this new type of illumination that disrupted the behavior of the traditional pigments and, therefore, the perception of the colors. Based on the experience described above, and faced with the inefficiency of the lighting resources of the theaters of the time, Mariano Fortuny will focus on investing his skills not only in the quality but also in the quality of light, he will develop a famous system of "diffused" lighting and will take care of controlling the chromatic vibration of the irradiation through arc lamps equipped with regulators and capable of producing the desired effects of gradation and tonality: Fortuny himself will say (1901) in the technical report of one of his patents, "a new type of scenic painting by indirect light is thus obtained, which can be colored, shaded and graded, being, moreover, susceptible to be animated by movements and admitting any transformation.

As a matter of fact, the expressive implications provided by the new possibilities of this type of light concurred with a substantial rethinking of the bases of naturalistic realism, according to which the scenographic design was progressively detached from the mimetic adherence to reality for the sake of its creative interpretation, so that the scene will tend to focus, prevalently, on the emotional charge of color and the dramaturgical feasibility of lighting. It is postulated, thus, the need to subordinate the scene to luminous effects and to an adequate plastic, so that neither its naturalistic force nor its preciousness would reach such an extreme of intrinsic excellence that the spectator would pay more attention to the *parerga* than to the dramatic *ergon*. However, these premises, exalted by some of the main successful individuals responsible for the theatrical renovation of the twentieth century—read Adolphe Appia

and Gordon Craig, fundamentally—will not fit entirely with the poetics of Fortuny, subject to codes that are fond of the "perfect illusion": a recurrent yearning that has animated the progress of the Western mimetic scene since the Enlightenment. In none of his scenographic projects (Tristan and Isolde in 1900, Francesca da Rimini in 1901 or La Walkyria in 1905, for example) is there a definite will to approach the new scenic trends that are emerging on the international scene, maintaining the validity of some inveterate sociocultural codes accrued by tradition and established by convention that did not renounce the power of the consecrated spectacular matrix. The relationship between text, historical setting and stylistic evocation or free abstraction has constituted the development of theatrical figuration in the last century (Ricchelli, 2008; Iversen, 1989 and Cirilli, 2003) and, in this debate, Mariano Fortuny as an individual is openly postulated in the domains of the, albeit reconsidered, tradition. By means of the eternal debate between illusion and allusion, the artist shows discrepancies with the "retheatricalizing" avant-gardes of Craig, Appia or Fuchs due to the disintegration that they gave to the customary principle of verisimilitude, although there are points of convergence in their commitment to the "disentanglement" of the stage and in the condemnations to the unreality of the conventional reality of the decorations in use. In fact, Fortuny collaborates with Appia in 1903 in the private room of the Countess Martine de Béarn (Grazioli, 2008 and Marotti, 1966), with whom he agrees on the responsibility given to light as an intermediary between the actor and his environment, between text and theatrical play: the most important element of fusion of a staging (Perrelli, 2002; Fabbri, 1994 and Daly, 2011). According to these premises, light acquires a superstructural value and implies a responsibility for the scenographer in relation to the obligations acquired with truth and beauty in determining the resulting aesthetic form of any staging.

# 5. CONCLUSIONS

In contrast to the intellectual operations that alienate themselves from the sensible reality to consider the dramatic substance in its pure essence or notion sponsored by the essentialist practices of the avant-garde, Fortuny respects the traditional way of conceiving the scenic painting and its competencies and, therefore, of designing its contents, but he resizes it and alters the optical relationship between the spectator's eye, the kinetic space of the characters and the last terms of the forum by virtualizing its figuration in luminous terms. It is a process in which light plays an active part and in which it acquires a value of its own by transforming the drawbacks that electrical clarification entailed for nineteenth-century theatrical painting into the basis of a new regime of representation and an unusual repertoire of images. In these terms, scenography takes a step further towards the so-called "space design" and lighting technology becomes a dramatic, narrative, locative and diegetic instrument at the behest of the spectacular event, dramaturgical and substantial vector of staging. Fortuny supports the accessibility of recognition, of the concrete identification of the locus, which leads to a heritage of astonishing images, analogical representations of realities where description and sensation merge space and time from elements told with absolute truth, but full of poetic suggestion, emotional evocation and values of undeniable symbolic scope.

## 6. REFERENCES

- Arregui, J. P. (2009). *Los arbitrios de la ilusión: los teatros del siglo XIX.* Asociación de Directores de Escena de España.
- Banu, G. y Kahane M. (Eds.). (1990). Charles Garnier. Le Théâtre. Actes Sud.
- Bapst, G. (1891). *Essai sur l'histoire des panoramas et des dioramas.* Librairie Hachette et Cie.
- Bordini, S. (1984). *Storia del Panorama. La visione totale nella pittura del XIX secolo.* Officina Edizioni.
- Cirilli, C. (2003). Giovanna d'Arco di Gaetano Rossi e Nicola Vaccaj. Genesi e ricezione dell'opera, fonti testuali e musicali. *Fonti Musicali Italiane*, 8, 87-126. https://sidm.it/ojs/index.php/fmi/article/view/925
- Cornago, O. (2006). La teatralidad como crítica de la modernidad. *Tropelías*, 15/17, 191-206. http://10.26754/ojs\_tropelias/tropelias.200415-178
- Daly, N. (2011). The volcanic disaster narrative: from pleasure garden to canvas, page, and stage. *Victorian Studies*, *53*(2), 255-285. <a href="https://doi.org/10.2979/victorianstudies.53.2.255">https://doi.org/10.2979/victorianstudies.53.2.255</a>
- Fabbri, P. (1994). Rossini the aesthetician. *Cambridge Opera Journal, 6*(1), 19-29. https://doi:10.1017/S0954586700004110
- Fortuny, M. (1901). Brevet Addition au brevet d'invention principal nº 359.588 ayant par titre 'Système d'éclairage scénique par lumière indirecte'. Office National de la Propriété Industrielle.
- Fortuny, M. (1903). *Brevet d'invention nº 329.176 'Appareil de décoration théâtrale'.* Office National de la Propriété Industrielle.
- Fortuny, M. (1904). Éclairage des scènes au moyen de la lumière indirecte: Système Fortuny. Album 03. [Descriptions et illustrations]. Museo Fortuny-Fondazione Musei Civici di Venezia.
- Fortuny, M. (1906). Éclairage scènique par lumière indirecte "Système Fortuny". Album A18 1092. [Considerations sur l'éclairage]. Museo Fortuny-Fondazione Musei Civici di Venezia.
- Fortuny, M. (1941). *Théâtre Lumière. Album A18 1092.* [Descriptions et illustrations]. Museo Fortuny-Fondazione Musei Civici di Venezia.
- Fortuny, M. (s.f.a). *Cupula Fortuny. Album A18 1092*. Museo Fortuny-Fondazione Musei Civici di Venezia.
- Fortuny, M. (s.f.b). *Memoria autobiografica. Album 03.* [Descriptions et illustrations]. Museo Fortuny-Fondazione Musei Civici di Venezia.
- Frigerio, E. (1983). Wagner a Bayreuth. Nota alla scenografia. Franco Maria Ricci.

- Fuso, S. y Mescola, S. (Eds.) (1978). *Immagini e materiali del laboratorio Fortuny*. Marsilio Edotori.
- Grazioli, C. (2008). *Luce e ombra. Storia, teorie e pratiche dell'illuminazine teatrale*. Laterza.
- Isgrò, G. (1986). Fortuny e il teatro. Novecento.
- Iversen, M. (1989). The Positions of Postmodernism. *Oxford Art Journal, 12*(1), 31-34. https://doi.org/10.1093/oxartj/12.1.31
- Maino, M. (2010). Fortuny y la escena: la iluminación como terreno de experimentación y reforma. En D. Ferretti y S. Plans (Coords.), *Fortuny. El mago de Venecia* (pp. 71-98). Obra Social de Caixa Catalunya.
- Marotti, F. (1966). La scena di Adolphe Appia. Cappelli.
- Morcillo, F. (2007). L'exotisme littérarie: relecture du conte de "Vathek" de William Beckford. *Anales de filología francesa,* (15), 193-204. <a href="https://revistas.um.es/analesff/article/view/21301">https://revistas.um.es/analesff/article/view/21301</a>
- Nicolás Martínez, M. M. (1993). *Mariano Fortuny y Madrazo. Entre la modernidad y la tradición* [Tesis de doctorado, Universidad de Granada]. <a href="http://hdl.handle.net/10481/14367">http://hdl.handle.net/10481/14367</a>
- Osma, G. (1980). Mariano Fortuny, his life and work. Aurum Press.
- Osma, G. (2012). Mariano Fortuny. Arte, ciencia y diseño. Ollero y Ramos.
- Peckham, M. (1961). Toward a Theory of Romanticism: II. Reconsiderations. *Studies in Romanticism*, 1(1), pp. 1-8. <a href="https://doi.org/10.2307/459586">https://doi.org/10.2307/459586</a>
- Perrelli, F. (2002). Storia della scenografia dall'Antichità al Novecento. Carocci.
- Petitier, P. (Ed.). (2004). Prisons [numéro thématique]. *Romantisme. Revue du dix-neuvième siécle*, 126. <a href="https://www.persee.fr/issue/roman-0048-8593-2004">www.persee.fr/issue/roman-0048-8593-2004</a> num 34 126
- Pujoulx, J. B. (1801). Paris à la fin du dix-huitième siècle. B. Mathé.
- Ricchelli, G. (2008). L'orizzonte della scena nei teatri. Storia e metodi del progetto scenico dai Trattati del Cinquecento ad Adolphe Appia. Hoepli.
- Sonrel, P. (1943). *Traité de Scenographie. Évolution du matériel scénique, inventaire et mise en oeuvre du matériel scénique actuel, technique de l'établissement des décors, perspective théâtrale, autres scénes en usage.* Odette Lieutier.
- Van-Dijk, T. A. (1980). El procesamiento cognoscitivo del discurso literario. *Acta Poetica*, (2), 3-26. <a href="https://doi.org/10.19130/iifl.ap.1980.1-2.677">https://doi.org/10.19130/iifl.ap.1980.1-2.677</a>
- Viale Ferrero, M. (1980). *La scenografia. Dalle origini al 1936*. Cassa di Risparmio di Torino.

# P. Arregui, Juan, & Díaz-Emparanza Almoguera, Miguel Mariano Fortuny and the virtualisation of the stage space: electricity, heritage and imagery

Wagner, R. (2000). La obra de arte del futuro. Universitat de Valencia.

Wagner, R. (2013a). Arte y Revolución. Casimiro.

Wagner, R. (2013b). Ópera y Drama. Akal.

Wolff, H. C. (1978). Voltaire und die Oper. *Die Musikforschung*, *31*(3), 257-272. https://doi.org/10.52412/mf.1978.H3.1794

# **AUTHORS' CONTRIBUTIONS, FUNDING AND ACKNOLEDGMENTS**

## **Authors' contributions:**

Conceptualization: P. Arregui, Juan y Díaz-Emparanza Almoguera, Miguel. Methodology: P. Arregui, Juan. Validation: P. Arregui, Juan y Díaz-Emparanza Almoguera, Miguel. Formal analysis: P. Arregui, Juan y Díaz-Emparanza Almoguera, Miguel. Data curation: P. Arregui, Juan y Díaz-Emparanza Almoguera, Miguel. Drafting-Preparation of the original draft: P. Arregui, Juan. Drafting-Revision and Editing: P. Arregui, Juan y Díaz-Emparanza Almoguera, Miguel. Visualization: Díaz-Emparanza Almoguera, Miguel. Supervision: P. Arregui, Juan y Díaz-Emparanza Almoguera, Miguel. Project management: P. Arregui, Juan y Díaz-Emparanza Almoguera, Miguel. The author has read and accepted the published version of the manuscript: P. Arregui, Juan y Díaz-Emparanza Almoguera, Miguel.

**Funding:** This article is supported by funds from the MAEP Research Group (Music, Performing Arts and Heritage) of the University of Valladolid.

**Conflict of interest:** No conflicts of interest are reported.

**Acknowledgments:** This article was written within the framework of the research project: PDC2022-133460-I00 (Heritage Education in Spain facing the 2030 agenda: heritage literacy plan in digital environments). Ministry of Science and Innovation, State Research Agency, European Union (Next Generation EU Funds).

## **AUTHORS:**

## Juan P. Arregui

University of Valladolid.

Professor of History and Science of Music-FyL-UVa. Degree in Art History, PhD in FyL prog. D. in "Spanish Music" (2004) and Extraordinary Doctorate Award (2005). He has published about a dozen books as coauthor, co-editor and main author, as many chapters and articles in specialized journals and other contributions of various kinds. He is also an external reviewer of texts for publication in scientific journals. As a visiting professor, he has participated in the International Master of Scenography (Complutense University of Madrid) and in the Predoctoral Diploma in Hispanic Musical Heritage (C. San Gerónimo, U. Havana, Cuba), as well as in the Master in Management of the Historical-Documental Heritage of Music (C. San Gerónimo, U. Havana, Cuba).

juan.p.arregui@uva.es

**Orcid ID:** https://orcid.org/0000-0001-8081-2145

**Google Scholar:** <a href="https://scholar.google.com/citations?user=W6mKK0sAAAAJ">https://scholar.google.com/citations?user=W6mKK0sAAAAJ</a> **ResearchGate:** <a href="https://www.researchgate.net/profile/Juan-Peruarena-Arregui">https://www.researchgate.net/profile/Juan-Peruarena-Arregui</a> **Scopus:** <a href="https://www.scopus.com/authid/detail.url?authorId=57204453124">https://www.scopus.com/authid/detail.url?authorId=57204453124</a>

Academia.edu: https://uva-es.academia.edu/JuanPArregui

#### Miguel Díaz-Emparanza Almoguera

# P. Arregui, Juan, & Díaz-Emparanza Almoguera, Miguel Mariano Fortuny and the virtualisation of the stage space: electricity, heritage and imagery

## University of Valladolid.

Associate Professor of History and Sciences of Music-FyL-UVa. Graduate in Primary Education (2014), Degree in Musicology (2001), International Doctor in Musicology (2012) and Extraordinary Doctorate Award (2013). He has carried out research stays at the *Discoteca di Stato* in Rome and at the *Mirage* laboratory of the Universitá di Udine, at its Gorizia site. He has more than 27 indexed publications including articles, chapters, monographs and other varied contributions. He is also an external reviewer of texts for publication in scientific journals. He has been a visiting professor in the Predoctoral Diploma in Hispanic Musical Heritage (2014-2018) as well as in the Master in Management of the Historical-Documental Heritage of Music (2019-2022) (C. San Gerónimo, U. Havana, Cuba).

m.diaz-emparanza@uva.es

**Orcid ID:** https://orcid.org/0000-0002-5800-6910

**Google Scholar:** <a href="https://scholar.google.com/citations?user=NbuSGBsAAAAJ">https://scholar.google.com/citations?user=NbuSGBsAAAAJ</a> **ResearchGate:** <a href="https://www.researchgate.net/profile/Mikel-Diaz-Emparanza">https://www.researchgate.net/profile/Mikel-Diaz-Emparanza</a> **Scopus:** <a href="https://www.scopus.com/authid/detail.url?authorId=57204461247">https://www.scopus.com/authid/detail.url?authorId=57204461247</a>

Academia.edu: <a href="https://uva-es.academia.edu/MikelDiazEmparanza">https://uva-es.academia.edu/MikelDiazEmparanza</a>



## **RELATED ARTICLES:**

- Chaparro Medina, P. M. y Cervantes Hernández, R. (2024). La construcción identitaria de jóvenes de la diversidad sexo genérica en las redes sociodigitales: prácticas performativas reivindicativas. *Revista Latina de Comunicación Social*, 83. <a href="https://doi.org/10.4185/rlcs-2025-2311">https://doi.org/10.4185/rlcs-2025-2311</a>
- Gutiérrez, F. J. L. (2023). La iluminación artificial en la historia: un recorrido desde la prehistoria hasta la actualidad (II). *ArqueoTimes*, 5, 54-57. <a href="https://dialnet.unirioja.es/descarga/articulo/9064649.pdf">https://dialnet.unirioja.es/descarga/articulo/9064649.pdf</a>
- Del Prado Flores, R., Moreno Basurto, L. Z. y Chávez Castañeda, M. (2020). Representaciones fotográficas de la sociedad del cansancio y la pobreza. *Revista Latina de Comunicación Social*, 75, 291-312. https://doi.org/10.4185/RLCS-2020-1427
- Toro Calonje, A. y Lopez-Aparicio Pérez, I. (2018). Narrativas corporales: la danza como creación de sentido. *Vivat Academia*, 143, 61-84. https://doi.org/10.15178/va.2018.143.61-84