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Sarah Peil Winstead

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The Work of Living Art, Empathy, and the Creation of an Aesthetics of Perception in the Early Twentieth Century

by

Sarah Peil Winstead

University of Arkansas

Fay Jones School of Architecture and Design
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Introduction: The Life and Impact of Adolphe Appia

Adolphe Appia (1862-1928), theorist and pioneering voice of the New Stagecraft Movement in twentieth century theatre, was a transformative influence on the history of scenic design. This paper looks at the links between Appia’s theories in theatre scenic design and contemporaneous German aesthetic theory. At the time German theorists like Adolf Hildebrand and August Schmarsow fully developed aesthetic theory *Einfühlung* or empathy theory, based on the connection between the human body and perception. I will argue this theory influenced not only Appia and his contemporaries, it also shaped the landscape of mid-century theatre design. Appia’s own theories revolved around three central ideas: Living Space, Living Color, and Living Time. His work illustrates the core ideas of empathy theory. The practical application of his theories influenced the technology and design of the stage in his time, and created a visual language for empathetic design.

Appia, who studied theatre in Dresden and Vienna beginning at the age of 26, started his career as a young designer in 1888 when he was inspired by the work of composer Richard Wagner (1813-1883). While Wagner himself aspired for his work to be a “total work of art,”¹ the overloaded sets and two-dimensional naturalistic details created a disharmony between the performers and the backgrounds as the performers existed within three dimensions, but were limited to only move across the stage in two dimensions.

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dimensions so as to not disrupt the illusion of the two-dimensional set. Appia saw this disharmony occurring in the theatre, and sought to find a solution, “To replace the coexistence of conflicting elements with a functional arrangement that drew its expressive power from the hierarchical ordering of the means of theatrical expression”\(^2\) as described by Denis and Marie-Louis Bablet. In this, he reacted against sets by designers such as Max Bruckner and the Bayreuth designs of Joseph Hoffman seen in figures 1 and 2. This arrangement was to be dictated not by pictorial images or an illusion of reality, but rather by the actor's own movement across the stage.

Appia's aim was to create a new type of stage dissolving the barrier between performer and audience, decrying “the architecture that effected the separation: the proscenium arch — that ridiculous window that confines the stage picture — and the footlights — that 'monstrosity,' as he called it, of our theatre.”\(^3\) He would populate this new type of stage with three-dimensional, sculptural stage settings, and he lit it with new powerful electric stage lights which were beginning to replace the gas lights used previously. Instead of being raised above the audience, performances would exist on the same level as the audience, and actors along with the sets they occupied would not be strictly limited to a stage, but allowed to move freely in three dimensions.

Appia's quest to break the boundary between performer and audience was further aided by Appia's discovery of eurhythmics and his work on the subject alongside Emile Jaques-Dalcroze. Dalcroze, who pioneered the field of eurhythmics, a method of teaching

\(^2\) Ibid., 12.
\(^3\) Ibid., 15.
musical understanding through rhythmical physical movements, recognized “experiencing meaningful rhythmic movement associated with ear-training and improvisation facilitates and reinforces the understanding of music concepts, enhances musicianship and focuses awareness on the physical demands of artistic performance”\(^4\). He later founded the Emile Jaques-Dalcroze Institut at Hellerau, shown in figure 3, in order to teach his new musical gymnastics, using movements by performers to analyze or act out musical accompaniment. This inspired Appia to create a series of “rhythmic space” drawings, such as figure four, the potential eurhythmics had in influencing spatial design. He believed the movements of the performers could be used not only to interpret a musical number, but could also find resonance in and influence spatial design. The rhythmic space designs were therefore Appia’s interpretations of how human movements through time could direct the formation of space.

The majority of Appia’s life was spent alone writing books and essays on his groundbreaking theories and sketching scenes to illustrate his theories, yet he was recognized by and influential to other stage innovators like Edward Gordon Craig and Jaques Copeau, who said about him: “The reality of the stage that lived in him was more alive than what we see in the theatre... he broke out of the theatre and took us with him. He denied and repudiated the theatre — but out of love for that living art”\(^5\). During his life, Appia had several important publications, including *The Staging of Wagner’s Musical Dramas* (1895), *Music and The Art of Theatre* (1899), and *The Work of Living Art* (1921).


is also responsible for a number of essays throughout his life, such as *Ideas on a Reform of Our Mise en Scène* (1902), *Return to Music* (1906), *Eurhythms and the Theatre* (1911), and *Actor, Space, Light, Painting* (1919) to list a few. His ideas were recognized as significant by other innovators throughout his career but it was later in his life, during the 1920s, Appia began to receive widespread recognition. In 1923 he was asked to stage *Tristan and Isolde* for Arturo Toscanini, and in 1924 he designed the scenography for two parts of Wagner's *the Ring Cycle*, shown in figure 5, and in 1925 he designed the stage and costumes for *Prometheus*. The simplified forms and harsh abstractness of his set designs were not accepted universally as they were a dramatic break from traditional theatrical sets, but Appia's theories of light, space, and the human body had important and lasting effects on modern stagecraft. Upon his death in 1928, his colleague and close friend Jaques Copeau wrote a tribute summing up the importance of the work of Appia: "For him, the art of stage production in its pure sense was nothing other than the embodiment of a text or a musical composition, made sensible by the living action of the human body and its reaction to spaces and masses set against it.”⁶ Appia's work went on to inspire the work of stagecraft designers who were not only his contemporaries, such as Edward Gordon Craig (figure 6), but also who came after, such as Josef Svoboda (figure 7) and Robert Edmond Jones (figure 8), who brought Appia's theories on stage design to America.

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In the case of Appia’s initial source of inspiration, the Wagnerian Opera, the movement and actions of the performer were regulated by music, as in theatre music is the measure of time. The role of the actor is to interpret the music through their own body and then define spatial relationships through their movements across the stage. In Appia’s choreography of time and space, it is light that acts as mediator between the two: “Light enlivens both space and actor — in their coexistence and mutual presence, in their opposition, and in their coming together,” whereas in the Wagnerian Opera lights were kept dim and atmospheric throughout the production in order to maintain the illusion of three-dimensional space. For Appia, light, specifically electric light, becomes a character in its own right and a crucial element in his stage designs. As noted above, stages such as the ones used to stage Wagner’s operas were lit by open-flame gas-lights, and earlier by kerosene lamps or candles as seen in figure 9. These methods of lighting resulted in a dim stage. Two-dimensional painted canvases or stock flats, rectangular flat pieces of theatrical scenery painted and positioned on stage, were used to suggest the setting of the performers. It was in 1879, with Edison’s invention of the electric lamp, that theatre lighting, such as the examples shown in figure 10, was revolutionized. The new electric lamps were much brighter than the gas-lights they replaced and electric spotlights not only illuminated the performers but also went so far as to reveal every joint in the stock flats and the texture of the canvas stretched on them. The development of these

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7 Denis Bablet, *Adolphe Appia*, 12.
powerful electric lights for the stage became problematic for designers, as they created visual disharmony between the set and the performer as they clearly outlined the performer in harsh light against the painted backdrops. In the light of these powerful stage lights, two-dimensional illustrations on backdrops were harshly revealed for what they were — painted scenes rather than real settings. Instead of allowing the viewer to imagine these backdrops as literal extensions of nature behind the performer, the electric lights revealed the falseness of these sets and created a discord between the three-dimensional, moving actor and the backdrop in front of which they performed.

Not only did electric lights illuminate the backdrops as an artificial reproduction of a landscape or place, Appia asserted illuminating these types of sets with the new lighting technology available was a disservice to the potential of the new lighting technologies as well. For Appia light was not meant to solely illuminate, but to carry meaning and mood and to act in partnership with the actor and the set—to become a “powerful means of expression through space”\(^8\). Furthermore Appia argues there is no longer a place for painted decor on the stage as it is belied by the light shining upon it and by the shadow cast by and onto it. If light is the life-giver according to Appia, light illuminating a two-dimensional backdrop only reveals that backdrop as “dead” and therefore in direct opposition to the actor's movements on stage.

In addition, Appia fought against the presence of the proscenium arch that was the two-dimensional shaped arch through which the audience would view the framed picture of the drama, and footlights. Both of these elements common to traditional stage

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designs, shown in figures 11 and 12, acted to separate the audience from the performers onstage and Appia wished to dissolve the boundary between actor and viewer.
Eurhythmics: Man is the Measure of All Things

Appia’s theories of space, light, and time were furthermore developed through his own work on eurhythmics. He first encountered the system of rhythmic gymnastics when he met Émile Jaques-Dalcroze in 1906, when Dalcroze was at the Geneva Conservatory of Music as a composer and teacher, instructing pupils to “translate musical composition directly into space through the reactive medium of their own bodies”\(^9\). Examples of these types of exercises may be seen in figures 13 and 14. Appia recognized the potential ramification eurhythmics could have on his own theories about stage space and the human body and collaborated over the next several years with Dalcroze. Appia writes about the importance of this work with Dalcroze and his system of “musical gymnastics”\(^10\) in his essay “Theatrical Experiences and Personal Investigations” in 1921. In this essay, Appia states “In ‘Music and the Art of Theatre’ (a previous essay) I had already called for a ‘musical gymnastics’ as essential for the singing performer, but I of course had no idea how to set about developing these. Dalcroze revealed them to me, and from that point on I could clearly see the route my progress would follow”\(^11\).

It became evident to Appia “By restoring the human body to its place of honor, and by banishing everything that does not emanate from it, eurhythmics has already taken an important step towards a comprehensive reform of our scenic and dramatic

\(^9\) Ibid., 6.

\(^10\) Ibid., 69

art”12. Through Eurhythmics, Appia was able to find in the human body a connection between space and time which was no longer reliant on the time intervals specified through music. Instead, the human body itself was able to define intervals of time through its own movements in space. These movements in space could then be used to define spatial volumes and both built space and lighting designs on the stage.

An example of the lesson Appia drew from his collaboration with Dalcroze is found in a series of drawings he made in 1909 and labeled “Rhythmic Spaces”, seen in image 4. On the creation of these drawings, Appia states: “...This is how the style of space appropriate for the rhythmic movement of the body was first formulated... I shall call this corporeal space, which becomes living space once the body animates it...”13 These hypothetical set designs were immobile, rigid, and sharply angled; however “when confronted by the softness, subtlety and movement of the body, would take on a kind of borrowed life”14 due to the contrast between the human body and the built form of the stage. These drawings were addressed by Dalcroze in a letter to Appia, saying: “I am deeply impressed with the beauty, simplicity, and power of your conception; I have never seen or known spaces that were more rhythmic or more evocative of rhythms... They take hold of me over and over again. I get unwound from them, then all wound up again. They show me the immediate relations between plastic, musical gestures and my

12 Beacham, Adolphe Appia: Texts., 93.
13 Beacham, Adolphe Appia: Artist., 119.
educational and aesthetic wishes”\textsuperscript{15}. It was these “Rhythmic Space” designs along with Dalcroz’s opening of Hellerau, an institute devoted to the practice and development of eurhythmics, that allowed Appia to put his ideas into practice and enter into what historians agree is the most important stage of his career. Not only did Appia himself design the theatre at Hellerau according to his ideas of a simplistic and three-dimensional set, but this design also marked an important moment in theatre history as it marked the first time in modern times that a theater was built without a proscenium arch and with a completely open stage. For the first time, in the great hall of Hellerau, Appia had a stage that dissolved the boundary between audience and performer. This may be seen in Images 15 and 16 as the performers are not restricted to occupy solely the space of a stage. Not only has the proscenium arch been eliminated, but the actors also are no longer raised above the level of the audience, leaving them occupying the same plane.

Appia’s designs and revolutionary theories pushed the boundaries of stage set and lighting design toward increasing simplicity and standardization. This simplified stage relied on “such elements as three-dimensional scenery, the expressive use of light and the evocation of psychology and atmosphere in scenic presentation”\textsuperscript{16}.

\textsuperscript{15} Denis Bablet, \textit{Adolphe Appia}, 26.

\textsuperscript{16} Beacham, \textit{Adolphe Appia: Texts}, 11.
As Appia’s theories developed, his designs became more simplified and severe, and his interests began to shift from purely stage design to encompass other forms of spatial design as exposed in his final significant publication *The Work of Living Art*. This shift in Appia's work and ideas occurred at a time of changing aesthetic theory led by a group of German aesthetic theorists at the turn of the twentieth century. It is to this we turn to understand the impact these theories had on Appia’s approach, his responsiveness to Dalcroze's eurhythmics, and the context of the theories of spatial design he developed late in life and tested through his sets.

The term empathy, translated from the German “Einfühlung” meaning “feeling into”, was first introduced into psychology by the psychologist Edward Titchener (1867-1927) in 1909. Prior to Tichener this idea of “feeling into” had been previously recognized as important in German philosophical circles, but did not have a long-standing technical tradition. As a term, “Einfühlung” had been used by philosophers to refer to the human ability to “feel into” nature or works of art. Romantic thinkers viewed it as an alternative way of understanding nature rather than the scientific method of analysis based on an examination of its parts. The belief held by these thinkers was by “feeling into” nature or a work of art it was possible to grasp its underlying spiritual nature.

Robert Vicher's essay “On the Optical Sense of Form: A Contribution to Aesthetics” (1873) introduced this idea of “feeling into” in a more technical sense related to art. He asserted the human body “projects its own bodily form – and with this also
the soul – into the form of the object”\textsuperscript{17}. For the role of the artist, Vicher states “the essence of artistic ideality (is) not to be conceptually aware of itself but to mirror itself in an individual object... Thus every work of art reveals itself to us as a person harmoniously feeling himself into a kindred object, or as humanity objectifying itself in harmonious forms”\textsuperscript{18}. Through his essay, Vicher created a methodology of analyzing not only nature, but also art through the lens of human perception, or the “feeling into”

Building on the work of Vischer, Theodor Lipps (1851-1914) ultimately identified empathy as important not only in analyzing aesthetics, but also as a central category of the philosophy of the social and human sciences\textsuperscript{19}. Lipps argued that alongside its role in our aesthetic appreciation of objects, empathy is the primary basis for recognizing each other as minded creatures. Thus empathy theory became not only relevant for analyzing nature and art, but also

In the late nineteenth century Adolf Hildebrand and August Schmarsow published their respective theories on empathy in design, suggesting a new way in which artistic representations could be analyzed as visual presentations. In his essay \textit{The Problem of Form in the Fine Arts} (1893), Hildebrand sought to tie the perception of an object, for instance, a sculpture, directly to the viewer of that object. He observed that the ways in which a viewer perceives a distant object in two-dimensions are vastly different from the

\textsuperscript{17} Vischer, Robert, Harry Francis Mallgrave, and Eleftherios Ikonomou. \textit{Empathy, Form, and Space: Problems in German Aesthetics, 1873-1893}. (Santa Monica, CA: Getty Center for the History of Art and the Humanities, 1994), 92

\textsuperscript{18} Ibid., 117.

perception of an object close to the viewer. While the distant object may be perceived as a self-contained spatial whole, the near object is inherently subject to the viewer's perception due to the movement of their own body including the rapid movement of the eye in relationship to the object and the type and quality of light being cast upon the object. This is a consequence of the mechanics of human stereoscopic vision which results in the brain synthesizing two disparate images into one three-dimensional object, such as illustrated in figure 17. The phenomenon holds true not only for works of art such as sculpture and bas-relief, a form of carving producing a three-dimensional space on an otherwise flat surface, but also for architecture and any three-dimensional object in space. Thus, as Adolphe Appia later argues, a person's perception of space is inherently tied to the formal aspects of that same space.

While an object is given an inherent form by the viewer's perception of it, its effective form is determined by its specific context. “Inherent” form is the form of the objects removed from any external stimuli or forces acting upon it, whereas its “effective” form is that which results from the relationship between the object and any external factors to it. The specific context of the object is significant as it alters its apparent spatial values. This may be by a change in the quality or quantity of light on the object: placing it in lighter, darker, harsher, or softer lighting environment. Colors from the context may be cast upon the object, or adjacent colors may alter the viewer's perception of the object, such as in the example of figure 18 where adjacent colors make a consistent color appear to change.
In so far as two-dimensional artistic representation is concerned, Hildebrand argues the merits of relief as it “defines the relation between surface movement and movement into depth”\(^{20}\). As it mitigates multiple dimensions, relief relies not only on two-dimensional representation as a painting does, but it also engages the third dimension, and the viewer’s stereoscopic vision.

While Hildebrand’s theory is primarily used to reference the merits of works of sculpture against two-dimensional painted surfaces, Schmarsow addresses the field of architecture directly, and thus indirectly other fields of spatial design such as theatre. While criticizing the perception of architecture as an “art of dressing”\(^{21}\), referencing the design of building facades and ornament, Schmarsow argues the essential feature of architecture itself is the “enclosure of space”. All works of architecture, no matter how simple or complex, are “spatial constructs” and thus have inherent spatial qualities that may be compared and analyzed. Then, in a similar manner to Hildebrand, Schmarsow sought to tie the form of architecture to the viewer’s perception of form. In his essay The Essence of Architectural Creation (1893), he called the resulting perception of the spatial qualities of a form its intuited form (Anschauungsform). According to Schmarsow, “All our visual perceptions and ideas are arranged, are ordered, and unfold in accordance with this intuited form; and the fact is the mother lode of the art whose origin and essence we seek”\(^{22}\). For Schmarsow, separating the field of architecture as distinct from the other

\(^{20}\) Vischer, Empathy, Form, and Space, 252

\(^{21}\) Ibid., 282

\(^{22}\) Ibid., 286.
fine arts was impossible, as it is the same spatial drivers in architecture that give form to all other artistic representations. In fact, Schmarsow famously posited that architecture was architecture itself is the “creatress of space”\textsuperscript{23}, meaning that the built environment guides how space is perceived. Human beings intuit space according to two primary axes: the vertical and the horizontal. As human beings occupy the world vertically as bipeds, the vertical axis becomes the axis of spatial enclosure. This can be seen in the form of the wall or column. The horizontal axis thus becomes the plane of movement and gives a perception of spatial depth rather than enclosure. Thus, through combinations of these two axes we gain understanding of the movements of the human body through space.

With this theory it is not space itself or an object in space that is significant, but rather how that space or object is perceived through human intuition. In this way both Hildebrand and Schmarsow ground their theories in the central idea of \textit{empathy}, human perception. As Vischer argued, “Our sense of space and spatial imagination press toward spatial creation; they seek their satisfaction in art”\textsuperscript{24}. The human body is the vehicle of perception, and those perceptions, including the perception of space, may in turn begin to shape the form of the world around us.

Into this context of late nineteenth century German aesthetic theory Adolphe Appia introduces his groundbreaking work in the theater, building upon the ideas of empathy espoused by people such as Hildebrand and Schmarsow. In Appia's consummate publication, “The Work of Living Art” published in 1921, the stage designer

\textsuperscript{23} Ibid., 288.

\textsuperscript{24} Ibid., 287
synthesizes ideas of perception, space, form, and the emerging technologies of the turn of the century in order to create his own theory of spatial design. This theory dramatically shifts the language of the stage away from two-dimensional backdrops with performers moving in front of them, instead advocating for an abstract, simplified, and three-dimensional set that allows for interaction between performers and the space of the stage. By making this transition away from two-dimensional sets and flattened, linear movements of actors, Appia places importance on human perception guiding the formation of spatial elements instead of relying on forced perspectives or painting to establish setting. In this approach to stagecraft echoes the writings of Vicher, who asserted the meaningfulness of pure form and the symbolism of form in our ability to "feel into" an object. In his own theories, Appia created a language between the human body moving through space and that space it moves through that allows for a simultaneous projection into space by the human body and built response to the body. As the body perceives itself in space, the spaces Appia theorizes anticipate that projection and are designed around the bodys' own movements.

While Appia is largely considered the most important theatrical lighting designer of the turn of the century, his innovations have important ramifications for the whole of theatrical art as well as for the realm of aesthetic theory he concluded his life pursuing. According to him, not only was the relationship between the body and space, the heart of Empathy Theory, crucial to design, but so also were the interrelation between time, light, and the human body. These he named respectively Living Space, Living Time, and Living Color.
Appia's theory of Living Time can be defined as “the art of expressing an essential idea simultaneously in time and space”\(^\text{25}\). In Appia’s early work designing sets for Wagnerian operas, he relied on the musical score in order to shape the hypothetical movement of performers, and eventually the built space of the stage as well.

For the physical stage, time is an essential aspect of what Appia refers to as the *mise en scène*. This is because “the *mise en scène*, as a setting in space which changes in the course of time, presents in essence a question of proportion and sequence. Its governing principles must therefore regulate its spatial proportions and their temporal sequence, each dependent upon the other”\(^\text{26}\). It was the expression of the temporal aspects of the *mise en scène* that Appia sought to express through his early designs of Wagner's Operas done in 1896 and seen in figures 19 through 21. The rhythm of the music itself, he believed, would inform the presence of built form and thus the scenic design for the opera would become an organic extension of its own soul, which was expressed through music. Appia asserts in his essay “Return to Music” that “Undoubtedly we have discovered that music finds in the movement of the body a uniquely precise and attractive expression. Wagner desired, without accomplishing it, a visual expression in his dramatic presentation appropriate to that of the music”\(^\text{27}\). This Appia accomplished by


\(^{27}\) Ibid., 77.
maintaining a simple and flexible set that would only change between acts of the opera. Elements of the sets would in turn signify multiple different scenic elements, such as the “trees” in Parsifal that may also be interpreted as columns in a temple, or a single set would be animated by changing lighting effects, such as with the Rock of the Valkyrie.

Music itself, as its own manipulation of time, creates “a formal language consisting of harmonic progressions, modulations, cadences, and intervals; and the addition of musical themes, such as the lyrical content...popularized by Richard Wagner, was extraneous to this process”\(^2^8\). In this way Appia’s assertion of Living Time is reflective of Empathy Theory, as human perception becomes central to its understanding.

This relationship between the musical score and the movements of performers is evident in his writing: “The varying lengths of musical sounds are realized in visible proportions in space. If music had but one sound and but one duration for this sound, it would remain time’s slave; as it happens, however, it has a kinship with space. Through groupings of sounds. The variable time-durations of these groupings are capable of an infinite number of combinations; accordingly, they are responsible for the phenomenon of rhythm, which is not only akin to space, but can be fused with it, through movement. And the body is the bearer of movement”\(^2^9\). Thus Appia establishes the primary relationship between the movements of the body and defined increments of time and ultimately the heart of his theory of Living Time. It is through interpretation by the human body that time is instead able to take up the designation of “Living Time”.

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This concept of time interpreted through the movements of the human body can be illustrated strongly through Appia's own work with Dalcroze in eurhythmics, staging the movement of performers to correspond to and be informed by the music of the production. When expressing space and time simultaneously, rhythm and gesture play key roles. Performers would act these out, either individually or in groups. What Appia discovers; however, is that where previously musical scores were the only method of expressing intervals of time, now through eurhythmics the human body itself could define time through the rhythm of its movements: “In this fact we reach the heart of the problem of living time; if previously (he) named music the supreme corrective and regulator, it was in anticipation of this point” 30.

While Appia asserts that the movements of the body themselves may express the temporal rhythms of a specific work on stage, he also concedes that the gestures necessary for such expression are not natural to the human body apart from this type of production. It must be a conscious effort put forward for “gymnastics — in order to strengthen our organism — impose on the body gestures whose proportions do not occur in our daily and natural life; but gymnastics do not necessarily suppress the life of our body thereby. In this simple technical exercise, we express the life of our body in a particular way, that is all” 31. It is Appia's belief that while the type of gesture needed for the expression of rhythm and time is not inherently found in our daily lives, it is a type of gesture that instead speaks to the soul, or inner life. “Our body, in order to be put to the

30 Ibid., 22.
31 Ibid., 22.
service of expressing our inner life — in order to express it, instead of merely referring to it symbolically — must modify its normal life considerably” 32.

Once the human body is able to measure time through its own gestures, it is ultimately able to alter the perception of time by controlling the perceived increments of it. Furthermore, it is through this expression of temporal increments in combination with the physical gestures of the body that time, through the body, is able to inform the design of spatial relationships. These spatial relationships may at last become elements of the stage interacting with the body naturally since their form is derived from the body's own movement.

While this dialogue between time, the human body, and spatial forms is directly applicable to Appia’s designs for the theatre, he also asserts the implications this aspect of his theory has in other design fields including sculpture and even architecture. In fact, Appia claims that the architect is better equipped to navigate the temporal aspects of human movement in space than the painter or sculptor due to the fact that “he has nothing to copy. His work in itself is already a modification of natural forms; but if it loses sight of the proportions of the human body and of the diversified movements of life, its modifications are arbitrary and unjustifiable. The time arts, having nothing to copy, share the lot of architecture; they are still more closely related through their common kinship with the living being” 33.

32 Ibid., 23.
33 Ibid., 23.
In the synthesis that Appia proposes between time and the living being, resulting in his concept of Living Time, both time and implied space become extensions of the human body. Thus the perception of time and the suggested spatial relationships outside of the body in essence become a mirror of the human body. While the progression of time itself is fixed, the human figure moving in specific increments in relationship to the progression of time may create the perception of varied temporal relationships. The same applies when the human body suggests spatial relationships through its movements in time and space. At last there is an expression of that "inner life" Appia describes, for what is the passage of time but the human perception of that passage. If the movements of the body then guide the perception of time, how much so does time itself become an extension of human life?

In the same way empathy theorists proclaim that the human body projects its own bodily form into the form of an object, Appia has concluded that the body may project its own perception of time into movement. Thus, the resulting expression of movement in time naturally translates into expressions of space derived from the human body.
Living Space: The Human Body as Articulator of Space

While Appia’s theory of Living Time addresses the regulation of space by intervals of time, what Appia defines as “Living Space” focuses on the relationship between the human body and the character of the space it occupies and defines. As the body has been able to interpret the passage of time in space, the question now is what type of space does this interpretation create?

Specifically, Appia espouses this type of defined space is created by “the victory of bodily forms over inanimate forms”\(^{34}\). These inanimate forms are asserted by Appia as being constructed from the interaction between and combination of two primary planes: “planes intended for movement, faster or slower, as the case may be, and subject to interruption; and those which exclude movement, serving to heighten the general effect of the body”\(^{35}\). Appia identifies this first category of plane, those intended for movement, as horizontal. The horizontal, with the ground plane expressing both weight and rigidity, is foremost intended to support a human body, “for before all else, the body must rest on a plane, and in so resting must express its weight”\(^{36}\). As such, it should oppose animate forms, and sharply contrast against the plasticity of the human body.

This necessity for opposition also holds true for vertical planes as they are intended to act as interrupters of movement and reflections of the human body in its

\(^{34}\) Ibid, 27.

\(^{35}\) Ibid., 25.

\(^{36}\) Ibid., 25-26.
primarily vertical condition in space. While the horizontal plane allows for the "feeling into" of movement, the vertical plane allows for the "feeling into" of bodily form.

These two planes may further be combined in the forms of ramps or stairs to create a surface that expresses both movement and interruption as the body claims victory not only over the inanimate, but also over gravity. Much like planes, space itself must oppose the body, for "opposition to the body gives life to the inanimate forms of space"\textsuperscript{37}. Volumes of space will thus carry the same weight given by the combination of planes that define them.

According to Appia, "Anything that tends to alter the expression of weight, no matter what purpose it serves, weakens bodily expression"\textsuperscript{38}. This extends to everything from material to surface coverings to furniture: “The different pieces of furniture built for the comfort and rest of our body are so constructed that they weaken the contact which we make with non-living matter”\textsuperscript{39}. It is through resistance and a strong contrast between the lines of a human body and the lines of rigid forms around it that the presence of that human body is expressed. “By opposing itself to life, the ground, like the pillar, can receive life from the body”\textsuperscript{40}.

Again, as Appia made the connection between his theory of Living Time and architecture, he now draws a comparison between Living Space and architecture. Much

\textsuperscript{37} Ibid., 27.
\textsuperscript{38} Ibid., 27.
\textsuperscript{39} Ibid., 26.
\textsuperscript{40} Ibid., 29.
like in his ideas of Living Space, for an architectural application “weight is a factor that is absolutely indispensable to bodily expression... Through it matter asserts itself; and the thousand steps on this assertion make up its expression”\textsuperscript{41}.

Through Appia’s writings, it becomes clear that the central idea behind his theory of Living Space is itself weight: “Weight, not mere heaviness!”\textsuperscript{42}. For him, in order for space to be living, the human body must gain victory over inanimate forms. It is through the projection of the body’s own weight throughout space that this victory occurs, and it is through opposition that inanimate forms recognize the body’s weight. The horizontal surface must oppose the foot that lands on it, in accordance with Newtonian laws; creating that opposite reaction that prepares the foot for it’s next step and the one after that. A ground that welcomes the foot weakens the movement of the entire body, and as a result withholds life from the space. The ground, as well as the movement of the body across it, is deadened as one cannot sufficiently react against the other.

Similarly, the vertical surface must become a projection of the human body in space, as human beings are inherently vertical creatures. Even the Classical Greeks recognized this in their portrayal of the Caryatids holding the weight of the Erechtheion. If these figures, instead of being given life through the strength and rigidity of the stone they are made of, were made of a material that would give way at the slightest touch, they would lose the life that would have been expressed through opposition to touch. The vertical element, being a projection of the human body in space, must therefore

\textsuperscript{41} Ibid., 27.
\textsuperscript{42} Ibid., 27.
resist the body, and by so resisting, “it acts! The opposition has created life in the inanimate form; the space has become living!”

With this assertion of the necessity of solidity, Appia’s idea of living space comes to a conclusion. It is born from living time as “music imposes its successive units of time on the movements of the body; this body, in turn, interprets them in terms of space. Inanimate forms, by opposing their solidity to the body, affirm their own existence — which, without this opposition, they cannot manifest so clearly — and thus close the cycle.” Again, Appia’s own theories echo the aesthetics of empathy as it is through the bodily perception of space that we experience it: “For our eyes, then, living space — thanks to the intermediary of the body — will be the resonator for the music, so to speak.”

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43 Ibid., 28.
44 Ibid., 30.
Living Color: Light and Color as Formers of Space

As we have seen, the ways in which the human body acts with time to create Living Time, and with space to create Living Space, Appia finishes his theory of living art with the creation of Living Color. It is his opinion “light is to space what sounds are to time — the perfect expression of life”\textsuperscript{46}. In Appia’s theory it is important to consider human biology, for the idea of living color is tied directly to the presence of light. The human eye is only able to interpret color through the reflection of light; therefore it is impossible to analyze the role of color in aesthetic work without also taking into consideration the role of light. According to Appia, “color... is a derivative of light; it is dependent thereon, and — from the scenic point of view — dependent in two distinct ways. Either the light takes possession of and becomes one with the color, in order to diffuse it in space, in which case the color shares the existence of the light itself; or the light is content to illuminate a colored surface of an object, in which case the color remains attached to that object, receiving life only by virtue of the object, and through variations in the light which makes it visible”\textsuperscript{47}.

The question, should color free itself from this attachment to surface by becoming one with light or instead remain tied to an object’s surface? According to Appia, “Color, in the first instance, is ambient, pervading the atmosphere, and — like the light — taking part in movement; consequently, it bears a direct and intimate relation to the human

\textsuperscript{46} Ibid., 31.

\textsuperscript{47} Ibid., 31.
body”\textsuperscript{48}. This relation to the human body again speaks to the idea of Empathy, as, like in both “Living Time” and “Living Space”, light becomes “Living Light” through the body’s ability to “feel into” it. This may be accomplished in two different ways in Appia’s work, in the ability for color as light to convey presence or to convey mood.

Opposed to this idea of “Living Light” is the attachment of a color to an object previously mentioned. Appia asserts that in the expression of color, it “…can act only by opposition and reflection; if it moves at all, it does not move of itself, but only with the object which reflects it. Therefore, though its life is not fictitious, as in painting, yet it is totally dependent… These distinctions are necessary for the correct handling of color in living space; they prove the difference existing between color in painting — a fiction on a plane surface — and color in action, effectively diffused in space”\textsuperscript{49}. In order to become compatible with the human body, and the expression of the body in both space and time Appia asserts as necessary in his identification of Living Space, color must be active. It must share the ability of the body to move in time. The “fiction” that Appia refers to is the immobility inherent to color in painting: “Now it is this very principle of immobility which gives painting its finished character, its perfection; and since living art must renounce this perfection, the sacrifice is quite apparent — especially in the case of color”\textsuperscript{50}. While Appia concedes the elimination of surface color in his designs is in fact a sacrifice, it becomes necessary to him that color, when implemented, is both spatial and

\textsuperscript{48} Ibid., 31.
\textsuperscript{49} Ibid., 31-32.
\textsuperscript{50} Ibid., 32.
takes on an active presence that is responsive to the body. Color itself becomes a character in space when it is animated by light, and as such becomes subject to projecting the viewer’s bodily form as it takes on the role of “living color”. In fact, Appia asserts the idea of painting may be separated from the idea of color, for “in analyzing the essential character of painting, we saw that it has nothing in common with living space and living time. It is only proper, then, to distinguish clearly the idea of painting — fictitious groupings of color — from the idea of color in itself”\textsuperscript{51}. As painting only provides a two-dimensional representation of life, the human body cannot directly interact with it. As a result of this, it must become separate from the “living art” espoused by Appia: “Dramatic art is above all an art of life; and it is precisely in relation to the representation of that life, given as a point-of-departure, that we must effect a synthesis”\textsuperscript{52}.

Color, in order to take up its role, as “Living Color” must, like time and space, result from and in response to the movements of the human body. Appia claims that “it is from the body that the stage decoration must be born or must arise — and not from the detached imagination of the dramatist. We know now that only the living body of the actor can dictate to space”\textsuperscript{53}. It is in its response to the life of the body, and through human perception of color in space that color itself is given life. This realization affirms Appia’s view on the unnecessary role of painting on the stage, for “painting, so to speak, signifies form, light, color, etc., in a fiction like that of a poetical text without music;

\textsuperscript{51} Ibid., 34.
\textsuperscript{52} Ibid., 33.
\textsuperscript{53} Ibid., 35.
hence, it is qualified to take the role of visible symbolization whenever this is indispensable... In many cases, living light and living color will be able to approximate the “signification” by making their expression concrete through the form or the movement of a shadow, the color or the direction of a light".  

Having established that light and color liberated from surface are able to approximate the same significations as the painted surface would have, it now becomes a question of how these significations are to occur. In order to address this, again the human body itself must be brought into question, for if living light only attains its life through the life projected onto it by the human body, the qualities the human body is able to recognize in itself are the ones it recognizes as significant in light. These qualities are volume and movement. Volume, such as expressed through a projected figural light, and movement, seen in fluctuating light or changes in its color or location, echoes the body's own ability to occupy and move through space, thus creating the ability for these types of light to influence the perceptions of the human body at the same time that they are given life by these perceptions.  

These two qualities of volume and movement are evident to Appia as he writes “certain details of space, of fixed color used with fluctuations in light, of ambient color, of partial obstructions casting more or less mobile shadows which mean nothing definite, but which contribute to the life of the movement — are of this type. There is one condition, however: the living body must accept them as playing a part in its creation in space. The dramatist-stage-director is a painter whose palette should be living; his hand

54 Ibid., 36-37.
is guided by the choice of living colors, their mixture, and their arrangement, by the actor. Then the actor himself is plunged into this light, realizing in time what the painter could conceive only in space.”\textsuperscript{55} Thus, by providing the impression of how the human body might feel in a specific space, is light able to convey the reality of that space. Color no longer represents objects on a two-dimensional canvas, for “by renouncing the fictitious role it has in painting, color attains life in space; but in that case it becomes dependent on light and on plastic forms, which determine its variable importance. Its living reality deprives it of the objects which it would represent fictitiously on the canvas; we need hardly seek its help, then, to represent objects on the stage.”\textsuperscript{56}

\textsuperscript{55} Ibid., 37.

\textsuperscript{56} Ibid., 37.
Epilogue: An Aesthetic of Perception

While Appia originally was inspired by and spent the majority of his life pursuing scenic design, his exploration of the ideas of Empathy Theory in set design create a relevance in his work for multiple design disciplines. As Appia concludes in The Work of Living Art, “In an age when, in every field of knowledge, we are seeking to learn more about ourselves, how can one help being startled by our ignorance concerning our own body, concerning our entire organism, from an aesthetic point of view?”\(^{57}\). Similar to empathy theory, Appia’s theories revolve around the human body and the human perception. It is with the human body that his stage sets finally obtain a life of their own. In this way, inanimate objects are given animation through their interaction with the human body and perception. According to Appia, “We have seen that the artistic value of the moving body constitutes an important technical problem to solve for the future of our culture”\(^ {58}\). The “Living Art” that he theorizes, while having immediate applications for the stage, may also extend to the realm of art, sculpture, or even architecture.

Appia himself envisioned his work as assisting in forming human connections, with the potential to move beyond the stage and into the ways in which people conduct their lives. He expresses his desire for the future of human interaction in his plea for a refusal “to dash from one place to another for activities which we must watch as spectators, and whose form we cannot penetrate. Let us seek a place where our newly-born community

\(^{57}\) Ibid, 68.

\(^{58}\) Ibid., 77.
of purpose can be clearly asserted — a place flexible enough to afford the realization of our every desire for a complete life"\textsuperscript{59}. His challenge to dissolve the barriers between our public and private lives, and to refuse to remain spectators echoes his own work in the theatre breaking down the barriers between performer and spectator. These flexible spaces of community he labeled “Cathedrals of the Future”\textsuperscript{60}.

Echoes of this theory of built space may be seen in the work of the German Expressionist architects, such as Bruno Taut, Rudolf Steiner, and Hans Poelzig, working at the same time as Appia. Taut and Poelzig in fact developed set designs for motion picture or theatrical use, an example of which may be seen in figure 22, while Steiner developed a series of lectures on eurhythmy.

As Appia’s own theories lead him to envision a Utopian future defined through the built spaces of our lives, so too does Bruno Taut’s own architecture reflect these same Utopian ambitions. For Taut, the future was to be defined by glass. Color and light would intermingle in a way reminiscent of Appia’s theory of Living Color in order to shape the daily lives of people. Taut’s own utopian cities drawn in “Alpine Architecture”, shown in figure 23, even echo Appia’s “Cathedrals of the Future”.

While it is unknown if there was a direct link between Appia’s work and the architects of German Expressionism, they appear to share the same ambitions and influences, to place humankind center stage in relationship to our built environment. They interpret this idea in relation to human perception: the only sense through which

\textsuperscript{59} Ibid., 78.

\textsuperscript{60} Ibid., 78.
we experience the world is the sense of human perception; therefore our art, theatre, and buildings should reflect that perception. As Appia concludes in *The Work of Living Art*: “Let us learn to live art in common with others; let us learn to free ourselves, to experience in common the deep emotions that bind us together. Let us be artists! *We can*”\(^{61}\).

The subject of this study is significant not only in the realm of theatre set and lighting design, as the work of Appia, though recognized has not been subjected to formal analysis, but also to designers of space in general. Through an analytical understanding of Appia’s work and theories in the context of empathy theory, his ideas of living time, space, and color become not only accessible but also relevant to the work of designers today. Again, changing technology is challenging the ideas of human perception, and theories such as Appia’s create a language for design that is based in responding to it.

\(^{61}\) Ibid., 72.
Images

1. The Bayreuth design of 1876 for the first scene of Das Rheingold, as conceived by Joseph Hoffman.

2. The 1896 setting for the Walhalla landscape, Scenes Two and Four, as designed by Max Bruckner.

3. The Emile Jaques-Dalcroze Institute at Hellerau

4. Adolphe Appia, Rhythmic Space Designs of 1909


6. Set Design by Edward Gordon Craig

7. Set Design by Josef Svoboda

8. Stage set for 'Macbeth' 1921 by Robert Edmond Jones.

9. Gas Lighting for the Stage

10. Early Electric Lighting for the Stage

11. Proscenium Arch

12. Early electric footlights


15. Orpheus: Act II Descent into the Underworld: Rehearsal at Hellerau

16. Eurhythmic Exhibition at Hellerau

17. Stereoscopic Vision Diagram

18. Color Optical Illusion


20. Adolphe Appia, Tristan and Isolde: Act II Design of 1896

22. Hans Poelzig, Set Design for Der Golem (1915)

23. Bruno Taut, Alpine Architecture (1917)


27. Analysis Diagram: Rhythmic Design of 1909, 'The Staircase”


30. Analysis Diagram: Rhythmic Design of 1909

31. Analysis Diagram: Appia's 1926 Version of the 1912 Design for Elysian Fields

32. Analysis Diagram: Echo and Narcissus
Die Ausführung ist ganzes ungebräuchlich, schwer und opferreich, aber nicht unmöglich. Man verlangt so selten von den Menschen das Unmögliche. [Goethe]
This design for Wagner's 'Parsifal' illustrates an early design of Appia's before the development of his theory of “Living Art” or his work with eurhythmics. As such, Appia describes this design as part of his “romantic” period.

Formally, 'The Sacred Forest' is derived through the character and quality of Wagner's score, however Appia further creates this set to blur the line between nature and architecture. While the columns of the set are initially intended to convey trees, the setting of the act transforms from a forest in the beginning to the Temple of the Holy Grail at the end. As such, the columns initially representing trees become the architecture of the temple at the end of the act.

Early explorations of Appia's “Living Color” can be seen in this set design through the presence of directional light, originating from an unseen source to the right of the stage. Furthermore, an ambient light washes the back of the scene, creating a clear break between foreground and background.
As one of Appia’s Rhythmic space designs, ‘The Shadow of the Cypress’ was designed during his period of work with Emile Jaques-Dalcroze at Hellerau. As these designs were intended to accompany eurhythmic performers, they implement lighting effects and formal compositions that respond to the human body.

This particular rhythmic space is intended by Appia to invoke the sensation of an avenue of cypress trees and by extension an entire countryside through a single shadow. The shadow, cast by an unseen cypress, is further intended to change in nature due to fluctuations in light that correspond to the musical rhythm. The fluctuating shadow gives the sensation of a person being under tree cover in the countryside though there is not a tree physically present in the set. While illustrating Appia’s theory of “Living Color” through the changing directional light, the unseen tree further illustrates a theme Appia employs in many of his sets of an unseen presence off stage.
As one of Appia’s Rhythmic space designs, ‘Moonbeam’ was designed during his period of work with Emile Jaques-Dalcroze at Hellerau. As these designs were intended to accompany eurhythmic performers, they implement lighting effects and formal compositions that respond to the human body.

‘Moonbeam’ applies Appia’s theory of “Living Color” through the dramatic presence of light that bisects the vertical space of the set. While this light creates a definitive separation of tones on the back wall, this would also translate in three dimensions as it would illuminate performers moving up and down the single set of stairs. Because this design is comprised mainly of horizontal elements, the diagonal of the light is complemented by the diagonal of the stair. The human body, as a vertical element would stand in opposition to both the horizontal and diagonal elements in the scene.

While many of Appia’s sets are defined by a sense of infinite space, this set is closed in on multiple sides. Instead, light coming from the side suggests extending space to the sides of the scene.
As one of Appia’s Rhythmic space designs, ‘The Staircase’ was designed during his period of work with Emile Jaques-Dalcroze at Hellerau. As these designs were intended to accompany eurhythmic performers, they implement lighting effects and formal compositions that respond to the human body.

‘The Staircase’ illustrates Appia’s theory of “Living Space” in its use of rigid horizontal and vertical planes suggesting movement and stasis respectively. The foreground of this set is built of layered horizontal elements, responding to the movement of performers. However, light is framed in the background by two vertical planes that terminate in a reflective surface. While the framed light becomes its own presence, the vertical planes of the background furthermore act to frame the human body present in the foreground. Thus the vertical figures in the foreground are reflected in the vertical planes of the background.
As one of Appia’s Rhythmic space designs, ‘An Arrangement of Steps Walls and Podia’ was designed during his period of work with Emile Jaques-Dalcroze at Hellerau. As these designs were intended to accompany eurhythmic performers, they implement lighting effects and formal compositions that respond to the human body.

While light is a key element of this design, it acts as a secondary character to the language of vertical and horizontal planes created by Appia. This set formally becomes a series of higher and smaller spatial volumes, along which the primary movement of performers occurs. Appia connects the multiple levels of horizontal planes through the diagonals of the stairs, which to him convey both movement and enclosure, and shrinks the receding volumes of space through vertical planes. Along with directing movement, this shrinking of spatial volumes also creates a forced perspective, which is unusual in Appia’s set designs.
As one of Appia’s Rhythmic space designs, ‘Forest Glade’ was designed during his period of work with Emile Jaques-Dalcroze at Hellerau. As these designs were intended to accompany eurhythmic performers, they implement lighting effects and formal compositions that respond to the human body.

This design of Appia’s, ‘Forest Glade’, is significant in that it combines his theories of living color, living space, and living time. He proposed mobile arrangements of light and shadow that produce the bodily feeling of being in a forest while also dividing the visible scene through vertical elements in the foreground. These would echo the presence of performers in the set.

Furthermore, the vertical elements that divide the foreground of the scene break up the movements of actors visually, allowing for the manipulation of the viewers perception of time passing in accordance with Appia’s “Living Time”.
As one of Appia's Rhythmic space designs this set was designed during his period of work with Emile Jaques-Dalcroze at Hellerau. As these designs were intended to accompany eurhythmic performers, they implement lighting effects and formal compositions that respond to the human body.

This rhythmic space is organized by Appia to express the movement of performers in three dimensions. Multiple levels of horizontal planes are connected through the diagonal form of stairs. The two primary masses of this composition are then interrupted by the implied vertical void between them, reinforcing Appia's assertion that the vertical plane is the plane of interruption. This implied vertical element finds reciprocity through the vertical figures of actors as they occupy the primary horizontal planes.
In this set designed for act three of “Gluck’s Orpheus”, Orpheus encounters the Spirits of the Blest while searching the underworld for Eurydice. Appia asserts that the musical score at this point mandates a complete serenity in the set that may only be accomplished through sloping planes and stairs. No vertical plane can interrupt the movement of the performers, which would be calm and quiet to match the music. The lighting of this scene is also intended to be uniform and have a gental mobility that creates a dematerialization of the built set, making it and the characters appear unreal and otherworldly. The horizontally dominant scene is transformed, however, through the presence of actors, whose vertical forms act in stark opposition to the form of the set.

This drawing was influential to Edward Gordon Craig as he described it in a letter to Appia as “How gracious – How perfectly temperate – How GOOD”.

This set design was intended to convey the appearance of a rock outcropping alongside a pool of water in which Narcissus would admire his reflection. Though there is no water present, five niads would create the perception of water through their movements on the lower level, murmuring and gesturing when Narcissus’s reflection was cast in the pool. Furthermore, the stairs sloping down to the lower level convey the mobility and serenity of the water. All that is required to express trees in the scene is the presence of two columns on the left. Their verticality is echoed in the void in the center of the set, which implies a vertical presence bisecting the scene.

In this design, light is kept even and diffuse rather than direct, giving importance to the formal composition of the set and the movements of the performers.
Notes


2. Ibid., 12.

3. Ibid., 15.


5. Denis Bablet, Adolphe Appia., 23.


10. Ibid., 69.


18. Ibid., 117


20. Vischer, Empathy, Form, and Space., 252

21. Ibid., 282.

22. Ibid., 286.
23. Ibid., 288.
24. Ibid., 287.
27. Ibid., 77.
30. Ibid., 22.
31. Ibid., 22.
32. Ibid., 23.
33. Ibid., 23.
34. Ibid., 27.
35. Ibid., 25.
37. Ibid., 27.
38. Ibid., 27.
40. Ibid., 29.
41. Ibid., 27.
42. Ibid., 27.
43. Ibid., 28.
44. Ibid., 30.
45. Ibid., 30.
46. Ibid., 31.
47. Ibid., 31.
48. Ibid., 31.
49. Ibid., 31-32.
50. Ibid., 32
51. Ibid., 34
52. Ibid., 33
53. Ibid., 35
54. Ibid., 36-37
55. Ibid., 37.
56. Ibid., 37.
57. Ibid., 68.
58. Ibid., 77.
59. Ibid., 78.
60. Ibid., 78.
61. Ibid., 72.
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