Jean Gebser's Aperspectival Consciousness and Modern Architecture

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Jean Gebser, a prominent German-Swiss philosopher, introduces a transformative framework that aims to elucidate human consciousness and cultural structure, laying the foundation for a new approach to interpreting the development of architecture. This paper delves into the intersection of Gebser's theory and modern architecture, with a particular focus on the emergence and advancement of the "aperspectival" spatial concept in the work of German architect Hans Scharoun as an illustrative example.

Challenging the prevailing linear understanding of time and space, Gebser's *The Ever-present Origin* offers insights into the forms and mutations of human consciousness from its primordial beginning to the "present," positing that humanity evolves through different modes of consciousness, with each mode building upon and transcending the previous one. Gebser believes that because a key aspect of understanding human perception of time and space is the notion of perspective, the discovery and application of perspective indicate people's consequent awareness of space. Therefore, based on the absence or presence of perspective, Gebser recognizes three "epochs" in human history, "unperspectival," "perspectival," and "aperspectival," which correspond to the era from the inception of human civilization to the Renaissance, from the Renaissance to the early 20th century, and from the twentieth century onward, respectively.

Gebser's philosophy thus provides a new framework for us to understand architecture. Borrowing Gebser's analysis of the "aperspectival" consciousness, this paper shows that the development of modern architecture during the early decades of the twentieth century embraced a new spatial language that was aimed to reconcile the fragmentation of modern life and form a harmonious wholeness, resonating with the evolving human awareness of "integrity." The work of notable architects, such as Frank Lloyd Wright, Walter Gropius, and particularly Hans Scharoun, emphasized the interpenetration of spaces, the blurring of inside-outside boundaries, and the liberation from the linear perspectival

spatial construction. The paper thus explores the profound affinity between Gebser's concept and Scharoun's architecture, demonstrating that in his theater and concert hall projects, Scharoun challenged both the linear perspective tradition and linear progression of time. Through a close reading of Scharoun's spatial creation, this paper argues that the architect experimented with new spatial concepts such as "simultaneity" and "aperspectivity" and designed structures that not only accommodated the changing needs of individuals, programs, and society but also promoted a holistic and integral consciousness.

German-Swiss philosopher, linguist, and poet Jean Gebser (1905-1973) was born Hans Gebser in Posen, a province of Prussia. He left Germany in 1929 and moved to Spain and then to Southern France where he changed his German first name to the French "Jean." In 1939, Gebser fled to Switzerland, escaping only hours before the border was closed. Gebser's philosophical thinking focused on human consciousness, which bore anthropological, sociological, psychological, philosophical, and spiritual significance. *The Ever-present Origin*, Gebser's magnum opus, offers his insights into the forms and mutations of human consciousness and its structure from its primordial beginnings to "the present," Gebser's time, through the mid-20th century. Gebser maintained that the discernible consciousness structures in the course of mankind's history had "evolved," if not mutated, through "epochs." The original contribution of Gebser's work, which is beneficial to the study of architecture, was that he based the periodization on unique forms of visual expression.[1] Gebser's premise was that the essential trait of a new epoch and reality—noticeable in nearly all forms of contemporary expression—is people's awareness of their inseparable bond to their consciousness of "space and time."[2]

Key to understanding humans' awareness of space and time, at least in the European context, according to Gebser, was the notion of perspective. He believed that the discovery and application of perspective indicated people's "consequent coming to awareness of space."[3] Therefore, based on the respective absence or presence of perspective, Gebser identified three "epochs" in human history of what he called "unperspectival," "perspectival," and "aperspectival." The first, or the

"unperspectival," era was from the inception of human civilization to the Renaissance; the second, or the "perspectival," epoch began from the Renaissance to about the early 20th century; the emerging "aperspectival" time was from the 20th century onward. Gebser's ideas on these three eras are summarized as follows.

THE "UNPERSPECTIVAL" EPOCH

Gebser believed that perspective indicates people's spatial consciousness. During the "unperspectival," or "pre-perspectival" epoch, due to the lack of perspectival awareness, the consciousness of objectified space was still dormant. Thus, humans were completely submerged in and coextensive with the world. Regarding manifestations, the free-standing stone structures in Megalithic architecture culture, the non-spatial nature in Egyptian architecture, and the post-lintel structural system in Greek architecture all demonstrated that people from this epoch could only see "undifferentiated space," suggesting an absence of any confrontation with space that is external to people.[4] In fact, "space" in antiquity was always associated with a sense of security in the maternal world and embodied the "unperspectival" man's inextricable relationship to his parental world and, consequently, his complete dependence on it which excluded any awareness of ego in our modern sense. As Gebser argued, "people remain sheltered and enclosed in the world of the 'we' where outer objective space is still non-existent."[5] In the "unperspectival" world, Gebser maintained, the lack of spatial consciousness coincided with the absence of self-identity, and spatial awareness presupposed the objectification and qualification, or abstraction, of space, which required the self-conscious "I" to "stand opposite or confront space, as well as to depict and represent it by projecting it out of one's soul or psyche."[6]

THE "PERSPECTIVAL" WORLD

The "perspectival" world, as perceived by Gebser, showed distinct signs of inception around 1250 A.D. in Christian Europe. It was in Giotto's work where people first saw an incipiently objectified external world. Despite the predominantly religious theme in Gitto's landscapes, his paintings nonetheless marked a departure from the "unperspectival" consciousness. Ambrogio and Pietro Lorenzetti (1290-1348 and 1280-1348, respectively) as well Brunelleschi's experiment in front of the San Giovanni Baptistery externalized the self-contained inner self into the heavenly landscape and urbanist view. These works featured realistic scenery, as opposed to symbolic representations, of the landscape and building. As such, a consciousness of space characterized by spatial depth began to emerge and became increasingly perceptible.

Although perspective has been considered the preeminent expression of the objectification of spatial consciousness, its arrival had double consequences. On one hand, perspective extended people's perception of the world. On the other hand, it narrowed their field of vision and solidified the relationship between humanity and space and confined individuals to a limited realm where they could only perceive a fraction of reality. Thus, one of the profound implications of the perspectival consciousness of the world was the neglect of "wholeness." The excessive emphasis on abstract, objectified space through the discovery and application of perspective also led to "an unavoidable hypertrophy of the 'I' confronting the external world."[7] In particular, the spatial awareness dominated by perspective resulted in three distinct fields, as articulated by Piero della Francesca (1415-1492), "the first is the eye that sees; the second, the object seen; the third, the distance between the one and the other."[8] Indeed, perspective not only positions the observer but also the observed, creating a split between these two domains. Just like Erwin Panofsky (1892-1968) stated in his *Perspective as Symbolic Form*, "Perspective creates distance between human beings and things […] Thus the history of perspective may be understood with equal justice as a triumph of the distancing and objectifying sense of the real, and as a triumph of the distance-denying human struggle for control."[9]

Furthermore, the rational abstraction of space led to an ever-greater neglect of "time." In particular, the perspectival spatial construction puts restrictions on where people perceive external reality. To obtain conformity between one's direct spatial perception and the corresponding perspectival construction, it is assumed that the subject is static. In other words, the rationalization of space excludes the temporal dimension as well as the bodily movement. To Gebser, this particular ignorance leads to a feeling of "guilt" and even anxiety to "look for" time, marking the beginning of the "decline of perspectival age" and the rise of the "aperspectival" epoch.

THE "APERSPECTIVAL" CONSCIOUSNESS

Based on a desire to liberate existence from the tension between "anxiety" about time and "delight" stemming from the conquest of space, people from the early 20th century entered a new era which Gebser called "aperspectival." The term "aperspective"—with a Greek prefix "a-" meaning "away from" or "free from"—indicates a liberation, rather than mere negation or opposition, from the exclusive validity of both "perspective" and "unperspective." The use of "aperspective" thus denies both the possibility to uniting the inherent coexistent "unperspectival" and "perspectival" structures and the attempt to reconcile or synthesize these two structures.[10] Gebser's concern of "aperspectivity," however, was with integrality and ultimately "wholeness."[11]

Gebser believed that the "aperspectival" consciousness, although still taking shape when he was working on his book, would become the dominant awareness in the new century. Again, he examined new forms of expression in pictorial art to support this claim. Consider, for example, Picasso's paintings completed in the 1920s (Figure 1). Instead of striving for psychological connotations such as "beautiful," Gebser valued the "integral" quality, meaning that the artist successfully incorporated "time" into the

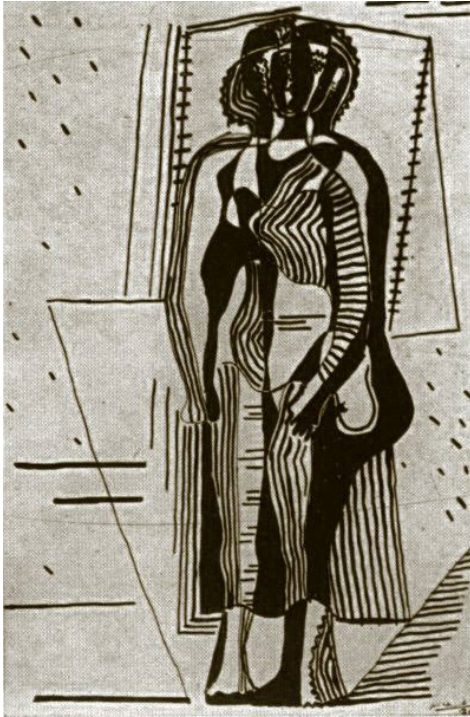artwork by presenting various aspects of the subject simultaneously to the viewer.

Figure 1. Picasso, Femme Debout, 1926

In Gebser's view, this new representation mode was neither "unperspectival" nor "perspectival," but rather "aperspectival," as the sense of time was integrated and concretized as a "fourth dimension."[12] By the "fourth dimension," Gebser did not mean merely the measurable time but rather a new expression of temporal quality. Just like the notion of "aperspectivity," time was an "a-categorical element" or "a-mension,"[13] that would elicit a holistic and integral sense of "freedom" from the chronological time, which I will return below.

"APERSPECTIVITY" IN MODERN ARCHITECTURE

In addition to modern painting, modern architecture, in Gebser's view, also manifested the emergence of "aperspectival" consciousness. In particular, new conceptions of space developed during the early 20th century sought to resolve the problem of opposites, or "destructive dualism," to express the notion of time, and overall to attain the sense of "wholeness." For instance, he noticed that Giedion's evaluation of perspective in the spatial conception of the Renaissance and modern period in *Space, Time and Architecture* conformed his own argument. Gebser pointed out that Giedion's idea on the "dissolution of perspective" and the "transformation of the space in space-time" in both Cubism and Gropius's Bauhaus building bore important similarities with the "aperspectival" awareness.[14]

Gebser contended that Frank Lloyd Wright also promoted the notion of time in his architecture, as Wright once said "The new standard of space" consisted of "space measurement in time."[15] Even though Gebser did not go into details, Wright's spatial concept featuring the "lively interpenetration of space" emphasized the temporal aspect in architecture through dynamics and movements.[16] The buildings that showcased the aperspectival quality of continuous flows of space, "free plan," and open construction can also be seen in Mies' German Pavilion for the 1929 International Exposition at Barcelona, Lucio Costa and Oscar Niemeyer's Brazilian Pavilion at the New York World's Fair in 1939, and Alfred Roth and Emil Roth's Doldertal Apartment Houses in Zurich. All of these architectural manifestations were important to Gebser because they were not only free of historical styles derived from "superannuated systems of proportion" but also, more importantly, presented spatio-temporal continua.

To Gebser, the most important modern pioneer whose work illustrated the aperspectival consciousness was German architect Hans Scharoun, who intended to create spaces that were free from the influence of perspective. Scharoun's "New Philharmonic Hall" in Berlin, as Gebser noted, "surpassed the rigidity of fixed perspective and initiated new formations deeply indebted to the new consciousness."[17] In fact, the recognition between Scharoun and Gebser was mutual. In Scharoun's archive at the Academy of Fine Arts in Berlin, there was a letter dated December 21, 1965, addressed to Scharoun from Gebser, thanking the architect for the sixtieth birthday blessings.[18] Scharoun's friend and mentor, Hugo Häring (1882-1958), also read Gebser's work published in 1949. In his 1952 lecture "vom neuen bauen," Häring stated that "A Swiss scholar, Jean Gebser, has pointed out profound changes that heralded a turning point in our thinking, which he calls an aperspectival age."[19] Compared to Häring, who mainly used Gebser's thinking to justify his idea about the "New Building," Scharoun adopted Gebser's idea into his designs. As Scharoun's student and assistant Jürgen Pahl emphasized, Gebser's "introduction of the temporal dimension into space, or the 'spatialization of time' [...] expressed its strongest emanation in the work of Hans Scharoun,"[20] an achievement which I will then discuss using three of Scharoun's theater and concert hall projects.

KASSEL STATE THEATER

In 1952, Scharoun was invited to participate in the competition for the new State Theater of Kassel. His design featured two theater halls, with 1,100 and 760 seats respectively. In these two spaces, Scharoun aimed to achieve the "necessary intimacy" (*notwendigen Intimität*) between the actors and the audience, intending to involve the viewers more closely in the theatrical events on the stage through structural and spatial measures. Scharoun envisioned this theater to be freed from the "courtly idea of representation" (*höfischen Repräsentationsgedanken*), the realistic theatrical performance and celebrations that emerged in the Renaissance across Europe as an essential component of the practice and cult of the ruler.[21] Serving less as pure

entertainment than the representation, this kind of event relied on perspective to enable the pictorial construction of fantastic stage settings and offered rich possibilities to satisfy the longing for the glorification of the ruling house and the manifestation of its claims of power over other dynasties.[22]

In the Kassel State Theater, Scharoun sought to "provide a premise for the presentation of a lively integration between the world of 'appearance' (*Schein*) and the world of 'reality' (*Sein*),"[23] as shown in a revised version of the theater plans. To that end, instead of having a framed stage with a proscenium arch, Scharoun designed a grand stage with a wide portal of twenty meters in width (Figure 2). This extraordinarily extensive opening would not only have the capacity to accommodate a wide range of plays, concerts, and operas but also bring the spectators and performers closer. To enhance the more immersive experience, Scharoun also placed a large window next to the second revolving stage behind the front one to admit natural light into the space and allow the audience to get a sense of the city view beyond. The small theater hall was accommodated on one side of the main stage of the great hall. As a result, the two halls would share the same backstage area, which would be lit up by the daylight and allow more flexible staging and event types. Here we can identify Scharoun's attempt to discard the traditional backdrop on stage, which was employed to convey illusionistic spaces.
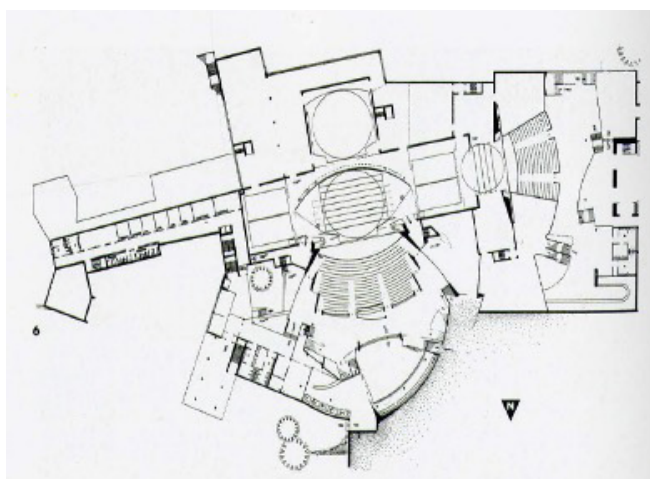

Figure 2. Floor Plan, Kassel State Theater (the main theater hall is in the middle, with the small hall to the right, and the offices and workshops on the left), 1952

MANNHEIM NATIONAL THEATER

Even though Scharoun's Kassel State Theater project was never built, his innovative theater hall received significant development in his entry for the Mannheim National Theater competition of 1953. Scharoun used the opportunity to investigate into the fundamental principles of theater, spanning from ancient to contemporary times, and to offer novel alternatives for theatrical

space that would harmonize with the city and meet the new demands of performing arts. Scharoun's investigation involved his discussions with Häring and culminated in a research paper written by Häring's assistant, Margot Aschenbrenner.[24]

Titled "Über die Baustruktur des Theaters - Drame und Raum - Geschichtliches und Folgerungen" (About the Building Structure of the Theater - Dram and Space - History and Consequences), this paper distinguished two distinct types of theater, which she called "rational" and "irrational."[25] (Figure 3) Due to their metaphysical and spiritual theme, which transcended specific time and locations, Greek theater, medieval plays, and Shakespeare's plays were all considered "irrational."[26] The discovery of perspective during the Renaissance heralded the beginning of "rational" theater, epitomized by Andrea Palladio's Teatro Olimpico, but reached its peak arrived in the French Classical theater, exemplified by the 1780 Théâtre Français in Paris, designed by Charles de Wailly and Marie-Joseph Peyre.[27] "Rational" indoor theaters adopted the proscenium, which served as a frame into which the audience observed a represented illusion of static perspectival reality tied to a specific location at a particular time. The proscenium then gave rise to two distinct spaces: one for the audience and one for the stage.
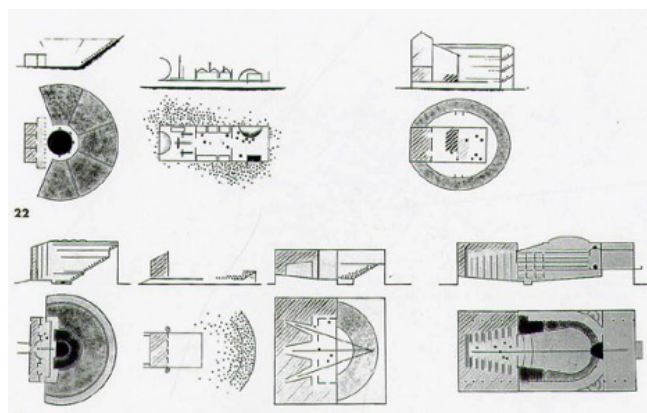

Figure 3. Diagrams of Historical Theater Types: "Irrational" (top) and "Rational" (bottom), 1953

This study led to Scharoun's design for the Mannheim National Theater, specifically a new auditorium layout aimed at "reuniting the stage and the audience," akin to the "irrational" theater, where a spiritual dimension would foster a sense of "togetherness and harmony."[28] In particular, Scharoun extended the stage area to accommodate multiple theatrical scenes taking place side by side and organized the audience into different angled sections to encourage potential bodily and optical movements (Figure 4).

Both Scharoun and Aschenbrenner believed that this theater space could evoke an "aperspectival" sense, as described by Gebser. As Aschenbrenner argued, "the aperspectival view of things is, by its nature, an affected view."[29] Aligned with

Aschenbrenner's view, Scharoun's goal for the new Mannheim theater was to "grant places," quoting Heidegger's famous line from the lecture called "Building Dwelling Thinking" delivered in 1951. Heidegger's idea explained the sense of intimacy between spectators and performers that the "irrational" theater space would foster. It also justified his strong advocacy for an embodied, lived spatial effect over an abstract, mathematical, and perspectival configuration.
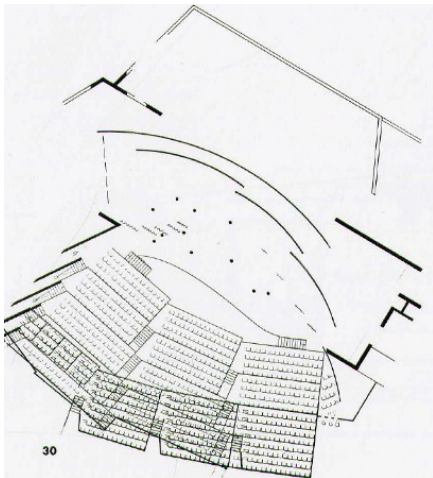

Figure 4. Theater Hall Plan, Mannheim National Theater, 1953

BERLIN PHILHARMONIC CONCERT HALL

The old Berlin Philharmonic Concert Hall on Bernburger Strasse was bombed in 1944. Like many other important buildings, a competition for the new Berlin Philharmonie was delayed, and in this case, it was not announced until eleven years later. Among the twelve architects invited to participate in the competition in 1956, Scharoun was awarded the first prize, with the expectation that construction would begin soon. However, three years later, the Berlin House of Representatives decided to relocate the site to the southern edge of the Zoo (now the Großer Tiergarten). They hoped that that Scharoun's concert hall would serve as the centerpiece of a new cultural center called the Cultural Forum (Kulturforum), symbolizing a reunited Berlin.

Surprisingly, this relocation did not result in any significant design changes. The primary reason for this was that the most crucial aspect of the building—the concert hall—had been developed from the inside out, making the change in the original urban context seemed insignificant. In the design report, Scharoun stated that the concert hall was based on a "simple consideration"; "a space dedicated to music, in which music is made and heard." Drawing on the previous research conducted by him and Aschenbrenner for the Mannheim State Theater, Scharoun asserted that "the concert hall, despite its size, should be able to set the immediate, creative participation into the live music." Scharoun continued, explaining that "the making of music and the shared experience of the music would take place in a place

that does not derive its structural conception from the formal-aesthetic but from the "lived process (*Vorgang*)."[30] According to Scharoun, the "process" of people gathering to enjoy music was entirely different from the way that traditional theater layouts were designed. He stated, "Just as seeing is not hearing, theatrical is not auditory space […] people tend to form a circle when music is improvised."[31] Since this "lived process," in Scharoun's view, was natural from both the musician's and the listener's psychological and musical performing perspectives, it should be applied to a concert hall. Thus, with the aim of reviving the genuine "process" of performing and experiencing music, Scharoun sought to sought to place music back to the "central point" (*Mittelpunkt*) of the Berlin Philharmonie Concert Hall.

As shown in one of the earliest sketches, Scharoun's concert hall for the new Berlin Philharmonie challenged the "shoe-box" perspectival tradition (Figure 5). The center of emphasis in the concert hall was the conductor's position, highlighting by multiple circles in Scharoun's sketches. He emphasized, "The orchestra, with its conductor, becomes the focal point in terms of both space and appearance. It is not located in the mathematical center of the space but is surrounded on all sides by the audience."[32]
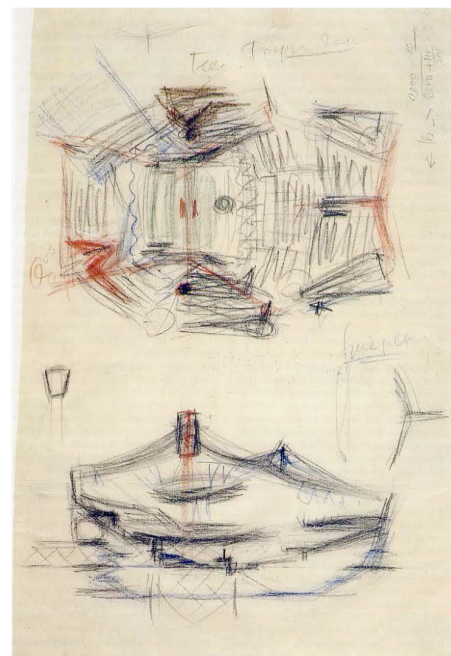

Figure 5 Early Sketch of the Berlin Philharmonie, 1956

As a consequence of the "music in the center" idea, the audiences were positioned in groups encircling the orchestra podium. Musicians and listeners would no longer sit facing each other, as in a conventional concert hall, but would come into close contact. Scharoun believed that such a centralized auditorium that would diminish the separation between the stage and audience that often resulted in a lack of engagement and intimacy. Instead,

it would evoke a sense of communion among the audience as well as between the audience and the musicians. With the goal of achieving unity among people, space, and music, Scharoun envisioned that the new concert hall would focus people's attention to what was happening onstage without emphasizing social hierarchy among the spectators.

CONCLUSION

Starting with the Kassel State Theater project, Scharoun aimed to diminish the perspectival illusion by overcoming the proscenium arch of the convention theater layout. The twenty-four-meter-wide opening in the Kassel State Theater allowed spectators to view the performance and action on the stage from multiple angles, as well as see other audience members on the opposite side of the auditorium. The approach enabled Scharoun to eliminate a central, single, and static perspectival image. In Mannheim, the stage opening was widened even further to twenty-seven meters, rendering the traditional proscenium arch virtually imperceptible.

The stage of the Mannheim theater design was not only wider than that in Kassel but was also designed to accommodate several events on different spots and varying heights on the spacious stage. Actions could occur simultaneously for different seating areas in a planned sequence.[33] Scharoun used Ibsen's Peer Gynt as the archetypal Nordic play. He and his team envisioned different stage levels being utilized for various parts of the play, depicting scenes on earth, in water, and in the sky alternately.[34] The spatial setting of the stage, the layout of the seating banks, and their relationship were guided by a common objective: to transcend the constraints of the rational theater and its defining factor, linear perspective.

When designing the Berlin Philharmonic Concert Hall, Scharoun had the idea "aperspectival" space in mind. Integrating the orchestra into the audience's experience and approximating a centralized space, this concert hall was more revolutionary than Scharoun's earlier theater space designs. It not only broke down the rigid barrier between the musicians and the audience but also liberated itself from the constraints of monocular perspectival composition and experience.

One of the primary functions of linear perspective in traditional theater design was to create an optical illusion that conveyed a convincing sense of depth. To ensure viewers perceived the intended spatial scenery accurately, they needed to remain in fixed positions, as perspectival construction relied on the assumption that people would view it from specific points. In essence, the shoebox-shaped auditorium became common and prominent in theater design, aligning spectators within a space that connected the ideally positioned viewer to the vanishing point of perspective compositions. In Scharoun's design reports for the theater in Kassel and Mannheim, he emphasized that the "perspectival theater" unfolded as one spatial frame and one temporal moment after another. This type of theater

space could be understood as a "mental chain reaction" of corresponding perspectives, resulting in a "concretization of time conveyed by the space."[35] Influenced by Gebser, what Scharoun aimed to create for these new theaters was the "aperspectival" experience. It was designed to depict scenes "on the top of" (*übereinander*) one another through the integration of a "new conception of time." Scharoun referred to this theatrical space "a temporal wholeness" (*zeitlicher Ganzheit*). He claimed that this innovative theatrical space "manifests in the flow of movement and the polar reference of "places" (*Orten*)."[36]

Geber's integral and holistic sense of "aperspectivity" and "time" deeply influenced Scharoun's postwar practice. His endeavor to liberate conventional theater space from perspectival constraints held profound significance extending beyond the realm of architectural presentation and theater planning. This shift marked a "paradigm shift" from perspectival space to the emerging aperspectival awareness. As Scharoun stated, "Aperspective brought about a far-reaching change in human consciousness, transcending the boundaries of visual arts and extending its influence to contemporary cultural expression."[37] It is important to note that the transition from perspective to aperspective found theoretical confirmation in Jean Gebser's ideas. Therefore, it is fair to say that Gebser's concept of aperspectival awareness provided Scharoun with a framework to understand and achieve his goal with theater and concert hall projects. In essence, Gebser's thinking offered theoretical confirmation and bolstered Scharoun's vision of a new space, although it may not have been the primary source. For Scharoun, aperspectival space represented a dynamic and responsive built environment— a fluid entity that, in Gebser's terms, embodied an "ever-present" sensibility.

ENDNOTES

1. Other forms of human expression, such as poetry, was also among important forms that are associated with the periodization. With the study scope of this paper, I focus only on the visual forms.

2. Jean Gebser, trans. Barstad, Algis Mickunas, *The Ever-present Origin* (Athens, OH: Ohio University Press, 1985), 2.

3. Ibid.

4. Ibid.

5. Ibid., 11.

6. Ibid., 10.

7. Ibid., 2.

8. Erwin Panofsky, *Meaning in the Visual Arts* (New York: Doubleday Anchor Books, 1955), 278. This was Dürer's translation.

9. Erwin Panofsky, *Perspective as Symbolic Form* (New York: Zone Books, 2012), 67ff.

10. Gebser, *The Ever-present Origin*, 3.

11. Ibid.

12. Ibid.

13. Ibid., 340.

14. Ibid., 465.

15. Ibid.

16. Allen Brooks, "Frank Lloyd Wright and the Destruction of the Box," *Journal of the Society of Architectural Historians* 38, no 1 (1979): 7-14.

17. Gebser, *The Ever-present Origin*, 468. It should be noted that the first edition of Gebser's book was published in 1953, and Gebser continued editing

and revising the book until his death in 1973. In the footnote of this state-
ment, Gebser mentioned Jürgen Pahl's book "Die Stadt im Aufbruch der
Perspektivischen Welt" published in 1963. The English translation of Gebser's
book was based on the text of the 1973 German edition published shortly after
Gebser's death.

18.   The letter reads: "The loveliest and most beautiful of the sixtieth birthday,
      which is the surprising number that you will be celebrating, and will make your
      dreams come true. I should have responded already a long time ago for this,
      thank each of you individually. But circumstance which I have no control kept
      me from doing so. To be able to do something in terms of saying thanks, I have
      chosen this way and hope this recipient of this letter that I will be possible to
      think." Hans-Scharoun-Archiv, AdK in Berlin.

19.   Heinrich Lauterbach and Jürgen Joedicke, eds. *Hugo Häring. Schriften,
      Entwürfe, Bauten* (Stuttgart, 1965), 75. Also cited in Uwe Trost, "Das neue
      Bauen and the Notion of A-perspectival Space," *Oz / College of Architecture and
      Design Kansas State University* (1991): 22-25.

20.   Jürgen Pahl, "Wege zu Aperspectivishem Bauen," in Jean Gebser and Günter
      Schulz, *Transparente Welt: Festschrift zum Sechzigsten Geburtstag von Jean
      Gebser* (Bern: H. Huber, 1965), 331-43.

21.   Scharoun also discussed the courtly theater in the Renaissance in the 1921
      Königsberg lecture. See Hans Scharoun, "Gedanken über das moderne
      Bühnenbild," in Achim Wendschuh, *Hans Scharoun. Zeichnungen, Aquarelle,
      Texte* (Berlin: Akademie der Künste, 1993), 57.

22.   For the history of courtly theatrical representation, see Alice Jarrad,
      Architecture as Performance in *Seventeenth-Century Europe: Court Ritual in
      Modena, Rome, and Paris* (Oxford: Cambridge University Press, 2003), and J.R.
      Mulryne, Krista De Jonge, Pieter Martens, and R.L.M. Morris, *Architectures
      of Festival in Early Modern Europe: Fashioning and Re-fashioning Urban and
      Courtly Space* (Abingdon; New York: Routledge, 2018).

23.   Peter Pfankuch, ed., *Hans Scharoun. Bauten, Entwurfe, Texte. Schriftenreihe
      der Akademie der Künste Band* 10 (Berlin: Akademie der Künste, 1974), 206.

24.   Peter Blundell Jones, Hugo Häring: The Organic versus the Geometric (Stuttgart:
      Axel Menges, 1999), 143. Aschenbrenner had a background in philosophy and
      literature and joined Häring as a secretary in the Film and Drama Department
      at the Reimann School in 1936. Born in 1900, Aschenbrenner studied literature
      under Robert Putsch and philosophy under Ernst Cassirer and Albert Görland.
      She joined as an administrator at the Film and Drama Department at the
      Reimann School in Berlin in 1936 and then became Häring's assistant.

25.   Margot Aschenbrenner, "Über die Baustruktur des Theatres," AdK Berlin. This
      paper was submitted as an attached supporting document as part of the design
      report. It also included diagrams produced by an assistant in Scharoun's office,
      who was very likely Alfred Schinz. Schinz was a German architect, urban plan-
      ner, and scholar. Schinz studied under Scharoun at the Technical University of
      Berlin after World War II. After graduation until 1955, he worked for Scharoun.
      He later became a scholar on Chinese architecture and urban planning,
      devoting the last three decades of his life to research of both traditional and
      contemporary Chinese urban planning. He published two major books on
      Chinese cities: Cities in China (1989) and The Magic Square: Cities in Ancient
      China (1996). In his books, Schinz acknowledged the original influences and
      inspiration from Scharoun on his study of Chinese architecture and cities.

26.   These categories were Scharoun's idea, as he had talked about these theater
      types in his 1921 Königsberg lecture. See Hans Scharoun, "Gedanken über das
      moderne Bühnenbild," in Wendschuh, *Hans Scharoun*, 57-65.

27.   Aschenbrenner's observation of Wailly and Peyre's building focused on its
      interior theater spatial setting and overlooked the open-air theatrical square in
      front of the building.

28.   Aschenbrenner, "Über die Baustruktur des Theatres," 11.

29.   Ibid.

30.   Scharoun's speech at the opening of the Philharmonie on October 15, 1963.
      Cited in Edgar Wisniewski, *Die Berliner Philharmonie und ihr Kammermusiksaal:
      Der Konzertsaal als Zentralraum* (Gebr. Mann, 1993), 131.

31.   Ibid.

32.   Ibid., 238.

33.   Scharoun, "Nationaltheater Mannheim Erläuterung zum Wettbewerbsentwurf,"
      Pfankuch, *Hans Scharoun*, 227.

34.   Peter Blundell Jones, *Hans Scharoun* (London: Phaidon, 1995), 161ff.

35.   Pfankuch, *Hans Scharoun*, 223.

36.   Ibid.

37.   Ibid., 227.