

‘Spatial Form’, ‘Purposive Intention’ and Movement in Space

A critical examination of Paul Frankl’s conception of architecture

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Introduction

This contribution deals with the subject of ‘movement in and through architecture’ by approaching movement, in this sense, through its relationship to the immediate experience of architecture, focusing on the perception of the built form and space. Here, built form and space are understood as shaping together a configuration of physically defined spaces, both of interior and exterior character, related to one another and the general space of nature—thus as forming a configuration of various kinds of physically created spaces and spatial relations. However, such a configuration is also understood to include and objectify, and therefore to express, certain social or rather socio-spatial meanings: appropriating a particular place in space and creating socio-spatial proximity and distance. Concerning the immediate experience of a given architecture with its specific built forms and spaces, I correspondingly focus on the perception of such socio-spatial and use-related meanings. As a part of dealing with movement in this particular way, movement is also addressed as an immanent component of architectural space itself.

This specific approach to movement as an immanent part of the experience of architecture takes place via a critical examination of art-historian Paul Frankl’s (1878-1962) conception of architecture, as found in his study *Die Entwicklungsphasen der neueren Baukunst* (Principles of Architectural History), published in 1914.¹ In this conception, the perception of a building’s use-related purpose—in his own words, a building’s *Zweckgesinnung* (purposive intention)—is regarded as an essential constituent of architecture. Here, Frankl directly links the perception of this constituent to the perception of the associated interior space, the *Raumform* (spatial form), as he refers to it. Interestingly, this specific linking of use-related purpose, perception and interior space also integrates the phenomenon of movement, both in terms of human movement in and through that space, as well as an immanent part of the space, the *Raumform* itself.²

It is for this reason that I use this conception (the implied concepts of movement, use-related purpose, perception and architectural space) as a point of departure to propose a different conception of the perception-related connection between architectural space and purpose and the role of movement within. It is a conception that clearly differs from Frankl’s argumentation, as it includes a more extended understanding of a building’s use-related purpose, of architectural space and its perception, as well as a correspondingly different way of relating it to one another and thereby integrating the phenomenon of movement. At the same time, however, in my conception, the use-related purposiveness of architectural design is equally regarded as a central constituent of architecture and its aesthetics, just as the formation of space and the perception of both. Therefore, my conception could also be understood as a critical continued development of Frankl’s argument. In particular, I regard the fundamental link he establishes between purpose, built space and perception as a significant contribution to a better understanding of architecture and its specific kind of aesthetics.³

¹ Frankl, Paul: *Die Entwicklungsphasen der neueren Baukunst*. Berlin 1914.

² This direct linking of space, purpose and perception indeed distinguishes Frankl from all other contemporary historians and theoreticians of his time, who also addressed the subject of architectural space like August Schmarsow, Herman Sörgel and Leo Adler.

³ With this intention, I refer to his study in a rather selective way, which means that I concentrate on the conceptual part of this, first and foremost, historical research. As far as dealing with the historical parts, this is exclusively done in order to exemplify this conception, or rather specific aspects of it. Even though Frankl’s study has since

Four fundamental elements of architecture

Frankl's conception of architecture—as set out in *Die Entwicklungsphasen der neueren Baukunst*—comprises a set of four fundamental elements, on the basis of which he analyses the development of European building styles from the 15th–18th centuries, and whose findings, in turn, have to prove this conception.

First, there is the previously mentioned *Raumform* (spatial form) that stands for a building's interior hollow space: for the defined spatial continuum, which is limited and shaped by the building's material form and that we perceive in an immediate way as soon as we enter a building and reside within and walk through it. Furthermore, Frankl distinguishes between different kinds of spatial forms, or rather their formation, and illustrates this on the basis of the presented historical analysis. Next to its geometrical shape, he regards two principle kinds of spatial composition (how sub-spaces are arranged into one continuous spatial form) as essentially significant in this regard: that of *Raumaddition* (spatial addition) and that of *Raumdivision* (spatial division). These are conceived to be, as a means of spatial design, opposed to each other, since the first supports the spatial independence of the various sub-spaces, while the latter, in turn, enables their integration into the spatial form as a whole. As part of the associated historical analysis, he exemplifies this differentiation in spatial composition as two phases, with two opposed kinds of space formation, in the development of ecclesiastical architecture from the Italian Renaissance until the European Baroque. Here, the kind of space formation of the first phase (1420–1550) is, according to Frankl, characterised by the presence of the principle of spatial addition, as the one of the following second phases (1150–1700) is determined by the opposite.⁴

Second, there is the *Körperform* (corporeal form) of a given building, the form by which the given spatial form is generated: a building's physical, more or less massive shape, comprising floors, walls, columns, roof etc. and the associated openings. As a whole, Frankl conceives of the corporeal form as a building's *tektonische Schale* (tectonic shell), as he names it; a shell, which composition likewise includes a principle design-related opposition. Different to the two (opposed) kinds of principles of spatial composition, it is the construction-related opposition between the “*Ausstrahlung eigener Kräfte*” (radiance of inherent forces) and the “*Durchlaß fremder Kräfte*” (channeling of external forces),⁵ which means, between the expression of the aspect of bearing and that of being borne, for instance, by a column on the one hand and a beam on the other. Applied to the two mentioned phases in the development of ecclesiastical architecture, Frankl identifies the first kind of tectonic expression with the composition of corporeal form characteristic for the first phase, and the second kind with the second phase.

The third element, the *Bildform* (visible form), stands for the building in the ‘form’ of its visual perception, meaning the three-dimensional imagination that we produce as beholders of a building on the basis of separated images that we produce by our visual perception and by moving through or around a building. Here, Frankl points out that all these images are synthesised into one single three-dimensional imagination of the building as a whole:

To see architecture means to draw together into a single mental image the series of three-dimensionally interpreted images that are presented to us as we walk through interior spaces and round their exterior shell. When I speak of the *architectural image*, I mean this *one mental image*.⁶

its first publication been widely considered as a significant contribution both in historical and theoretical terms, as well as in terms of their methodological combination, an comparable examination of Frankl's work—also focusing on its conceptual basis—does not exist to this day. Concerning the discussion of Frankl's study see, for example: Cepl, Jasper: Nachwort. In: Frankl, Paul: *Die Entwicklungsphasen der neueren Baukunst*. Berlin 1999, p. 188-196. Ackerman, James S.: Foreword. In: Frankl, Paul. *Principles of Architectural History*, Cambridge (Mass) 1968, vi-xi.

⁴ Cf. Frankl 1914 (cf. note 1), p. 71.

⁵ Ibid, p. 125.

⁶ Ibid, p. 125-126, quoted from Frankl 1968 (cf. note 3), p. 117.

Concerning the corresponding opposition between two kinds of visual forms, Frankl argues in favour of the opposition between an *einbildige* (composed of one image) and *vielbildige* (composed of many images) *Bildform* (visible form) thus visual imagination. In addition, again, as the first mentioned historical phase is characterised by the first kind of generated imagination, the second is characterised by the second kind.

As a fourth and final element of architecture, there is the, similarly aforementioned *Zweckgesinnung* (purposive intention); the *intended* use-related purpose for which a building is built, and which Frankl defines as follows:

When I speak of purpose in architecture, I mean that architecture preforms the fixed arena for actions of specific duration, that it provides the path for a definite sequence of events.⁷

Next to the direct linking between use-related purpose and built space that follows from this definition, and which will be discussed in the following section, the element of purposive intention also knows its own opposition. It is the opposition between approaching the spatial organisation of use, or rather use-related activity, from two different *Persönlichkeitsauffassungen* (views of personality): that of personal freedom, or autonomy, and that of the bond of the individual to a superordinate whole. With this perspective on a building's use-related purpose, Frankl links the concept of use in architecture with an underlying socio-cultural concept of man; in terms of ecclesiastical architecture additionally with the concept of one God. Corresponding to the other three elements, Frankl argues that the first phase in the development of ecclesiastical architecture from the Italian Renaissance until European Baroque is dominated by the notion of 'free personality', while the second rather shows the perspective of 'bounded personality'.

If we now consider the four kinds of opposition together, we see a particular congruence. On the one hand, there is an emphasis on the individual, the single part(s); on the other hand, there is an emphasis on the contiguous whole. It is in this way, that Frankl's conception of architecture addresses the composition of built form and space as well as their perception and use-related purpose as forming the fundamental basis of architecture. Here, he regards all four elements as "necessary part of a complete architectural experience,"⁸ thus of fundamental significance to architectural aesthetics. At the same time, however, and illustrating his first and foremost artistic and object-oriented concept of aesthetics, for him, the aesthetic value of any building is rather determined by additional attributes, such as specific proportions and rhythms realised in the respective composition, as well as specific ways of the associated materialisation, colouring or lighting of built form and space, and which classification he did not regard as the task of the historian.

Frankl's way of relating purposive intention, spatial form and perception

Next to this general significance for architectural composition and aesthetics that Frankl assigns all elements, his conception is also characterised by a specific order within which one element, the purposive intention, takes a central position and gets, in turn, directly linked to the element of spatial form: "I am solely referring to the purpose of the spatial form [...] I am discussing it [...] insofar as purpose is the essence of architecture, architecture is its material manifestation."⁹

This close linking of use-related purpose and built space is also expressed in the continuation of the quote above on his definition of the term purpose:

Just as these (events) have their logical development, so the sequence of spaces [...] The clearly prescribed circulation, which leads us through the different spaces in an opera house, through the

⁷ Ibid, p. 143, quoted from *ibid*, p. 131.

⁸ Ibid, p. 15.

⁹ Ibid, p. 144, quoted from Frankl 1968, p. 132.

vestibule to the ticket office, or through the corridors and up to the cloakroom, presumes a definitely ordered activity, and the spatial form is completely dependent upon the particular type of activity.¹⁰

According to Frankl, it is via the (visual) perception of the interior space that this intention becomes aesthetically effective. In this sense, he writes:

The moulded space is the theatre for certain human activities, and these are the focus of our perception. Once we reinterpreted the optical image into a conception of space enclosed by mass, we read its purpose from the spatial form. We thus grasp its spiritual import, its content, its meaning.¹¹

Furthermore, Frankl points out that this perception of a building's intended use-related purpose takes place in close connection with the perception of the given interior design, in particular the furnishing of the corresponding spaces. Without that, any room "has the same plundered, lifeless effect."¹² Thus, for Frankl, a building's purposive intention is objectified, as it were, in the synthesis of spatial form and its furnishing and is perceived in this combination.

Thus far, Frankl's conception on the basis of which he claimed to more closely define the development of style in architectural history, and which indeed marks a significant step in the development of a modern functional approach to architecture at the beginning of the 20th century, such as several years later Adolf Behne's book: *Der moderne Zweckbau* (The Modern Functional Building).¹³ However, what makes just his conception so interesting as a point of departure for my argument is that, first, he regards a building's use-related purpose as a central aesthetic content of architecture. Second, he conceives of this content becoming artistically expressed in and perceived through a building's spatial form and configuration. Third, this specific linking of use-related purpose, perception and architectural space also integrates the phenomenon of movement, both in terms of human movement in and through architecture, as well as an immanent part of the spatial form itself. But how does this happen?

Frankl's reference to the aspect of movement

Concerning human movement in and through architectural space, on the one hand, we find the reference to this movement addressed in his concept of visible form. Here, movement is not discussed as a particular mode of (sensuous) perception, but is implicitly present in the way that the visual imagination of a given building is described as constituted by the many separated images one produces over a certain period of time while moving within and around the respective building. It is the visual impression, the image that stands in the foreground, not the perception itself. In a similar implicit way, we see the aspect of human movement in and through architectural space addressed in his concept of purpose as an integral element of the use-related actions that are necessarily performed within a certain period of time one resides in a building and moves around. In the quote "When I speak of purpose in architecture, I mean that architecture preforms the fixed arena for actions of specific duration, that it provides the path for a definite sequence of events,"¹⁴ this use-related concept of movement is clearly discernible.

In the discussion of spatial form, however, the concept of movement appears in an explicit way, namely as an immanent part, or rather a result of, its kind of composition. Here, for Frankl, the presence of movement results from the way, in which the different sub-spaces of a given spatial form are dimensioned and arranged. In this regard, the two fundamental principles of spatial addition and spatial

¹⁰ Ibid, p. 143, quoted from ibid, p. 132-133.

¹¹ Ibid, p. 15.

¹² Ibid, p. 143, quoted from Frankl 1968, p. 132.

¹³ Behne, Adolf: *Der moderne Zweckbau*. Berlin / Frankfurt 1964. Original Publication: Munich 1926.

¹⁴ Frankl 1914 (cf. note 1), p. 143, quoted from Frankl 1968, p. 131.

division are associated with two different networks of movement. These networks are composed on the basis of spatial middle points and horizontal, vertical and diagonal middle lines in-between, and which:

in a schematic but concentrated way, indicate the prevailing movement. [...] When the space is composed by addition, this network of movement disintegrates into isolated static points strung along the connecting, quite, intermediary axes, and on the other hand, when the space is composed by subdivision, it becomes the arterial system of a continuous flow.¹⁵

Although these three references to movement are present, they are neither discussed in detail nor explicitly linked to one another. Nevertheless, it should be evident that, for Frankl, the visual imagination of a building as a whole implies the perception of an associated network of spatial movement. Furthermore, this spatially designed movement is also conceived of being part of the relation between purposive intention, spatial form and the visual perception of both. The same applies to use-related movement; because, for Frankl, in visually perceiving a given spatial form, we would automatically link that network of middle points and middle lines with the conceived activity that apparently takes place there. As a part of this, “the centre lines become paths through the space. They direct circulation between places equipped to serve appointed purposes.”¹⁶

As a result, in Frankl’s conception, the notion of a spatially designed movement plays an essential role in the perception of a building’s purposive intention as objectified in the composition of its spatial form. It mediates between purpose and space by integrating the intended use-related movement in space into the perception of spatial form. Here, as Frankl points out:

The movement infused into a space has a double effect: insofar as it stems from the contrast of addition and division [i.e. it is completely compositionally determined, OS] it applies to intuition; insofar as it derives from purpose, it applies to intellect. It is apparent, therefore, that the effective lines of movement are not exactly the same. Rather, two different networks appear to lie one above the other, partially covering each other but always standing in a reciprocal relationship to one another.¹⁷

A different understanding of ‘spatial form’, its ‘purposive intention’ and of perception and movement as part of their experience

As mentioned in the introduction, I regard as a significant contribution to a better understanding of architecture and its specific kind of aesthetics Frankl’s way of linking built space, use-related purpose and perception. Here, I particularly consider the notion of ‘purposive intention’ in its direct connection to the realm of space formation as still being an important insight. At the same time, this concept includes a limited understanding of architectural space and the use-related purpose of its formation, as well as his concept of, or rather reference to, perception is rather limited.

At the same time, it should be clear that this criticism is formulated from a present-day perspective and with the intention of a critical continued development of Frankl’s argument.

In this sense, my own, now following, argument on the subject of movement in and through architecture (in its relation to the immediate experience of built form and space) takes Frankl’s specific linking of ‘spatial form’ and ‘purposive intention’ as a point of departure, as it also proceeds from a criticism of both concepts and his understanding of, or rather reference to, the realm of human perception.

¹⁵ Ibid, p. 141, quoted from *ibid*, p. 131.

¹⁶ Ibid, p. 141, quoted from *ibid*, p. 131.

¹⁷ Ibid, p. 142-143, quoted from *ibid*, p. 132.

The socio-spatial meaning of space formation and its objectivation in built form and space

Starting with this criticism, the first aspect I wish to point out is that in his concept of spatial form, Frankl exclusively refers to a building's interior space in terms of the arrangement of volumes of hollow space; already expressed by the term spatial form. He did so in line with the contemporary aesthetic discourse on space and form in architecture as it developed among art historians and theoreticians of architectural aesthetics at the beginning of the 20th century, which was characterised by discussing space and form as two separate realms of architectural aesthetics.¹⁸

As an immanent part of this approach, Frankl's differentiation of various kinds of spatial geometries and compositions—according to the two poles of spatial addition and division of spaces—does not include the moment of the material enclosing of the space itself. Apparently it is regarded as a fundamental precondition that does not require closer consideration. It also does not include the aspects of separating, opening and relating spaces beyond the level of the pure geometrical arrangement of volumes of hollow space next and above each other. As a result, Frankl's concept of spatial form does not include the inside-out relation of a given interior space with the surrounding exterior. Furthermore, it does not include the corresponding understanding of the corporeal form as not only shaping interior hollow space through its limitations but also shaping the relation to the given spatial surrounding. Thus, it does not include the understanding of the corporeal form as a three-dimensional form *between* interior and exterior or between different qualities of interior or exterior space.

On the basis of this, Frankl does not address in any way the socio-spatial meaning of physically enclosing and separating, of opening and relating defined spaces to create socio-spatial distance and proximity. In addition, he does not discuss the arrangement of volumes of space in this respect. However, just the realisation of this meaning, in connection with enabling and making manifest the use-oriented appropriation of a given place, is directly expressed and perceptible in any configuration of spaces and spatial relations: via the dimensions and shapes of the various spaces and the configuration as a whole, by the quantity and quality of the space-separating and -connecting elements and the resulting dynamic between the moment of enclosing and that of opening, between that of 'inward' and 'outward' orientations.

In contrast, the immediate use-oriented meaning of a given spatial configuration to provide space for specific activities or events (as in Frankl's example of the opera house)¹⁹ cannot be objectified and expressed in this way. Although socio-spatial and use-related meanings are certainly linked to one another—since, for instance, the intended use determines the kind of spaces and their configuration—an essential difference between the first and the latter is that the concrete activity-related meaning of space formation is objectified in both built form and space merely in an indirect and abstract way. Rather, this meaning is demonstrated by means of the real or imagined activity that takes place within a particular spatial configuration. If we compare the experience of a given space in an unfurnished and furnished condition, this difference becomes evident: As soon as furniture is present, the use-related purpose of the space becomes concrete. Without furniture, it remains much more abstract; even though, in the course of architectural history, specific kinds of use have resulted in the development of certain building types with characteristic kinds of spatial configurations.

Frankl's neglect of this fundamental meaning of the architectural formation of space and its objectivation in built form and space leads to the aforementioned conclusion that without its interior design, and within which furnishing takes a central role, each spatial form would appear 'lifeless' to the beholder. There should be no question that any building generally unfolds its purposive, use-related meanings in connection with a given interior design and associated furnishing and, most intensively, in connection with the actual use-related activity that takes place there—and what also counts for the described socio-spatial meanings.

¹⁸ Concerning this principle separation cf. Frey, Dagobert, *Wesensbestimmung der Architektur*, in: *Zeitschrift für Architektur und Kunstwissenschaft*, 19 (1924), p. 24-77.

¹⁹ Cf. corresponding quote (note 10).

However, without addressing this particular meaning and its architectural objectivation, a building's purposive intention as objectified in interior design and furnishing remains at least abstract, as it remains placeless since the mediating link between the purpose of a particular space and those in surrounding (exterior) space is missing.

Corporeal perception and corporeal space

The second aspect, I want to point to, is that Frankl refers to the realm of (sensuous) perception in merely visual terms. As a result, the aspect of corporeal perception is present neither in terms of built space nor form. Yet, just the moment of the immediate corporeal perception of space—be it in a resting or moving state—would be an indispensable element if we wanted to explain how the spatially composed network of movement could be sensuously perceived as such, and how both networks could superimpose one another. Namely, by means of their immediate corporeal perception by physically moving through and acting in space or by the imagination of both. Without this, Frankl's centre lines and paths, the associated network of motion, remain abstract artistic notions, and rather represent a mental projection into the spatial form with no real connection to one's own spatial condition.²⁰

The fundamental problem lying at the basis of this—and the associated notion of motion as being fused into space—is that space itself cannot be in motion, but rather allows motion; and what also applies to architectural space. Therefore, unlike the perception of motion in material forms, any perception of motion as an immanent component of architectural space rather represents a projection of the imagined movement of the perceiving subject into that space. Instead, a building's spatial configuration implies certain spatial *dynamics*: for instance, the dynamic between space and spatial relation, shaped by the interplay of enclosing, opening and arranging spaces and including, in turn, a perceptible and more or less complex dynamic of 'inward' and 'outward' orientations. This, however, is to be distinguished from the notion of movement as an immanent component of architectural space.

Interestingly, Frankl's mere visual reference to perception complements his concept of architectural space as a composition of volumes of hollow space and the corresponding reduction of the corporeal form to a space-limiting surface; the moment of the corporeal is addressed in a very indirect way with regard to the realm of perception and that of architectural space.²¹ However, the corporeal aspect of both plays just an essential role in the perception of the socio-spatial purpose, or purposive intention, as we find it as objectified in a given physically shaped configuration of spaces and spatial relation. It does so as part of understanding the experience of architectural space (the included perception of an architectural configuration of spaces and spatial relations) as being constituted by two dimensions—and with which the actual explanation of my different conception eventually starts.

Two dimensions of experiencing architectural space

First, there is the sensuous perception of any architectural space—be it of interior or exterior character—as a defined spatial surrounding that we may perceive as both the (relative) enclosure of that space as

²⁰ Concerning this issue, it is very interesting to look at August Schmarsow's (1853-1936) approach to the human perception of space, within which the moment of corporeal perception in the state of movement plays just an essential role; but to which Frankl does not refer. Cf. Sack, Oliver: *Die Verbindung von Gestaltung Ästhetik und Zweckgebundenheit in August Schmarsow's Theorie der architektonischen Raumbildung*. In: Jachmann, Julian / Labbé, Mickaël, Lohmann, Petra: *Zweck und Erfindung, Perspektiven aus Architektur und Philosophie*. Siegen 2021, p. 93-98.

²¹ As mentioned before (cf. first section under previous paragraph) Frankl is in line with the contemporary art-scientific discourse of his time. One exception, in this regard, was the architect and architectural theorist Leo Adler, who very well pointed to the identity of architectural space and form (cf. Adler, Leo. 'Theorie der Baukunst als reine und angewandte Wissenschaft'. In: *Zeitschrift für Ästhetik und allgemeine Kunstwissenschaft* 20 (1926), p. 284.)

well as the (relative) enclosure of ourselves, our own body; and which we perceive in its spatial dimensions by actively moving through it or by imagining this movement. Here, we perceive the space-shaping form as an integral component of this spatial surrounding and indeed as a continuous, space-limiting surface. The solid, three-dimensional character of the corporeal form disappears, as it were, behind this surface. In terms of interior space, Rudolf Arnheim (1904-2007) explained this phenomenon on the basis of the inside perception of the Hagia Sophia as follows:

The empty volume of space gets perceived as an extension of the human being. The concave forms of the cupolas and round walls look as if they would have received their passive guise from the fact that they have given space to the entering human being taking possession of the building.²²

It is by means of this perception-based reduction of the space-shaping form to a three-dimensional surface that an enclosed space becomes a defined surrounding for us, one that we spatially appropriate by residing in it, moving through it and using it. Already, this first dimension of experiencing architectural space includes the perception of a certain socio-spatial meaning, objectified in the space-enclosing form: the meaning of providing a relative independent area, separated from the spatial surrounding with its own various kinds of appropriation and associated activities. Here, it is particularly the perception of the interior space in its horizontal extension, of the present floor space, that adds to the experience of that space the impression of an interior that can be appropriated and used; even though the height of the space also influences the kind of possible appropriation and use.

Second, however, the same space-shaping form turns to a solid 3-dimensional object for us at the place where it is opened and no longer encloses. Here, and by recognising, for instance, the soffit of a door, or an passage through a wall, this form appears to us in its thickness and thus turns from a space-limiting surface into a solid form between two spatial realms: the interior space where we reside and the exterior (or a different interior space) on the other side. Moreover, we perceive this part of the form as generating a corresponding 'outward' orientation. It is here that the inside perception of a building as an enclosed interior and its outside perception as an enclosing form indeed permeate and the building reveals, as it were, its space-shaping identity. At the same time, a particular socio-spatial meaning is expressed and perceptible: the meaning of creating both distance between interior and exterior and their simultaneous connection, creating proximity between either side: between the relative independent area at the inside with the use-related activity taking place here and the surrounding space with its own various kinds of appropriation and associated activities. The same happens, of course, when we perceive the same opening (and the associated 'inward' orientation) while approaching the building from the outside. Comparing in this regard 'door' and 'window', we see how the kind of opening co-determines the specific character of socio-spatial proximity and distance on the basis of the use-related appropriation it allows.

As a result—and different from Frankl's argument—by performing the 'arena' for certain use-related purposes, any building objectifies a purposive intention that goes beyond the execution of use-related actions: a *socio-spatial* intention that is oriented towards the shaping of a defined (configuration of) space(s) and its appropriation, as it is oriented towards the associated shaping of distance to and proximity with other (configuration of) spaces. This 'socio-spatial intention' we may conceive of being objectified in architectural space as soon as we understand this space as an inseparable unity of spatial and corporeal form. Moreover, the perception of this 'intention' forms an essential constituent of the experience of architectural space. But which role here plays the moment of corporeal movement in and through space?

²²Arnheim, Rudolf: *The Dynamics of Architectural Form*. Los Angeles 1975, p. 103-104.

The resultant significance of corporeal movement

As the experience of architectural space generally implies its perception in a resting and moving state, the same applies to the perception of this socio-spatial intention. In this sense, the above described meaning of the space-enclosing form of providing a relative independent area separated from the spatial surrounding, and with its own kinds of appropriation and associated activities, we may perceive in the state of rest and movement. The described meaning of a door, or passage, however, we particularly perceive by indeed walking through that opening, by overcoming the separation physically—be it from the outside towards the inside, entering the building or leaving it again (Fig. 1). And as we may perceive any spatial enclosure, we reside in or move through, visually as the enclosure of that space and corporeally as the enclosure of ourselves, we perceive any opening in the same synthesis of its visual and corporeal perception: as a space-defining object and a defined spatial realm, as an opening in the given material form and a spatial zone between interior and exterior (or two different interior or exterior spaces). Finally, we also may perceive its socio-spatial meaning in this twofold way.

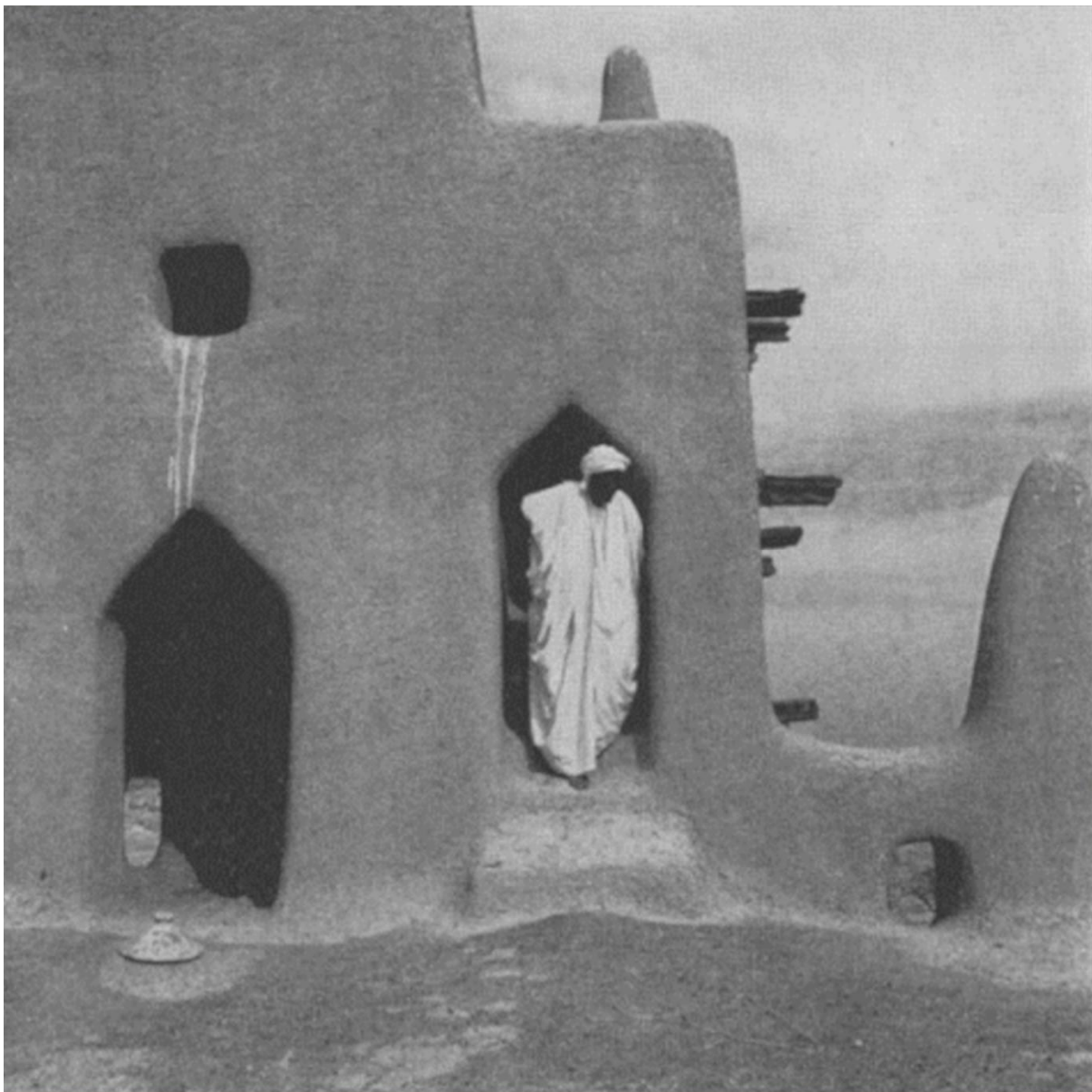


Fig. 1 Roof Great Mosque of Djenné (Foto: Aldo Van Eyck)

Here, the particular significance of the moment of actively moving in and through space seems to me that the dynamic of inward and outward orientations, of creating proximity and distance, finds its counterpart at the level of aesthetic experience and in direct connection with one's own socio-spatial, and use-related, intention. It is for this reason, that we may regard these two dimensions of experiencing architectural space and the associated significance of corporeal movement as indispensable constituents of creating a specific architecture-aesthetic experience.

Summary

This contribution deals with the subject of 'movement in and through architecture' by approaching movement, in this sense, through its relationship to the immediate experience of architecture, focusing on the perception of the built form and space and associated socio-spatial and use-related meanings.

This specific approach to movement takes place via a critical examination of art-historian Paul Frankl's conception of architecture, as found in his study *Die Entwicklungsphasen der neueren Baukunst* (Principles of Architectural History), published in 1914. In this conception, Frankl directly links the perception of architectural space to the perception of a building's use-related purpose, and integrating the phenomenon of movement.

For this reason this conception is used as a point of departure to propose a different conception of the perception-related connection between architectural space and purpose and the role of movement within. It is a conception that clearly differs from Frankl's argumentation, as it includes a more extended understanding of a building's use-related purpose, of architectural space and its perception, as well as a correspondingly different way of relating it to one another, thereby just as integrating the phenomenon of movement.