Architecture Re-Configured

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Abstract
The question of what differentiates architecture and building has been raised many times in Architecture Theory, with various responses or explanations - usually under the precondition that architecture is something more. It is one of the core questions of architecture theory. Inherent in the discussion seems to be how architecture becomes socially significant and how it conveys meaning. Continuing this line of inquiry, this paper examines how and why spatial configuration lies at the heart of architectural design and explores how and why space syntax research contributes to architecture per se. This is argued using a small set of socio-spatial figures commonly used in architectural design that formulate positions and situations based on discrepancies between configurative relations of visibility and accessibility. It is finally suggested that the conscious manipulation of these discrepancies is a core aspect of architectural design.

Keywords: architecture theory; spatial configuration; architecture; spatial analysis; critical analysis

1. Introduction
Architecture discourse has consistently been occupied with the question of its own being by constantly returning to a foundational question: What is architecture? Continually asking this basic question may be a way for the field to evolve, encouraging new ideas or perceptions, engaging established as well as novel aesthetic movements. This question necessarily lies at the very heart of architecture theory. In this discourse, one recurring problem is how to differentiate between architecture and buildings in general, and if it is the case that there is a difference, as most would agree, wherein this difference lies. In a sense, many of the keys to understanding architecture as a concept, as a process, and as practice lies within this ostensibly simple yet deeply complex question.

This is a question also addressed within space syntax research, although often less explicit than in many other traditions of architecture research. This paper continues this discussion through a proposal that is not meant to provide a final answer but rather to expand on the notion of a difference between vernacular building and architecture as discussed in the first chapter of Space is the Machine (Hillier, 1996, pp. 15-53). In this sense, this paper investigates this question in terms of the treatment of spatial configuration, which leaves out other important aspects of what constitutes architecture in
favour of considering particular knowledge on space developed within space syntax and how this knowledge can contribute to this discussion, and also to see how such an investigation reflects back into space syntax theory and research, as well as how this can contribute to architectural analysis.

Furthermore, using Peponis, et al.’s ideas formulated in *On the Formulation of Spatial Meaning in Architectural Design* (2003), this paper, although with a slightly different approach, addresses their main issue: understanding the spatial, configurative properties of space that are commonly and effectively used in architectural design to make statements that have significance beyond physical form but which originates within it. Here, we are concerned with ‘meaning’ in the sense of spatial configuration describing identities, roles, and social relations that, also following Peponis et al.’s reasoning, do not require the reader/interpreter to know the intended specific work of reference, but suggests social relations that are recognizable in a broader social and cultural context rather than explicit external references. In this sense, our approach also deals with a certain notion of meaning as something that emerges between the reader and the text rather than as communication between author and reader (Ricoeur 1981). The line of reasoning comes close to that of Psarra (2009a), while framing it somewhat differently and focusing more on specifics of spatial configuration at the expense of other lines of discussion such as the relation between discursive and non-discursive communication that is central to Psarra’s discussion.

This paper will form such a perspective by first treating spatial configuration somewhat simplistically through a series of *architectural figures* that constitute certain socio-spatial configurations because these figures are easily recognizable. Although I do not intend to claim that the specific meanings suggested in the following are inherent in spatial configuration as such, they are figures that architects as well as others can think with as well as can use to communicate ideas or designs. This approach allows a way to discuss common architectural formulations in terms of how they carry notions of social positions and roles by means of how they are constructed and situated in space, questions that mirror Hillier’s views:

‘*A building then becomes socially significant over and above its functions in two ways: first by elaborating spaces into socially workable patterns to generate and constrain some socially sanctioned - and therefore normative - pattern of encounter and avoidance; and second by elaborating physical forms and surfaces into patterns through which culturally or aesthetically sanctioned identities are expressed.*’ (Hillier, 1996, p. 24)

Furthermore, our approach addresses an intricacy of space syntax development stemming from its own strength in finding correlations between spatial configuration and certain forms of behavioural patterns such as movement. It has been suggested that the found relation between movement and accessibility is enhanced, if not dependent on, a close relation between visibility and accessibility (e.g. Turner 2007). At times, this view simplifies discussions on the way space syntax could support architectural design. It is against this background this paper constitutes its main proposal: Architecture, and especially in the modern sense, emerges when Visibility and Accessibility are
disconnected. As such, this paper rephrases the questions of space syntax analysis in relation to architecture and emphasizes prospects and problems within research and practice. Obviously, we build on other work within space syntax research herein less explicitly referenced (e.g., Psarra, et al., 2007; Psarra, 2009b; Zamani and Peponis, 2007; Tzorti, 2007).

2. Square

To start with, I will (somewhat unfairly) propose that the main body of space syntax research, be it in buildings or in urban settings, work with a spatial and cognitive notion that has its validity in certain specific kinds of spaces that could be described as streets or squares - where the configurative connections of visibility and accessibility coincide. In *An Architecture of Seeing and Going*, Hillier convincingly argues that one of the reasons irregularities appear in grid structures is that they bring together distance (in metric terms) and visibility (2003). This conflation tends to be how emergent settlements evolve; it can also argued that this is the case with vernacular buildings, although this is something that must be taken with a grain of salt as it is definitely not a one-to-one relation but a play of sequences, insulations, and permeability (Hanson, 1998). This is furthermore a notion that in particular ways continues into other situations where differences between accessibility and visibility tend to be treated as questions of resolution or scale or in terms of which is most important rather than as something that carries social or cultural significance in itself. From such a point of view, the figure of the square is a specific kind of social space defined as spaces of co-presence in which everyone is also able to reach one another.

![Figure 1](Image)

**Figure 1.** The differences in metrics and visibility. (a) integration: the darker spots are metrically farther from all other positions, but a person standing there would be able to see more. (b) the discrepancy between visibility and metric distance translated into seating arrangements. Figures after Hillier (2003), slightly revised.

But, as Hillier further argues, even in the street or square there seems to be an inverse relation between visibility and accessibility in that the positions which see most, and thus are most visually integrated, are close to the corners, whereas the most metrically integrated positions are in the central parts (Figure 1). He continues by discussing the social significance of this through how it is
used around a table to position people in more socially integrated, communicative, positions and in more status-filled, visible positions such as positions around a long table: ‘[…] maximises the status of the person at the end by maximising metric segregation from others while also maximising visual asymmetry i.e. it maximises surveillance from one point and minimises it from all others’ (Hillier, 2003, p. 06.23). Thus, not only are ‘squares’ differentiated as metric and visibility structures, specific geometric form is also of importance. It can be clearly illustrated through this passage in Orwell’s novel 1984:

‘For some reason the telescreen in the living room was in an unusual position. Instead of being placed, as was normal, in the end wall, where it could command the whole room, it was in the longer wall, opposite the window. To one side of it there was a shallow alcove in which Winston was now sitting, and which, when the flats were built, had probably been intended to hold bookshelves. By sitting in the alcove, and keeping well back, Winston was able to remain outside the range of the telescreen, so far as sight went. He could still be heard, of course, but so long as he stayed in his present position he could not be seen. It was partly the unusual geography of the room that had suggested the thing that he was now about to do.’ (Orwell, 1987, pp. 7-8)

That is, space in whatever form or simplicity it takes, is heterogeneous (Foucault, 1997a). Even the ostensibly most homogeneous form of a table, the ‘round table’ as Simon Mawer notes, has the peculiar effect that ‘[a]t this circular table, there is no hiding one guest for another. The further away you are, the more directly you look upon one another’ (Mawer, 2009, p. 117). What may differ the discourse within space syntax from many other discourses is the way this is treated as properties of space as material form, whereas a more common discussion is heterogeneity based on individual, time, or event (e.g. Tschumi, 1996; Kaye, 2000; Massey, 2005). While there are ontological differences between these discourses, the forms of heterogeneity are not mutually exclusive - it ought rather to be acknowledged that they are all of importance, even if the current line of discussion regards first and foremost heterogeneity as a result of form.

However important acknowledging the heterogeneity of individual spaces is, the interest currently lies within expanding these ideas to configurations of space. That is, while this discussion addresses properties of space studied intrinsically, the focus of space syntax studies is entities defined by extrinsic relations; there are reasons to address these questions in this perspective. From this perspective, the square constitutes an entity of internal intervisibility and access which is the basis for space syntax graph modelling (lines, convex spaces, isovists), forming networks analyzed as what makes up both emergent patterns of movement and being and which support intelligibility (in a wider sense of the word). The intrinsic discrepancy of space argued by Hillier is lost, a discrepancy that is addressed below.

3. Balcony

One of the simplest forms of such disconnection between accessibility and visibility lies in a figure that is common also within vernacular building: the balcony. A balcony allows one space to be visible from another space regardless of restraints to accessibility whether they are configurative or regula-
tory, creating a distinction between the seeing and the seen. That is, the balcony allows someone to see something that is comparatively far away in terms of access. Although 'actual' balconies may have different characteristics, herein treated as another figure,4 the current figure of the balcony can be exemplified by a passage from Emile Zola's Au Bonheur des Dames:

'Mouret, standing alone, planted himself beside the hall balustrade. From there he dominated the whole shop, for he had the mezzanine departments around him, and could look down into the ground-floor departments. Upstairs, the emptiness seemed heart-breaking to him: in the lace department an old lady was having all the boxes ransacked without buying anything; while in the lingerie department three good-for-nothing girls were sifting slowly through some ninety-centime collars. Downstairs, under the covered arcades, in the shafts of light coming from the street, he noticed that the customers were becoming more numerous. It was a slow, broken procession, a stroll past the counters; women in jackets were crowding into the haberdashery and hosiery departments; but there were hardly anyone in the household linen or woollen goods department.' (Zola, 1995, pp. 94-95)

Whereas the private balcony of a villa or a flat has its accessibility restricted in terms of who controls the entrance, there are many public situations where the balcony is used. Even more so if we leave the specific, physical form of the balcony so as to redefine it as a figure for the configurative setup where some (usually fewer and more static) are allowed to gaze upon others (usually more and more mobile). These we recognize as café windows, places in select squares, or streets in the urban fabric, and from literal balconies such as cafés in the central courtyards of department stores or over the 'streets' of shopping galleries. While not actually restricted in access, they are separated by distance and thus require comparative effort to reach. Furthermore, they are usually set up to let those on the balcony study the others without them necessarily returning the favour. This is a social description of space that depends on spatial configuration and in many cases created solely by configurative means.

In this sense, the extreme form of the balcony becomes Panopticon (Foucault, 1997b), which further emphasizes the discrepancy between the watcher and the watched, and which is quite literally a spatial construct although social discourse tends to treat it in terms of abstract processes in society. In Foucault's argument, the figure of the balcony, taken to the extreme, becomes a means of control of conduct by placing some (the prisoners) under the possible surveillance of the other, where it is not the actual surveillance but the fact that the watched do not know if they are being watched or not that works as a disciplining mechanism. This is also the argument taken further in discussions of camera surveillance: it is not the fact of someone seeing what you do that makes you self-conscious and causes you to follow norms and expectations on behaviour, it is the possibility of it happening without you having control over it. In this sense, the figure of the balcony often coincides with the figure of the tower, a figure representing power (e.g. Kramer, 1998, p. 77; Markus, 1993), although it should not be taken for granted that this is the case. This figure, however, is one that we can invert.
4. Catwalk

Another example by Zola can serve as a starting point for a discussion of the inverted relationship between spectator and performer where, in configurative terms, the distinction between visibility and accessibility is the same; whereas in directional terms, the situation is dramatically different: the few are put on stage for the many. Again, finding situations where this is the case is not difficult, be it through the formally restricted situations such as the catwalk where fashion models step on stage with the main purpose of exposing themselves and their clothing for the audience, or in less formally defined ones where one simply ends up being watched by others. The social effects can be exemplified through the following passage:

The next day, at half past seven, Denise was standing outside the Ladies' Paradise. [...] A cold wind was blowing and had already dried the pavement. From every street, lit by the pale early morning light under an ashen sky, shop assistants were busily emerging, their overcoat collars turned up, their hands in their pockets, caught unawares by this first nip of winter. Most of them hurried along alone and disappeared into the depths of the shop without addressing a word or even a glance to their colleagues striding along around them; [...] Denise noticed several of these gentlemen stared at her as they passed. This increased her timidity; she felt quite unable to follow them, and resolved to wait until the procession had ended before going in herself, blushing at the idea of being jostled in the doorway in the midst of all those men. But the procession continued, and in order to escape their glances she walked slowly round the square. When she came back she found a tall young man, pale and ungainly, planted in front of the Ladies' Paradise; he too appeared to have been waiting for quite some time.’ (Zola, 1995, p. 30)

Zola here deals with a social property of public space: that exposure for one another is one of its defining characteristics, and hereby that ‘[i]t involves being visible and observable by others, and behaving accordingly’ (Thibaud, 2001, p. 42). What he furthermore points to is the consecutive effects of scrutiny and regulation, and how those unfamiliar with the rules of conduct may feel insecure or even embarrassed. The catwalk, as an architectonic figure, is a situation where being scrutinized is emphasised not as a fact but as a potential, a staging that from certain points of view is much like that in Panopticon.

To refine this figure of discrepancy so as to tie it closer to the main questions of space syntax - how spaces without formal constraints to accessibility still have configurative properties that regulate and stipulate it - we use José Quetglas's analysis of Mies's Barcelona Pavilion: ‘[i]t is a house without doors. Open or closed?’ [... ] 'Mies’s Pavilion is a closed space' (2000, p. 385). The reason it is a closed space is, according to Quetglas, not that it has physical boundaries keeping people out, indeed, one of the defining traits of the pavilion is that it has no doors, but that the way the architecture constantly and repeatedly de-emphasises access while supporting visibility. He describes it as something other than the street below:

'The space of the pavilion remains 'retenu par la géométrie,’ according to the constant method in all of Mies's architecture. It deals with the arrangement of one or various horizontal planes, detached from the ground, where the lower plane always designates a strict surface. [...] If the platform is enough to define the space of the Pavilion as different, to segregate it as a stage separated from the
ground that the public of the Exposition walks on, the plane defined by the two covers, reduced to a sheet, will serve to transform this space, not only into something different but into something enclosed, into an interior.' (Quetglas, 2000, p. 386)

By means of disassociation, the plateau becomes something else; by means of making it exposed, it becomes a stage where people are involved in a type of performance. This configuration demands being comfortable under the consecutive scrutiny and the risk of making a fool of oneself; to be at ease, while simultaneously being scrutinised and risking being embarrassed in public. A situation that, as Bourdieu and Darbel (1991) or Bennet (1995) have argued, disciplines the ones put on display without having to explicitly regulate behaviour. Furthermore, the demands put on those entering the stage make people more likely to exclude themselves in cases where they are uncertain of how to behave under such scrutiny, similar to the example from Au Bonheur des Dames. On the other hand, it is also a place where those more comfortable with expressing their knowledge and taste can excel in the eyes of the masses (Giddens, 1984; Koch, 2007), and the possibility to express claims of status through the right to and comfort in being there (Zukin, 1995).

Again, it is important here to keep in mind that while the figure is the stage, what interests us is the situation where a place is more exposed than it is accessible, where to some extent the stage is an unsatisfactory as model because it often has formal restraints on who may or may not step up on it, as well as on when and how to. The figure stands for the exposure of few for many, whereas the balcony puts focus on the ones outside of it, leading to descriptions of how viewer and the viewed can and should relate to one another as well as indirectly regulating behaviour. These are factors similar to the ones in Hillier's argument regarding the long table: a status that is indicated by emphasizing visibility over accessibility. Here we can see both the balcony and the stage as potentially expressing status by indicating power and representation. From such certain perspectives, stage and balcony are different views of the same spatial situation seen from different agents, but this is only true for particular instances or events.

5. Wardrobe

Let us next turn to a figure where the relation between accessibility and exposure is inversed: the wardrobe. Like the other figures, this figure stands for a certain meaning of the word, which can be described through the following:

'From about 1840 onwards, the closet offered, instead, diminished architectural expression. The storage of clothing had been respatialised as a kind of shameful secret. The closet not only concealed the things it contained but, significantly, promised to hide itself.' (Urbach, 2000, p. 343).

We will stay clear of the psychological, historical, or social analysis of this change and stay within the perimeter of the closet as a spatial figure that hides itself. It serves as a figure for that which is primarily accessible. This can be argued to be the case for many functions along corridors, or close to main streets in back alleys or on secondary connections. In doing so, it emphasizes utility over representation: it is something we need to have available, but this use is not of the kind of significance
that it should show. In some cases, it also suggests knowledge. It could be the boxes hidden under the bed, the hidden wardrobe door in the wall, the kitchen drawer (as opposed to the glass cupboard), or the small kiosk or café constituted by little else than a hole in the wall, not announcing itself until one is right upon it.

This, it is important to note, falls into what Urbach describes as a later type of wardrobes and differs from the earlier type - the exposed hiding place, which makes a completely different statement: a difference which, notably, tends to separate the way the dressing rooms are gendered in shopping space (Koch, 2007; Figure 2) and a difference primarily in exposure. Both of the dressing rooms in Figure 2 are constituted by low accessibility in space syntax terms, yet the degree of exposure differs radically. Furthermore, exposure is not of the space or actors in itself, but of the entrance or exterior of it, playing with the ideas of the illicit gaze (Burgin, 1996). An exposure that provides a constantly repeated reminder of the need to try clothes on in one case (e.g. Larocci, 2008), whereas hiding communicates it is for when you think of it on your own. It is here also in place to stress the relationship of exposure to access, as the men's dressing rooms in the figure are configuratively deeper located - that is, less accessible. The point is that they are also deliberately kept from view, whereas the opposite could be said true for the one's in the women's clothing department.

If we remain within the figure and look closer on the spatial formulation itself, we can turn to Beatriz Colomina's analysis of Adolf Loos's villa for Josephine Baker, which brings light to the differences of these two situations:

'As in Loos's earlier houses, the eye is directed towards the interior, which turns its back on the outside world; but the subject and object of the gaze have been reversed. The inhabitant, Josephine Baker, is now the primary object, and the visitor, the guest, is the looking subject. The most intimate space - the swimming pool, paradigm of a sensual space - occupies the center of the house, and is also the focus of the visitor’s gaze. As Ungers writes, entertainment in this house consists in looking. But between this gaze and its object - the body - is a screen of glass and water, which renders the body
inaccessible. The swimming pool is lit from above, by a skylight, so that inside it the windows would appear as reflective surfaces, impeding the swimmer’s view of the visitors standing in the passages. This view is the opposite of the panoptic view of a theater box, corresponding, instead, to that of a peephole, where subject and object cannot simply change places.’ (Colomina, 1996, p. 260)

We can again see the importance of understanding what is expressed by the relative differentiation between accessibility and exposure, as the two kinds of dressing rooms form entirely different identity figures. The men's dressing rooms are wardrobes in the current sense of the word, whereas the women's dressing rooms constitute something else - the exposed wardrobe. In a sense, they are also similar to how Colomina describes the 'peephole'. This 'peephole' wardrobe is different from the figure of the stage in, for instance, who has control over when and how one is seen, the degree of knowledge of whether one is watched or not, and the sort of activity taking place in the exposed space, making the social character quite another but also in certain cases dependent on social setup or situation.

To some extent, the wardrobe's form of discrepancy is, by physical constraints of configurations of space, harder to achieve through spatial configuration - perhaps more than the other figures, it requires taking into account directionality and specific form - but still forms an important comparative figure because it takes steps to decrease actively visibility while containing or increasing accessibility, an important means through which architecture expresses social roles and significance.

6. Glass Box

A key to the main question of this paper, the difference between seen and reached, can be found in the use of glass encasings and glazed walls, as it is here the play takes on its most demonstrative form. For this discussion, Baudrillard (1996) makes an important point in describing how glass transforms the commodity into the sign of itself: glass, a transparent boundary, lets through a visual representation while restricting access and, in this process the object is turned into representation rather than an artefact. In emphasizing representation and limiting accessibility it further implies status and exclusivity, an argument that resembles Hillier's view (2003).

It is tempting to transfer this argument directly to glass architecture. However, this would miss one other important point: these transparent boxes are invariably locked, requiring personnel to open them to allow access. Glass can be seen as performative operations regulating the relation between exposure and availability of that which it contains so that one is promoted over the other like the figures of balcony and stage. In this way, in exposing the commodities within, their right to be represented is ensured while the effort to reach and the limitations of who can do so impose requirements of purpose and membership. Furthermore, it would also miss another important character of glass, which has to do with how it changes after direction and light conditions; reflective or opaque in certain situations such as a glass library in daylight, to be bright-lit and completely transparent at night - with the conditions reversed from the inside.
In this light, the glass wall turns out to be not one form of boundary, performing the same operation in all situations. Rather, it allows exposure independently of availability and it allows representation independently of access or utility. The glazed wall showcasing the exclusive brands of cosmetics along Klarabergsgatan in Åhlens City, Stockholm, is doing a whole different thing from the glazed walls of H&M with openings directly into that which is seen within. To reach the exclusive cosmetics in Åhlens, a series of turns must be made and the effort required is higher than for other cosmetics not exposed to the street, all the while they present themselves to the most crowded streets next to the department store (Koch, 2007). These tactical, performative operations are almost exclusively in use by high-profile status categories and can shift dramatically by simple means of altering the degree of linearity of the boundaries as accessibility regulators. Placing commodities in endcaps (Underhill, 2000, p. 79), the far ends of sequences or aisles, performs the same operation of differentiation intrinsic to spaces, as in Hillier’s argument above (2003). They are seen much more than reached, and thus, their representative function is emphasised over their utility or their function as goods that should be bought.

6. The Argument Re-phrased

Let us return, then, to the original discussion introduced, namely that of what differs architecture from building in general. In order to do so, let us return to the definition of architecture discussed in Space is the Machine to see how the above argument compares to this. As the discussion evolves, Hillier later states that

'[a]rchitectur... through which buildings become cultural and social objects, are treated not as unconscious rules to be followed, but are raised to the level of conscious, comparative thought, and in this way made part of the object of creative attention. Architecture comes into existence, we may say, as a result of a kind of intellectual prise de conscience: we build, but not as cultural automata, reproducing the spatial and physical forms of our culture, but as conscious human beings critically aware of the cultural relativity of built forms and spatial forms.' (Hillier, 1996, p. 45-46)

We can say that architecture is the imposition of a certain kind of knowledge and reflexivity on the process of designing or refining a building that, in part, is the effect of the awareness of choice, a view that is further developed by Lars Marcus in Architectural Knowledge and Urban Form (2000). Architecture becomes a question of communicating priorities - that is, of what choices are made instead of or over other possible choices. In this, it becomes a statement of value (Lundequist, 1998). This does not say that vernacular building is not a process of decisions that reflect values, but it is to say that the vernacular is less aware of these choices and priorities, making the communicative role different. However, due to the physical form of architecture (or buildings), it will always be unable to be precise or general enough to communicate the range of values that is to inhabit it; there will always be a conflict that calls for prioritisation and choice. This position of architecture as neither precise nor general enough, in semiotic terms neither parole nor langue (Tschumi, 1996), is important to understand as part of the way it is appropriated and designed. The lack of ability, inherent in concrete space,
to present solutions that correspond to the multifaceted social logics that inhabit it (Kaye, 2000) leads to the situation where change is constantly driven by this lack, and where solution, while often temporary, lies in the choice of which of the relations to give precedence in each case.

What makes space syntax potentially powerful in this analysis is that we can move from analysis of static situations to performative operations of formulations of architectural designs as a question of spatial situating to the situations as results of emergent patterns of presence and absence of people. That is, we can formalize the way in which this is given expression in spatial form by analyzing spatial configuration of visibility and accessibility while establishing knowledge of movement flows and presences as a result of spatial form to understand how the situations will emerge in spatial structures. Because there is a relation between accessibility and flow, we can understand the emergent role of a space as stage or audience, balcony or catwalk, wardrobe or glass box. It is no longer a simple question of interior versus exterior, or programmed spaces in relation to one another, but a question of how emergent patterns of movement and stationary people relate to one another through spatial configuration.

We can express this as in the Figures 3a through c. The first figure illustrates social situations as placed in relation to degrees and basic forms of presence: many and few on one axis, passers-by and stationary on the other. Space syntax mainly works with the three quarters of this to the right and downside, whereas it seldom works with the top left quadrant where the attractors have as most relative power. Using this basic figure, based on what can be measured by and large through accessibility (Hillier, 1996), we can illustrate how exposure works in relation to this. A balcony, for instance, can do the work of figure 3b. It allows the private to survey the public. In this form, the balcony could also be the apartment window. The catwalk, on the other hand, does the work of Figure 3c. It exposes the private to the masses (which means it is not private any more, but this is another discussion). This

![Figure 3a. A simple figure of social situations and their definition as either consisting of static people or flows on the horizontal axis and amount of people present on the vertical axis.](image-url)
emphasises aspects of *representation*, which added to the question of the physical transition from the spectator to the scene, or the other way around, makes it even more complex. Furthermore, questions of how and where connections and disconnections are made, as studied by Conroy-Dalton and Kirsan (2005), become even more important. Much of this is performed through configurative form without formal restrictions to access.

If these three systems work to establish social and cultural positions of status, privacy, publicity, power, and so forth, the question must be put on what grounds this is done. To what extent is there a social system that they support or express, maintain or imitate, and to what extent does this spatially constructed map of positions precede the social positions themselves? This would be Baudrillard’s (1983) argument, which while having merit is deeply problematic. A point of such an argument that can be integrated, however, is that it is in its representation that the system gains its social significance; representations that make their way into public culture and therefore becomes not only expressions but negotiations thereof (Zukin, 1995). To some extent, applied to spatial configuration, we have a reformulation of the argument in *Space is the Machine* (Hillier, 1996).

![Figure 3b and c. We can see how the balcony (b, left) and the stage (c, right) connect places and situations otherwise strongly separated in the scheme - something that can be done by spatial figuration alone.](image)

We can thus speak of three spatial systems - one of accessibility, one of exposure, and one system of the relative degrees of these two compared to one another. These three systems are always played with in architecture, and equalising the two requires deliberate design choices to that effect. To some extent, it can be argued, this is an effect of the three-dimensionality of architecture as well as the relations between exterior and interior that is to be defined. Thus while this is the core of architectural design, it also seems to be something that lies inherent in spatial form overall - indeed, we have recognized that the street and the square, the figure that attempts to equalize exposure and access, is by no means neutral or homogeneous (Hillier, 2003).
Saying that this play is at the core of architectural design, however, does not mean to say that they are so exclusively, or that it by necessity includes a differentiation. It is, thus, not the point here to say that a lack of separation by necessity means it is not architecture, nor that the amount of separation is an indicator, or that instances of separation do not exist in 'buildings in general'. On the contrary, it has been argued that designing a building where this does not happen is difficult. The point is the conscious manipulation and to achieve certain symbolic or performative effects, a consciousness that also, as Psarra (2009b) argues, incorporates expectations of representation, reformulation, and innovation. Furthermore, the forms in which this disjunction takes shape as well as the degree to which it has been done, has shifted over time and space with a significantly rising importance with the advent of modernism. This is likely due to as well technical reasons as conceptual and aesthetical, together with the effects being in line with the development of the modern identity and subject. Abolishing other means of expressing social or cultural significance, such as types (e.g. Markus, 1993) or ornamentation (e.g. Loos, 1997; Wigley, 1995), the manipulation of spaces and their interrelations become more obvious as well as more central. In some cases, such as in much of Mies’ architecture, it can be seen as one of the central investigations (e.g. Quetglas, 2000), and in the socially staging sense discussed herein perhaps even more in e.g. the Theatre de l’espace in Paris, 1937, by Edouard Autant in collaboration with actress Louise Lara, with the explicit intent to investigate urban situations through staging spatial relations (Read, 2005). I would like to stress, however, that this shift of focus to disjunctions of access and visibility should not be seen as an invention of modernism but perhaps a foregrounding caused in part intentionally and in part as a result of the changes of the range of means with which architecture expresses itself.

7. Conclusion
We can see that one of the most pervasive, effective, and powerful means through which architecture formulates social significance and social meaning is through the separation of accessibility and visibility. Moreover, this is an area where space syntax theory has the possibility to provide significant insight into the analyses, yet within the field this is relatively unexplored. It is the proposal of this paper that it is also one of the means through which architecture differentiates itself from the vernacular in that it intentionally plays with this relation between access and exposure to express values, which arguably is one of the primary purposes of architectural design. In this sense, even the apparently dysfunctional, illogical, or inexplicable disconnections may be that which makes all the difference. This is important to have in mind when studying architectural design as well as when communicating the benefits and propositions of space syntax with architects, as the regulation of flows and ease of access or orientation might actually be contrary to that which the architect has been tasked (or have the intent or wish) to formulate through spatial form.

Furthermore, the analysis of the configurative properties discussed herein requires further theoretical, methodological and empirical development, as they do not easily lend themselves to questions of directionality and non-reciprocal relationships such as those herein broadly drawn.7 There are studies made providing material to work with, and development of software that allows
analyses complementary to the traditional measures in the space syntax field - the development of layered graph analyses (Dalton and Conroy-Dalton, 2009) seems of particular interest. However, the problem remains that for many of the relations discussed in this paper, it is not a question of how visibility complements accessibility, or how depth can be reduced by visual relations, but instead it has been argued how depth (seen as ‘inaccessibility’) can at times even be emphasized thereof. While Layered Graphs do seem like a promising methodological development, it requires further graph-mathematical and modelling modulation to address architectural disjunctions as discussed here. It would seem to indicate that a layering of ‘positioning analysis’ and values of integration or control begins to provide answers. But, it must also be acknowledge that the discussion drafted in this paper also needs to be further developed and nuanced parallel to this. Methodological and practical problems aside, these questions are important to address within space syntax research, and while not easily applicable to the field’s tools and methods except in a few specific cases, seem to be clearly within the boundaries of space syntax theory.

8. Notes
1. In this sense, it can be questioned if “meaning” is the best term in this case, but I am here using the term to suggest communication of values, either directly and through conscious interpretation or communication, or indirectly through lived space (Lefebvre, 1991) in how it constructs habits and regulates conduct.
2. While the concept of authorship in architecture is too complex to handle in-depth here (see e.g. Anstey, et al., 2007), it may be in place to acknowledge that this removal of the ‘Author’ may be problematic in a discussion of what constitutes architecture in how closely related the concept is to the authorship itself. However, the ‘author’ is not removed from the current discussion or the designing of architecture as much as from the power over the subsequent interpretation of the built structures.
3. It can be argued that this is a central characteristic of modernism (and post-modernism, if in a different sense) and less prevalent in earlier architecture, which I will return to - a wide discussion in this paper represented by e.g. Bennet (1995), Wigley (1995), Colomina (1996), Baudrillard (1996), Tschumi (1996), Quetglas (2000), and Read (2005).
4. In this way, representative balconies, with the purpose of allowing spectacles or exhibition such as the royal balcony or similar figures like the baroque grand staircase, in this paper fall into the definition of the figure of the catwalk.
5. Retenu par la géométrie - ‘retained through geometry’; that is, Quetglas claims that Mies consistently works with defining (and enclosing) spaces through geometry that is in some sense open or undefined.
6. Intelletual prise de conscience - (roughly) ‘intellectual awakening’; that is, architecture comes into existence with the awareness of the cultural implications of building and the following intentional manipulation of built form to achieve certain effects.
7. It is tempting to move into a discussion on the use of ‘knee-height’ and ‘eye-height’ analysis common within space syntax studies, but such a comparison only responds to specific (if common) forms of these figures - most easily applicable in the case of the glass wall. It is of interest to do this kind of study, but how to work with three-dimensional setups is more complicated - not to mention the way some of them are more or less inherently directional. ‘Exposure per integration to integration’ is a potential figure to work with, but exactly how such a measure would look or if it would actually give valuable results is also something that must be thoroughly investigated, among many other forms of modeling.
References


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