CHOREOGRAPHING EXPOSURE:

Theatrical configurations of architectural disjunction

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Abstract

The way architecture articulates social, cultural, political, and organizational values as well as character and identity through manipulation of visibility, permeability and the relation them in-between has been discussed by many researchers. Consistent methodologies that focus on this specific split are however unusual, and it tends to be handled discursively and on a case-by-case basis. There are also shortcomings in how such disjunctions are considered both in functional and communicatory terms. For development of morphological and configurational analysis, studies of well-known architectural works can be used to investigate geometric and configurative properties and how they relate to analyses and understanding of spatial mediation of societal values. This, however, faces a methodological challenge, as it deals with a multi-variable set of relations – including both amount of and degree of differentiation between visibility and permeability, and potentially questions of directionality that are problematic for syntax analysis to deal with.

To move forward, one can either build a library of analysed buildings to compare and evaluate different disjunction patterns to, or compare these analyses to a base set of geometries and disjunctions. This paper intends to make generic methodological and theoretical contributions through specific studies of these relations focused on a well-known and analysed building: Adolf Loos' house for Josephine Baker (1928), and introducing comparison to other situations. It also aims to more clearly begin establishing a terminology for such disjunctions that can be used to further refine the understanding.

Keywords: architectural disjunction, spatial logic, visibility-permeability, atrium architecture, Adolf Loos, Josephine Baker

Theme: Spatial Analysis and Architectural Theory

Introduction

The differentiation of permeability and visibility as a property of architecture is certainly not a new question or discovery, and is a question repeatedly dealt with in studies of architecture in general as well as in architecture theory specifically. It is an at the same time simple and complex split that allows for elaboration, articulation and formulation of a wide range of concepts through spatial form. For a variety of reasons, including technical possibilities but also new ways of thinking and representing architecture, modern architecture arguably made this sort of elaboration its central point as compared to symbolic-formal plays of post-modernism or orders, geometries and sequences of certain types of classical architecture (see e.g. Rowe 1976, Hanson 1998; c.f. Hadjichristos 2003). To a certain extent this also led to experiments and investigations where these properties were investigated through architectural production (c.f. Read 2005, Evans 1978, Quetglass 2000) which makes the period methodologically and theoretically of interest. The complex simplicity of this split is a known issue in the space syntax field, and several studies address the issue developing a range of different approaches. The purpose of this paper is methodological and theoretical development on how to model, analyse, and understand such relations, and for this reason the main study focuses on a building that in architecture theory and other fields has been repeatedly scrutinized from this very perspective: Adolf Loos' house for Josephine Baker, designed in 1928. This building exists only as a model and drawings that show signs of being conceptual: plans, model, and sections do not always match, creating some conflicts for interpretation of the building. The intent is thus to make theoretical and methodological advances through a focused study.

Within space syntax research specifically, visibility-permeability disjunction is often studied either as singular situations of exposure or accessibility (Koch 2010), as compensatory use of one over the other (Dalton and Dalton 2010; Beck and Turkienicz 2009), provide certain forms of transpatiality (Sailer and Penn 2009), or formulates narratives (Psarra 2009). More specifically on individual buildings, Zamani and Peponis (2007) study changes in visibility and permeability in the High Museum of Art in Atlanta, and Kali Tzorti discuss the relation in Tschumi's Acropolis museum (2011). Relations between permeability and visibility in simple geometric forms have been clearly discussed by Hillier (e.g. 2003), and in simple configurative models by Koch (2012). Peponis' (2012) discussions of purview and metric reach makes a significant contribution in that it includes both theoretical development and a wide range of buildings allowing trends and tendencies in large samples of architecture to be studied.

In a broader approach, Thomas Markus (1993) discuss the relations in a variety of building types emerging in the 18th and 19th century, but as noted by Zhu (2012) one of the more thorough and systematic studies, over a range of years, is by Julienne Hanson, here primarily referred to through *Decoding Homes and Houses* (1998). Perhaps closest to the study in this paper comes some of the studies by Psarra (2009), as in the discussion of Sir Robert Soane's museum. These all, directly or indirectly, contribute to the discussion in this paper, which intends to make generic methodological and theoretical contributions through specific studies.

It can be argued that at this point the challenge is not necessarily on the technical as much as on the conceptual side of the analysis. As I intend to show, an analysis as the one to come asks just what *is* analysed in 'visibility' analysis. For this purpose, a well analysed building provides a good opportunity to discuss the disjunction in a richer manner not the least because it allows to find spatial analysis measures and models that responds to and develops the existing body of studies, refocusing questions from the regular empirical correlations to discursive, critical discussion of architecture as formal, cultural and social artefacts. Such a study also allows a critical scrutiny of existing analyses in light of findings in the spatial analysis. The Baker house

will be investigated in consecutively more explorative and complex manners, beginning with simple discussions of views and movement patterns, through syntactic relations, to a more complex discussion. However, before going into the detailed spatial analysis, however, it is of use to introduce the object and discourse under scrutiny: Adolf Loos house for Josephine Baker.

The Architect and the Dancer: The Josephine Baker House

The exact origins and purpose of Adolf Loos' house for Josephine Baker remains unclear, since the accounts for not only its becoming, but the relations of Loos (1870-1933) and Baker (1906-1975) overall are scarce (el-Dahdah and Atkinson 1995) and subject to various forms of speculation. It is known that they met in Paris in 1927, where Loos reportedly took dance lessons from Baker (Jules-Rosette 2007), and that there is a link of trajectories in that Loos was a vivid amateur dancer who liked theatre and dance in general, and that Josephine Baker was a famous jazz singer/dancer that performed in Paris several times during Loos' stay in the city. Baker herself has left no record of ever commissioning a house from Loos, and the account from Loos' side is second-hand information from his 3rd wife Claire Loos who recounts him saying that Baker was dissatisfied with the work of her current architect, and that he therefore had proposed to her that he could do it better (Shapira 2004).

It has repeatedly been noted that there is a significant age difference between the two, and that some of Baker's performances were 'exotic' – though care needs to be taken when using such terms, as she was a recognised artist and it was within her position as a stage celebrity this took place (Shapira 2004). This has added fuel to some of the analyses of the never built and possibly never commissioned house, subscribing design choices to voyeuristic or erotic desires from Loos' side. I will not currently go into this discussion, but note that while there are contesting interpretations (e.g. el-Dahdah and Atkinson's versus Shapira's), this is part of the discourse to which the paper relates and therefore, the discussed voyeuristic qualities also become topical for an analysis of visibility properties.

The house reportedly was designed to replace or remodel Baker's existing house in Paris and has a number of interesting configurative qualities which have been central to the discussion. On an overall level the design follows patterns typical to the 18th century French tradition of domestic distribution. The floors correspond to a servants/workers floor, an *étage noble* (representative floor), and a personal top floor. The fourth floor is a cellar and left out of the analysis. Communication is clearly separated for owners/visitors and servants in line with modern rationalism (Emmons 2005). Throughout, the unclear relation between architect and dancer, and the purpose of the design, remain central to the discussion of its architectural and spatial qualities, where specifically configurations of visibility and permeability are repeatedly addressed as Loos' design, within a fairly 'standard' programmatic solution, offer a number of ambiguous relations between the various parts of the building.

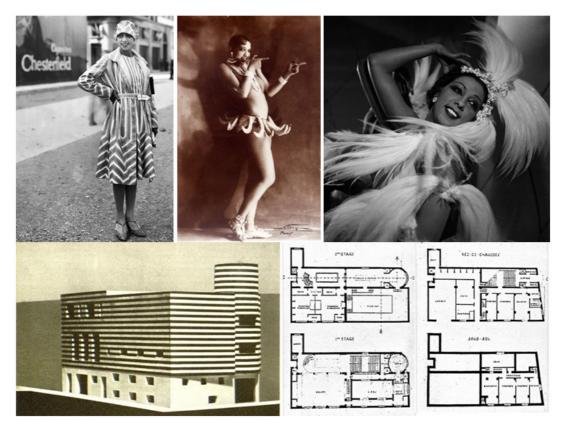


Figure 1: Josephine Baker and the house by Adolf Loos. The images of Baker capture three of Baker's personas utilized in the discourse – directly or indirectly –to offer different explanations to Loos design. Although most authors offer nuanced descriptions, it can be mentioned that Shapira (2004) stresses the need to understand Baker's off-stage life as a well-dressed lady, el-Dahdah and Atkinson (1995) stress the 'exotic Other' and sexual charge of the banana dress, and Jules-Rosette (2007) focuses a fair deal on the performing dancer and theatricality. Photographs of Josephine baker are by Stanislaus Walery and Hélène Roger-Viollet. The model photo is from From Heinrich Kulka, ed., Adolf Loos: Das Werk des Architekten (Vienna, 1931), fig. 222. Drawings originally from Graphische Sammlung Albertina (Adolf-Loos- Archiv 588). All public domain by age.

Permeability and visibility in Baker's house

The Josephine Baker House is a very deliberately designed configuration, where 'staff' mostly permeate the ground floor, also containing the kitchen. This floor also has a servant entrance in another direction than the main entrance. The main entrance leads into the house and up a wide set of stairs to the main hall with its representative salon, and passing by the pool the smaller petit salon and a café, somewhat similar to a boudoir (el-Dahdah and Atkinson 1995). This clearly forms a representative floor, with two central motifs in the windows to the pool, and the main, curved stair up to the 'private' floor where bedrooms and a salle a manger (dining room) can be found. The pool is accessed in the configuratively deepest space, under a glazed roof. A secondary stair leads down to the servant's quarter from the salon, and a shortcut spiral stair goes from top to bottom near the entrance. The main focus of rastered isovist integration (internally to the building) is the Salon, especially by the stairs up to the private quarters. Integration weighted by the entrance significantly strengthens this pattern moving focus towards the pair of main set of stairs. As a permeability construct, thus, the Baker house follows a common pattern of focusing integration to the main representative or common rooms internally, and constructing a gradient interface from public to private when related to the entrance (c.f. Hanson 1998).

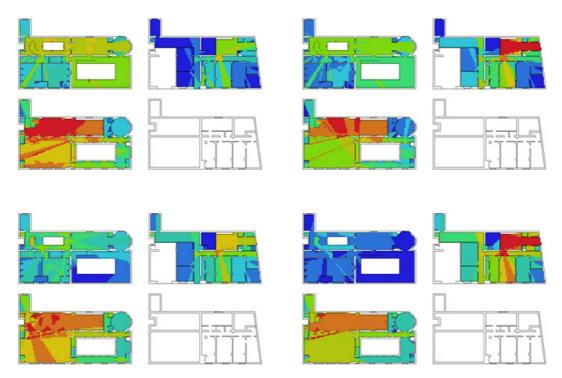


Figure 2: Visibility (above) and permeability (below) rastered isovist analysis of Loos' House for Josephine Baker, analysed internally (left) and contextualized (right). Floors shown in a 2x2 matric with cellar (empty, bottom left), entrance floor (upper right), étage noble (lower left) and top floor (upper left). Analysis produced in Depthmap 10 by Alasdair Turner (Turner 2001).

As a visibility construct, this is then short-circuited by on one hand windows to the pool – both from corridors and spaces around it and from the main entrance stairs - and by a small atrium formation close to the main stairs to the second floor. Amulti-floor visibility analysis is constructed in distinct manners: internal windows and boundaries such as the pool's water have been ignored (i.e. things that can be seen through or past), but areas such as the pool has not been filled with isovist origin points, in order to enable comparative statistics between the data. Second, to address cross-floor visibility, connections have been made at the centre of each length of the rectangular shapes of the atrium and the pool on the top floor, down in an estimated 45-degree line, orthogonal in plan, to the floor below. This is problematic in as far as that the extension of visibility is horizontally uniform in all directions from the link and in full extension. At this stage choices need to be made whether to introduce boundaries in the plan to represent spatial boundaries 'in section' as when connecting atrium formations the gradual shift in visibility between floors needs to either be ignored or distilled down to a singular boundary in plan. Several analyses were made, but results have been somewhat similar. One thing can be noted of the analysis presented here: the main stair to the top floor and the atrium tends to be overemphasized in most straightforward forms of analysis, whereas introducing boundaries to limit this effect have a somewhat wider impact than what would be preferred. This leads to that on the top floor integration tends to be skewed in favour of the length of rooms stretching out from the stairs compared to the pool. With this in mind, the relation between permeability and accessibility in the building can be studied as in [Figure 3], comparing on one hand the internal configuration, and on the other the contextualized configuration.

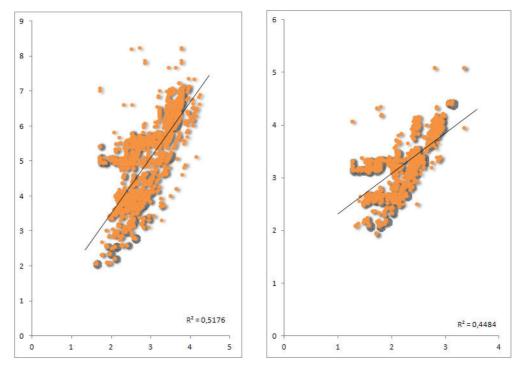


Figure 3: Comparison of the permeability and visibility integration of Loos' House for Josephine Baker, measured internally (left) and contextualized (right). In both cases permeability integration is on the x-axis. Noticeably, there is a larger correspondence internally, and stronger and more distinct split in the contextualized measures. Some of the outlying points are due to how Depthmap calculates links across floors.

The scatters show first, that there is a clear disjunction between visibility and accessibility in the building, and second, that this disjunction is greater for a visitor than inhabitant, in as far as a visitor more strongly relates to the entrance/exit than an inhabitant. The split in values between permeability and visibility is also more distinct for the contextualized values, indicating that there is a stronger distinction between spaces that follow a traditional public-private gradient by successively more secluded spaces both permeability and visibility wise, and spaces that while deep into the building form visually integrated stages - be it that they are exposed, or provide overview. The disjunction is furthermore differently located in the configurative logic – internally, it is mainly somewhere in the mid-range of integration values, whereas in the contextualized version it is in mid- and low range values. It can also be noted that there is a wider range of visibility values in the internal analysis, with a more condensed set for the contextualized values - which mostly has to do with a noticeably smaller highest level. This is partially logical, in that the connection to the exterior creates a deeper structure that connects through less internally linked spaces which in total pushes integration downwards – but it further says that while there is less logical correspondence between visibility and permeability in the contextualized ('visitor') measures, there is a larger value differentiation in the internal (inhabitant) measures. Internally, thus, visibility works to integrate the building through short-circuiting permeability whereas in a contextualized analysis, visibility works to differentiate segregated spaces into visually deep and shallow spaces.

Vertical visibility: Syntactic Sections

Central to many of the discussions of Loos' house for Jospehine Baker is the visibility relation between the étage noble and the 2^{nd} floor – and then especially the shifts in and play with visual connections and the pool. Some of them are not answered by the analyses above simply

because they are based on diagonals and vertical relations, i.e. relations in section or in three dimensions. In order to investigate how this relates to syntactic analysis, and to understand how measures and models operate in a potential 3D environment, it is of interest to analyse sections as in [Figure 4]. Section analysis as a partial response to 3D features in this way was proposed already by Turner and Penn (e.g. 1999) but has rarely been used, which is another reason to investigate their usefulness.

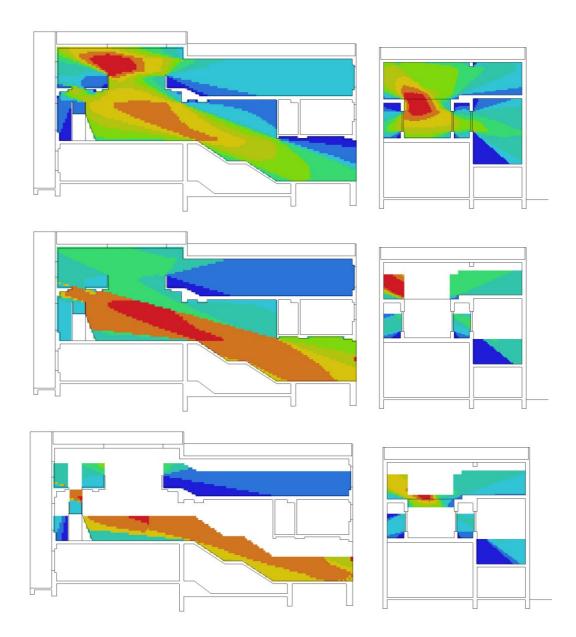


Figure 4: Section integration along (left) and across (right). The left sections include integration internally to the building (top), integration weighted to an exterior (middle) and integration measured for 'up to eye-height' on permeable surfaces. The sections across include integration of the whole space, integration 'up to eye-height' and integration 'up to eye-height' with an added set of vertexes for the surface portion of the pool.

The section 'along' the house cuts through the main entrance, offering the possibility to weigh the values to an exterior as well as analyse it strictly interiorly to the building, whereas a section across does not easily lend itself to such a weighting. As it can be discussed what sections of 'points floating in space' say, section analysis has also been performed with vertexes only up to eye-height over permeable surfaces. To begin with, it is worth addressing what the different forms of analysis convey. There are certain similarities in the distribution of relative values, providing no absolutely distinct difference between 'eye-height' and 'full' section analysis. The largest shift of value distribution compared to a full analysis is in the cross-section without vertexes in the pool, although to some extent this is an illusion as the same field has high integration also in the former even if not quite as high as other parts. Similarly, adding vertexes in the pool only makes small differences in the value distribution, slightly pushing the integration vertically.

A more important question at this point then seems to be rather which gives better information, since the same value distribution for the 'walkable' parts can, more or less, be found in all sections. It furthermore seems premature to dismiss the analysis on the grounds of where one can be, especially since it remains to be established how the analysis relates to those very spaces. In order to respond to this question, however, it is important to establish what is being asked, and it will take several additional steps of analysis to reach an informed conclusion. At this point, the findings of Wineman and Peponis (2010) can be considered: in their detailed analysis they found that VGA (rastered isovist analysis for visibility) captures not the properties of space that people act from, but rather where they go to. That is, the integration values produced may capture rather the degree of exposure, indirectly the degree to which spaces are visually related to, than the specific visibility potentials from the spaces (c.f. Koch 2012b). For movement correlation the difference might be mostly a curiosity, but for the understanding of analysis of sections, it seems of great importance: it makes the case for the 'full' analysis being relevant despite that it in several cases puts the integration core in locations where it is impossible or implausible to be.

Balcony, Theatre, or Exposée

The interpretation of these properties balances on a complex set of understandings that involves historical, social and cultural context, concurrent architectural ideals, and the views of the individuals Adolf Loos' and Josephine Baker. Similarly, the interpretation of their respective social and cultural position and status come into the equation most distinctly. The more common analysis suggest that Loos' design is voyeuristic and driven by Loos' desire for Baker, specifically Baker's body, and to various degree incorporates references to the difference between the 'cultured' and the 'exotic' or 'primal' (e.g. el-Dahda and Atkinson 1995). Contrary to this, Shapira (2004) proposes that it rather is a celebration of Baker as an individual, and that the celebrity status of Baker compared to Loos' declining position at the time suggests it is a project of admiration and the wish to offer Baker a stage for her art. The former can potentially be challenged for at times making weakly but not unsupported assumptions about the persons Adolf Loos and Josephine Baker, but the latter can be similarly challenged as lightly dismissing gendered positions of power and socio-spatial play of the time. As Shirley Ardener (2000) puts it, hierarchies do not follow singular rules of 'class', 'gender' or 'influence' but are full of different categorisations which relate in a complex manner, such as that genders can be subordinate or dominant across classes (or the other way around) and that such 'sorting algorithms' historically, in Europe, set significant priority to gender. A point that can be clarified through Massey's (1994) and Harvey's (1989) analysis of Ridley Scott's Blade Runner (1982) and how the film's (original theatrical release) ending becomes sensible if read as a gendered hierarchical relation (Massey), but difficult to make sense of treated as a class problem (Harvey). That is, for Harvey it appears counterintuitive that the 'oppressed class', as represented by Deckard and Rachel, does not join in revolution against the oppressors, whereas for Massey this becomes obvious since Rachel is

subordinated to Deckard by power relations of gender and thus they are not 'equals' that can join in revolution. Even Harvey himself notes how Rachel receives a 'human' identity by becoming "Decard's woman" (1989, 312). This does not clearly point in either way for the Baker house, but to how a switch of *which* social hierarchies one reads a work from makes radical difference in interpretation.

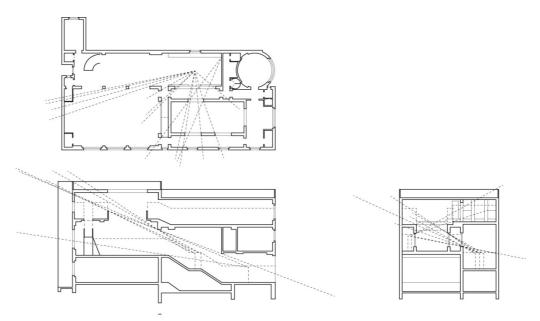


Figure 5: Some of the sightlines that become important in an analysis and discussion of Adolf Loos' house for Josephine Baker in plan from the entry stairs, and in section from 'reasonable person eye-height' up towards the atrium, the stairs, and through the pool.

It needs to be reiterated that compared to most analyses of homes in the space syntax field, and even compared to many of Loos' houses (Colomina 1996), the house for Josephine Baker inverts some – but not all – common visibility configurations of homes. As Hanson (1998) shows, while many of the manipulations of visibility and permeability of the modern era were new, most architect's houses still complied with the socio-spatial gradient of public-private, even if often more spatially and configuratively rich and nuanced in formulation. Parallels to the Schröder house at its most open (Hanson 1998) can be made, but such comparison ignores that this open configuration specifically and intentionally was created by the owner for public events, whereas the normal, 'private' situation used the movable walls to formulate a more regular gradient and more subdivision and separation. In this sense, Loos' house for Josephine Baker comes closer to some kind of stage or public space, offering more of the internal space exposed. Repeated unclear control over the interface/interaction also acts differently than what was commonly found.

Whether Josephine's swimming is a 'private' or 'public' activity can be contested, and the role of the exposed pool would turn out different depending on which it is. It is also not known what practice would be established in the house – that is, if Baker would swim with others (save servants) moving around, and whether strangers could potentially be let into the house by other household members when Baker was either swimming, or otherwise remained upstairs. This is further convoluted by the suggestions made by the absent body: the pool can be claimed to always suggest a swimmer no matter the explicit presence of a swimmer (c.f. Sandberg 2003) and where being in the presence (social, visual) of the owner while also being reminded of the owner swimming by implied reference – as the pool is on the private floor, the specific suggestion is of the owner – could work to stir imagination. Imagination that again could take

different forms, even if the specific situation emphasises a 'see but not touch' situation (Barthes 2007, Evans 1978, Ziff 2004) that exist simultaneously implied by configuration and 'real' in the social context. The possible origin of the design as Loos' personal project also raises questions about the architect imagining himself and the owner in the building. Had the house been built, if the specific act of swimming was a private or exhibiting, potentially liberating and expressive, or exposed act could just as well be confined to Baker's own choice.

This raises questions about power, control, and directionality that are only partially answered by spatial analysis and require socio-cultural contextualisation as well as understanding of practices and individuals. The point of control, however, is worth noting, as it is repeatedly inverted compared to common patterns. The pool, again, is one case - where as Colomina notes it is under many circumstances not possible for a swimmer to know if she or he is being watched through the windows below, conceptually handing control of the visual interface over to visitors rather than owner. Another is the interface between the public and private floor, that can be said to perform a similar operation in that the descent down the stairs allow the visitor to study the owner rather than the other way around – the curved stairs, exposed to the main stairs and the salon, are designed so they block a descendant's view while offering a gradual revealing of her or him from the main 'public' halls. In comparison, control over this interface is normally in the hands of the owner, and usually the spatial configuration allows either a simultaneous reveal (corner, door), or for the owner to first see the visitor. The atrium construct further complicates this, potentially allowing the owner to gaze down before descending the stairs, but at the same time being directed elsewhere both in the narrative sequence of walking from the private zones to the stairs, and in the way the stairs curve away from the atrium rather disjoining the potential viewpoint from the walk than including it.

This is, however, inversed by the main stairs, as el-Dahda and Atkinson notes the owner would be revealed from top down approaching the stairs seen from the entrance. They compare this to conceptually performing a kind of striptease. It has to be noted, however, that such an interface places control over contact at the very least equally between above and below the stairs, and both are revealed facing one another, with heads and eyes first in the process. To a certain extent, the elevated position is rather that of power, and the oversized stairs can be claimed to stress this property which arguably would propose status and importance of the one at the upper end rather than implying a striptease.

Some of these properties can be understood as celebrating Josephine Baker *the artist*: the stairs in their individual configurations allowing different forms of staging performances of the meeting of inhabitant and visitor, and the bath offering a range of empowering and liberating relations of owner to others. In the socio-cultural, historical context of its making, however, these interpretations seem to veer towards overly positive, whereas a similar design today may have other connotations closer to their argument. One question, then, is how different Loos' house for Josephine Baker is, and what it offers to learn of configurative analysis.

The Baker House as a Disjunction Type

To better understand the Baker house, it is worth trying to position it as a disjunction type. This can be done in two ways – one is to compare to other buildings, and the other is to compare to simple configurative or geometric figures. Both of these methods will be used, with a slight emphasis on the latter, while the former will mostly be used to contextualize the discussion and enrich the interpretation of social and cultural effects.

For the first, I will briefly compare to two atrium buildings where visibility-permeability disjunction has been discussed before: the Chemistry building of Karolinska Institutet in Stockholm (in Koch, Bergström and Marcus 2012) and the Stockholm City Library (in Koch 2004). The Chemistry building has an atrium without stairs – they are found in a separate space – and the Stockholm City library has the set of stairs in the back, 'behind' an entering visitor in the rotunda. They also relate differently to context, as the Chemistry building forms an atrium integrated 'inside' an activity that predominantly takes place in spaces surrounding it, whereas the Stockholm City Library forms an atrium that, save a singular shortcut, forms something of a cul-de-sac extending *from* the main entrance and the main activity spaces of the library. The top floors also posits people differently, where the Stockholm City Library positions those on the balcony facing away from the atrium – or choosing between facing towards the atrium or towards the collection of books – whereas the chemistry building primarily operates with people being turned along or towards the atrium's boundaries.

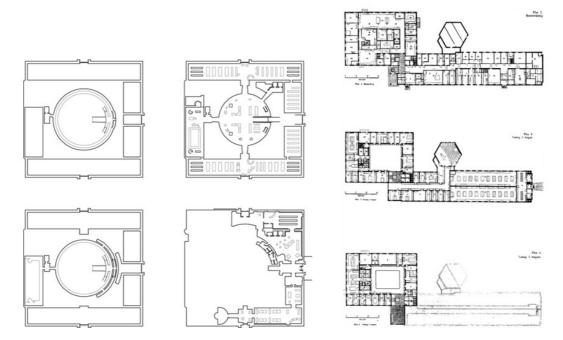


Figure 6: Stockholm City Library (left) and chemistry building (right). The City Library is ordered after entry plan (lower right), first (main) floor (upper right), first balcony level (lower left) and upper balcony level (top left). KI ordered from top to bottom after ground/cellar floor with employee entrance, ground/first floor with student entrance, and research unit floor. Plans of the City Library based on drawings received from the library; plans of the KI Institution Ture Rybergs Drawings in Kemiska Institutionen (1954).

The socio-spatial interfaces produced in these buildings have been argued to operate differently in many ways, producing in one occasion a distinct, if perhaps involuntary, 'catwalk' (City Library) and in the other, a curious kind of simultaneous socio-spatial separation and integration (KI). The atrium in the KI building arguably serves two main, somewhat contradictory purposes somewhat modulated by social practices: that of creating a base level communality (c.f. Goffman 1966, 1990), and that of disciplining the activity in the research portion of the building (c.f. Foucault 1997). A disciplinary effect of exposure I will return to.

The question is if this can be read in analysis of sections [Figure 7]. As in the baker house, much of the integration core ends up where it is impossible to physically walk. However, it ends up differently. Tentatively, the focality in the KI atrium guides vision through integrated space, looking down from above, and up from below, proposing a more or less symmetric relation of

the floors and their inhabitants. Furthermore, neither is in the focal point proper. In the Stockholm City Library, however, there is a distinct difference between the west and east end of the rotunda, and the different floors. Expressed simply: on the west side balconies one is seen from walking up the flight of stairs, placing control over exposure and vision distinctly in the hands of the one on the bottom floor, whereas on the east side (above the entrance) it is rather the case that someone who enters below the balconies does so with her or his back to them, placing similar power and control in the hands of the one on the upper floors. This is somewhat modulated by the north-south axis leading to the book halls, that pushes the relation towards the former simply due to the directionality of visits to the top floors; where the books are placed in relation to the atrium. In the terms of Koch (2010) the top floors of Stockholm City Library formulates on one side a *Catwalk*, and on the other side a *Balcony*, with a gradual shift in-between.

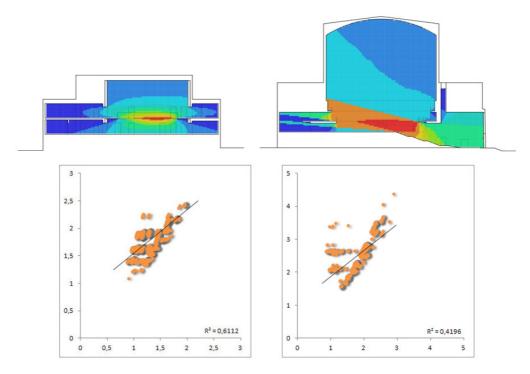


Figure 7: Section integration of the atrium in the KI Chemistry building by Ryberg, and the Stockholm City Library by Asplund (above), and scattergrams of the respective disjunction pattern (below). The section analysis of Asplund library has been weighted by the entrance whereas in the KI case there is no entry/exit in the extension of the section. Both disjunction patterns are weighted.

In Loos' house for Josephine Baker, the symmetry of the KI building does not appear, and the sections remind more of the Stockholm City Library. However, the configurations are further skewed towards catwalk situations as what constitutes the back balcony in the Stockholm City Library is directed to smaller and more segregated spaces deeper in the building. It can even be noted that swimming in the pool would place the swimmer *inside* the focal point, creating an as asymmetric as possible relation between swimmer/walker and others. As demonstrated in the two other buildings, this asymmetric relation is not something 'inherent' in atria, but comes from specific choices in their design. However, parts of what differs the Baker house from the two atrium buildings is not discernible in the section or overall correlation analysis, and needs to take into account *how* the spaces characterised by visibility-permeability differentiation are connected.

As it turns out, the Baker house rather formulates a disjunction pattern of a series-atrium as

seen in the investigations by Koch (2012a), briefly repeated here for clarity. In one stage of this investigation, a two-storey configuration of a three-by-three square 'plan' is set up and analysed with the centre space as an atrium, as in Figure 8, with the resulting relative asymmetry relation between permeability and visibility as in the presented scattergrams. While not an 'actual' series, the configuration of the house for Josephine Baker still follows a similar pattern, which means that rather than a continuous exposure or constant reveal of private spheres to public, it forms a somewhat repetitive pattern of hide and seek; a 'flattened' configuration of visibility interplaying with a deep permeability pattern. While not a direct correspondence, the configurative setup modulates a continuous gradient of representativity-privcay to an altering sequence of exposure through depth. In comparison, the atrium of the KI Chemistry building operates more akin to the network configuration in the simple diagrams, where, while different, the logics of permeability depth and exposure is consistent aside from the singular disjunction of the atrium - moving deeper into the permeability structure means moving away from exposure. The Stockholm City Library, in a completely disjoined configuration, simply retains visibility connections throughout an increasingly deep permeability structure. This makes the Stockholm City Library a case different from all three - corresponding to a diagram with all top floor spaces visually joined to the atrium. In this sense, however, it could be argued they all formulate a logic of disjunction that also corresponds to a social or even theatrical set of conditions.

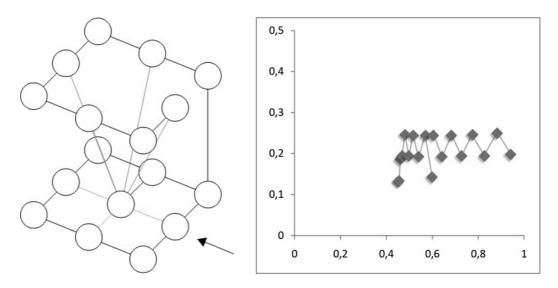


Figure 8: An illustration of the 'atrium/series graph discussed in Koch 2012a, with connections of only visibility in light grey on the left, and the resulting scattergram of visibility and accessibility properties (RA) on the right. In the scattegram, permeability connections have been drawn in thin lines. Right figure from Koch 2012a, 8143:9.]

Narratives of exposure

Comparing to Psarra's (2009) study of Sir John Soane's Museum, we remarkably enough find a similar pattern of permeability and visibility logic. This further supports claims that Loos' design for Josephine Baker is closer to exhibition space than to a home although it gives no conclusive answer to whether it is the owner or the visitor who is the viewer, or in power. On the contrary, based on this analysis both options are still possible, even if the spatial analysis suggest that the object of display is the owner in her presence and absence, in that sections suggest that rather than an equal footing (chemistry building) or top-down centered views there is an upwards

focus towards spaces where the owner is less in control of the interface (c.f. Stockholm City Library).

This effect, if one permits first to take the position of an imagined visitor, confined to the first floor unless invited further, can further be compared to how Stephen Jacobs (2011) discusses Hitchcock's Rear Window (1954) – a movie which as dramaturgy builds on that the protagonist (and the viewer) sees only parts of what goes on in people's lives across a courtyard. That is, the existence of not only doors not allowed to pass through, but vistas offering partial views of a deeper inside, suggest activities and potential links between and to spaces, and form a narrative of the unseen as well as the seen just as the absent body in the pool makes its presence known by implication. Especially should the owner be seen in one opening or the other: where will s/he show next? How are the spaces linked from exposure to meeting, and what goes on in-between, behind, and outside? It can be argued that for this quality to be invoked, it is necessary that the view of the depth is partial (c.f. Burgin 1996), and has a certain level of presence and focality. From the point of view of the owner, it could be seen as an elaborate stage for a peek-a-boo game, or a series of dance performances that keep the audience unsure of where and how the performance will continue, or even if – in a sense foreshadowing Autant's Theatre de l'Espace (Read 2005) where the traditional stage setup is replaced by a range of stages blending audience and performers into what is essentially an investigation into urbanity and theatricality. However, for a visitor, it the partial reveal is likely to invite imagination (c.f. Barthes 2007, Burgin 1996) of what is behind, inside, or what may at other times be there.

A difference here, between Soane's museum in Psarra's study and the Baker house is much akin to the views of the mobile and immobile observer, or an architecture that discloses itself repeatedly in a narrative, and one that discloses itself partially, teasingly, and thereby highlights its inaccessibility. While this is the principal point, it is of course not an 'immobile' visitor, but rather one that is restricted to throughout movements constantly see spaces to which there is no access, where the owner may be seen or imagined, to where there may be access at one point or the other, whereas in Soane's museum, the game of exposed and hidden spaces construct a complex narrative of spaces that have been, will, or can be visited by choice of the moving subject. In this sense, for the owner the house is more like the museum – only less filled with artworks to formulate narratives – and for the visitor more like Autant's theatre, only much more sparsely populated. The links between museum architecture and the Baker house is not limited to the Soane's museum, however, even if the similarity is almost uncanny in this specific case. Rather, the spatial configuration and disjunction pattern conforms to museum architecture in general – which raises questions of the intentions and effects, as it then could begin to operate in a disciplinary manner similar to concurrent museums (Foucault 2000, Bennet 1995, Bourdieu and Darbel 1991, Huang 2001), and raises questions about just who Josephine Baker is 'asked to be' in the design of Loos (c.f. Butler 2005). This, again, brings back the question of whom the house is for – the visitor, the owner, or perhaps a play of imagined possibilities that would remain imagined, as they would not quite happen yet always be present by implication – and therefore have (can have, are likely to have) disciplinary effects.

Conclusion: Person-to-person relations and spatial scenography

It is at this point, the 'theatrical', that I would like to end this exploration, linking on one hand to Josephine Baker's identity as a performing artist, and on the other to theatricality of modern architecture.

What the discourse on the house for Josephine Baker clearly shows in relation to the spatial

analysis, is that to unearth the effects and suggestions of spatial configurations require a dynamic relation of subjects through space. That is, a discussion on perception or cognition of space or architecture by a single individual is insufficient to offer the insights and challenges of the Baker house, as they are fundamentally dependent on the relation between two subjects or potentially between subject and object, relations that are to some extent reversible. This makes it quite different from Soane's museum as analysed by Psarra, as the focus of that particular building, it can be claimed, is rather on individual and artwork, or individual and space. As different from many public buildings the house for Josephine Baker, moreover, allows this discussion to centre on only two, real or imagined, subjects and the different relations they can formulate through the space as configured in the building, which allows some further scrutiny of what otherwise can tend to become relations between an individual – the subject – and the collective patterns or presences of others - the object. Furthermore, the slight asymmetries in plan and section push integration and thereby focal points asymmetrically towards some spaces that include the pool's surface and the stairs between the etage noble and the private quarters, whereas many atrium designs rather create a focus on the atrium itself which produce more symmetrical relations.

The baker house, as a spatial construct, simply challenges the relation between subject and object and allows it to play out differently depending on the social and cultural positions and relations of the subjects involved, set in a socio-cultural context that further informs the play. In both cases, it can be argued that the configurations might have disciplinary effects for both visitor and owner, although the power relations, both social and over the space of the house, construct a complex tension between exposure and viewer, and representation and passivity, which is not easily disentangled. It is further complicated by not being built and potentially being Loos' personal project, in which 'owner' and 'visitor' may take different roles than they would in a 'real' project. They specifically come into play for this very reason, that is, because the number of actors is few, and a number of specific situations may appear rather than a 'generic' pattern, and where attention is on relations between people *through* space rather than relations of individuals to architecture, or the other way around.

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